

SHIPYARD LOG

Pearl Harbor Naval Shipyard & IMF News Since 1943

August 2015

SPECIAL EDITION
TECHNOLOGY
& INNOVATION

New Virtual Reality Painting Simulator

11

OUR BRIGHT FUTURE
WIRELESS TABLETS ARRIVE
WARFARE CENTER COLLABORATION
IN FOCUS: INNOVATIONS WITH 900T

On the advent of new technologies & innovation

Aloha, and thank you for taking the time to read the August edition of the Shipyard Log.

August not only signifies the end of the summer, but it also ushers in the end of the fiscal year. This is important for the Shipyard, because we reflect on how well we carried out our orders for 2015, and chart our course for 2016.

The leadership team and I are using your input as our 'North Star' for strategic planning this year. I am excited about the ideas and recommendations you have provided my team, and as I described last month, we have constructed four strategic focus areas on the foundation of your input.

It is my honor to turn over this month's Commander's Corner to Dennis Young and Nate Lorenzo, your champions for the focus area of "Innovation and Technology Insertion." See you on the deckplates! – Capt. J. K. Kalowsky



Thank you, Captain, and thank you to our teammates here at Pearl Harbor Naval Shipyard and Hawaii Regional Maintenance Center. We are committed to take this effort over the goal line for you.

Within the next few years, repair/maintenance workloads here will continue to increase to levels we have not seen before. How we face and respond to these challenges, with a rapidly evolving workforce, will impact fleet readiness, presence and effectiveness. How we prepare will also impact our future as well as the futures of the Sailors we send to sea and their families.

Shipyards who came before us created an incredible legacy which hints toward what we are capable of – if we can come together, focus on our mission and give our very best effort. Our Ohana, working together with Aloha, must improve our capacity and capability to meet and exceed the challenges of increasing workloads.

One of our biggest opportunities to enable success starts with establishing a work culture that encourages employee empowerment, tireless leadership, and a commitment to innovation and technology insertion. Our history will be written by what we do now.

Nathan Lorenzo (Deputy Production Resource Department Head) and I (Dennis Young – Head, Engineering and Planning Department) have chosen to lead Shipyard efforts to identify and invest in innovation and technology insertion advancements as enablers for success. We are concerned with getting the right people with the right processes working in the right environment to ensure success.

The following goals are the result of inputs received from Executive Planning Sessions and from Production and Support code representatives, including Community of Practice leaders.

Goal 1. Production resource shop facilities, equipment and tools are ready to support workloads. Gaps in capacity and capability have been identified and mitigated. – **Right Environment.**

Goal 2. Critical production shop processes are ready and will accomplish workloads within cost and schedule needs. – **Right Processes.**

Goal 3: Advancements in information technology are identified and implemented on production projects. – **Right Processes.**

Goal 4. Advancements in innovation and technology advancements are being explored for investments to support upcoming workloads. – **Right Processes.**

Goal 5. Actions to advance performance improvement through knowledge sharing have been implemented. – **Right People.**

Innovation is made up of three elements: team + opportunities + resources. Our Learning Organization is an unstoppable team, unmatched in ANY maintenance organization. We are going to tirelessly uncover opportunities both inside and outside of the fence line. This will involve our Communities of Practice, our Production Efficiency Program (PEP) command center, our MOONSHINE process, and your ideas. It will also include developing collaborative relationships with the Naval Undersea Warfare Centers, Applied Research Laboratories, and our fleet partners. We are already seeing successes, and we will not rest in this effort.

Achievement of these goals will increase our capacity and capability. They will optimize our work environment within fiscal constraints, improve work flow through an innovative and engaged workforce, and improve work processes.

Funding will continue to be hard to find, but we will prioritize our opportunities and deliver progress back to you throughout the year. Funding will be short, but money is only one of the resources we have available to apply in this process. We also have time, talent and energy to bring to the fight.



SHIPYARD LOG

August 2015

Vol. 68, Number 8

www.navsea.navy.mil/shipyards/pearl

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SHIPYARD LOG: This DoD publication is authorized for members of the Shipyard. Contents of the *Shipyard Log* are not necessarily the official views of, or endorsed by, the U.S. government, DoD, or PHNSY&IMF. ISSN 1073-8258.

PUBLICATION DATES: The *Shipyard Log* is published monthly. Articles are due the 10th of each month. Send material to the editor via email or, if hard copy (typed, upper/lower case) on a CD via interoffice mail to Code 1160 *Shipyard Log*. All material is subject to editing.

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ON THE COVER: Shop 71 first-year Painter Apprentice Jason Dela Cruz tries out the virtual reality painting simulator.

Photo & graphics by:
Danielle Jones

First electronic tablets deployed

Story & photo by Justice Vannatta,
C1160 Public Affairs

Pearl Harbor Naval Shipyard and Intermediate Maintenance Facility (PHNSY&IMF) is the nation's first naval shipyard to introduce the wireless electronic tablet to its waterfront.

In support of its Mobile Workforce Enablement Initiative, the Shipyard issued its first F5t electronic tablets with 10.1-inch touch-sensitive screens to the USS Jefferson City project on July 31. Shop 38 is scheduled to be the second group to receive the tablets.

Code 109.33 Information Technology (IT) specialist Shannon Covington manages the electronic tablet project. Once procedures for tablet introduction and use are finalized and put into effect, he will work with contracted wireless engineers and support specialists to develop a Wireless Local Area Network (WLAN).

The wireless tablets will provide increased mobility and efficiencies to facilitate communication between Shipyard workers and engineers, and quicker access to policies, processes and training developed for new technology.

Tablet use procedures are being developed to ensure compliance with Shipyard, Submarine Force, U.S. Pacific Fleet and



Electronic tablet project manager Shannon Covington poses with Shipyard Commander Capt. Jamie Kalowsky and one of the new tablets on July 31.

higher headquarters security requirements.

As Capt. Kalowsky has said, "As the Shipyard takes great strides to increase productive capacity by involving, enabling and developing our people, we recognize that it means providing a strategic focus on innovations and technologies, to help our workforce support the defense efforts and commitments of the fleet. We

understand that this is a modern workforce with modern capabilities, and we are striving to become the new standard in proficient operations throughout the enterprise."

*"Innovation distinguishes between a leader and a follower."
Steve Jobs, Apple co-founder*

Shop 64 Plastic Fabricators advance SHT process

By Eric Petran
Code 220 Naval New Technology Program Manager

NAVSEA is encouraging the development of an improved method to detect areas of inadequately adhered special hull treatment (SHT) on *Virginia*-class submarines.

Charles Stewart from NAVSEA's Naval Systems Engineering Directorate (SEA05) and Lisa Weiser and Jamie McDonnell, both from the Naval Surface Warfare Center, Carderock Division, came to the Shipyard with two detectors to demonstrate their use and allow a joint Code 200/900 inspection team to use and evaluate the detectors on USS Hawaii (SSN 776).

In the current inspection process, inspectors lightly tap the SHT with a hammer and listen to the sound produced. Well-adhered SHT and inadequately-adhered SHT make different sounds when struck, but background noise in dry docks often make it difficult to hear the difference.

The new detection unit gives operators a visual indication of the SHT adherence quality.

User feedback is shared with the product development team, and some modifications have already been incorporated into units purchased by Portsmouth Naval Shipyard. Discussions are currently ongoing regarding how to incorporate remaining changes.



Photo by Danielle Jones



Warfare Center Innovation Team Visit

By Eric Petran
Code 220 Naval New Technology Program Manager

Here in the middle of the Pacific, we are geographically isolated from our brother public shipyards, though we are all engaged in the same mission of repairing Navy assets. We may not know all the initiatives of Naval Sea System Command (NAVSEA) organizations, especially if they do directly involve submarine and surface ship repair.

One such organization is the warfare center community. We often work on ship components directly or indirectly influenced by the warfare center research and design, but we do not often interface directly with the warfare centers.

Recognizing the benefits his naval shipyards and warfare centers could realize through direct interaction, NAVSEA commander Vice Adm. William H. Hilarides recently directed the warfare

centers to visit each public shipyard to learn what challenges they face. This effort could not have been timed better for our Shipyard; it aligns perfectly with our strategic focus area of Innovation and Technology Insertion.

During July, approximately 30 warfare center representatives spent four days here, touring production shops to see what areas were causing us concern. Issues brought up ranged from the number of calibration standards we must maintain to inhospitable environments encountered while repairing corrosion at the bottom of vertical launch missile tubes. In all, 111 ideas for potential collaboration were identified.

With such a lengthy list and limited resources, the Shipyard and warfare centers need to evaluate the possible. The Shipyard will provide feedback and clarify some of the items presented, while the warfare centers identify items they are able to address. As we work together to improve items brought up during the July visit, greater interaction and stronger relationships with the warfare center community will help propel Pearl Harbor Naval Shipyard into the future as a forerunner of innovation and ingenuity.

Shop 56 Work Leader Aaron Santos and Code 260 Engineer Christophe Jackson describe the many inherent problems experienced with a heat exchanger, a function of the electric auxiliary fresh water systems.



Code 930 General Foreman Jarred Newcomb presents innovative methods to replace the brush plate repair process with new chemicals and tools and reduce man hours in the process.



Shop 56 Mechanic Mike Yamamoto showcases the critical steps required when working on a rolling element bearing ring.

Code 730 Crane Maintenance Manager Francis Chanel briefs the Warfare Center innovation team on corrosion control issues that plague portal cranes in Hawaii's extreme environmental conditions.



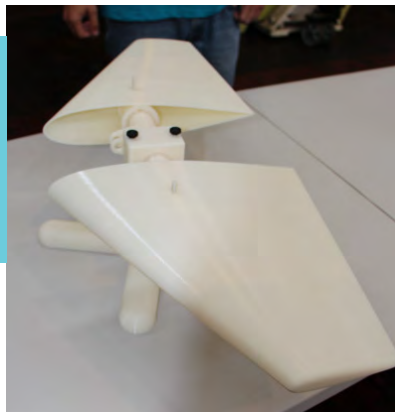
Warfare Center

INNOVATION TEAM VISIT

Inside Shop 56 Supervisor Alan Aquino demonstrates a VH-5 elbow fit and the intricacies of the in-shop fabrication.



This Shop 38 mock-up was created to scale with a Fortus 3D printer as a training aid for familiarization with the removal/reinstallation of submarine fairwater planes. The fabricated model, initiated by Mechanical Community of Practice leader Arian Like, took four days to complete.



Code 711 Crane Engineer Jarred Young (left, center) demonstrates to the Warfare Team how a heavy lift transport benefits production.



Code 930 General Foreman Dave Akau presents two install control surfaces for the fairwater plane, using presented by the hard stop grinding process within a

"This is a great opportunity to interface with P your own eyes the challenges they're facing."

Shop 64 Plastic Fabricator Trades Instructor Andy Ramiscal demonstrates the special hull treatment removal and re-installation process, and the many challenges the shop faces while executing these procedures.





Shop 11 Shipfitter Loft Leader Garry Palacio demonstrates to the Warfare Center innovation team how laser precision measuring is incorporated into structural fabrication work.



Shop 31 Machinist Mechanic Spenser McCready demonstrates the machining process for epoxy repair and installation on a flush rig adapter.



Code 930 Supervisor Alan LaFlamme highlights the challenges Shop 38 faces during 688- and Virginia-class hatch cutting process.



Code 930 Supervisor Alan LaFlamme highlights the challenges Shop 38 faces during 688- and Virginia-class hatch cutting process.

Pearl Harbor Naval Shipyard and actually see with - Deputy Customer Advocate Brian Mahoney



Visitors included (L to R): Chief Technology Officer Kurt J. Schultzel; Chief Scientist for Energetic Materials Dr. Alfred G. Stern; Deputy Customer Advocate Brian T. Mahoney; PHNSY&IMF warfare innovation event coordinator Calvin Koike; Keyport Chief Technical Officer Keith Archibald; NAVSEA 04 Industrial Process Manager Marissa Eyon; and Customer Advocate Office Head Jose Velez.

In Focus: 900T (Training)



Code 900T staff members include (L to R): Pedro Quintal, Christine Heirakuji, Jayme Shimomura, Danny Calpo, Brandon Shimabukuro, David Conner, Production Resources Training Administrator Traci Hanlon, her deputy Supervisory Training Specialist Albert Lau, Greg Leong, Ryan Kodama, Henry Dement, Yvette Oyape, and Beverly Higa.



The mission for Pearl Harbor Naval Shipyard's Code 900T is to provide production shops, codes and projects with trained and competent employees that can safely perform first time quality work within cost and schedule. Code 900T is comprised of approximately 90 people, including schedulers, instructors, supervisors and support staff. Code 900T maintains more than 500 lesson plans, a variety of training equipment and mock-ups, and more than 80 facilities for initial production shop trade skills training (nuclear and non-nuclear), continuing radiological training, and generic skills training for the entire Shipyard (e.g., confined space, asbestos, fall protections, mixed waste, respirator, etc.). Code 900T also manages the Apprentices Program which oversees a rigorous four-year training regimen, in partnership with Honolulu Community College (HCC).



Respirator Trainer Randal Nakamura instructs first-year apprentices on the proper fit testing technique to check the respirator mask seal.



Shop 31 Apprentice Trade Theory Instructor Marc Macedonio (top right) teaches third-year apprentices (L to R) Stacy Wright, Jon Nagamine, Keola Fukunaga and Chris Wee how to operate a Climax cutting machine to cut back layers of a ball valve.



Code 900T Training Leader Wendell Kuamo'o instructs Shop 64 first-year Apprentice Shipwright George Ka'apana on the operation of the Lyher scaffolding system, known for its quick set-up and safety attributes.



Shipyard instructors receive hands-on instructional design training on topics such as participant-centered training, the "ADDIE" process (Analysis, Design, Development, Implementation and Evaluation), and training development.



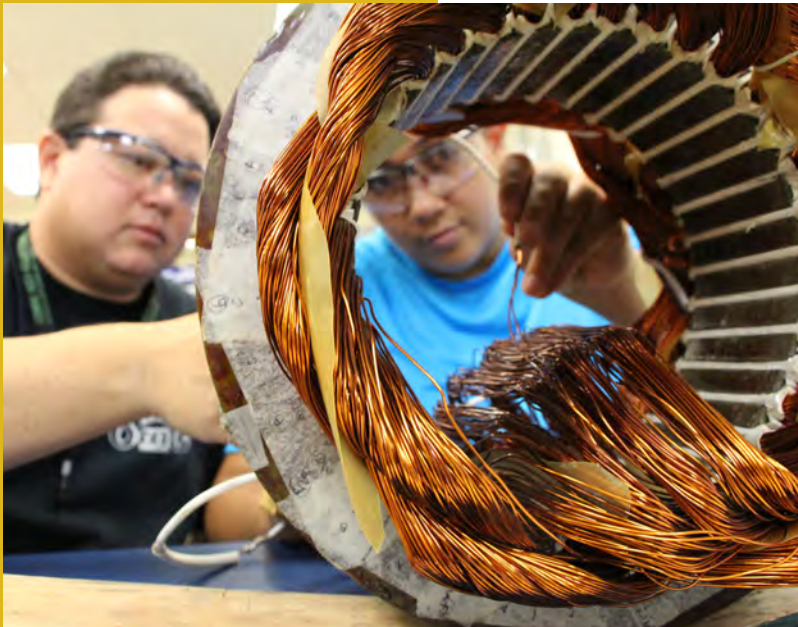
Instructor participants work on a lesson plan they are assigned to develop from scratch. Completion of this week-long session is required as part of Code 900T instructor qualification.

In Focus: 900T

Production Machinery Mechanic Ray Oyakawa (Shop 06 Tool Room & Maintenance) works on a high-powered air compressor (HPAC) while being tutored by Production Machinery Instructor Peter Martinez, Jr.



Shop 56 Pipefitter Brazing Instructor Paul Caparas inspects Limited Pipefitter Mechanic Christopher Wilson's brazing technique on a 90-degree elbow flange critical to pipefitter work.



Shop 51 Electrician Apprentice Instructor James Cady shows first-year Electrical Apprentice Kira Nakasone how to re-build copper coils in a 3-phase motor stator.



Code 900T Production Controller Nelson Ucol (L) works with Code 900T Schedulers Marlin Manley and Suzie Pierce. The C900T Schedulers support all Shipyard Production departments, processing training requests from training coordinators and instructors throughout the Shipyard to schedule employees for a variety of classes. The schedulers also ensure that students are each given appropriate credit for training received so qualifications to work on the waterfront are maintained.



Shop 26 Welder Apprentice Instructor Ryan Ching instructs Shop 26 second-year Welder Apprentice Kalama Souza, as she practices the shielded metal arc welding process in an overhead position, as would be used for "patch" work inside a submarine.





Industrial Equipment Mechanic Instructor Patrick Edralin teaches Industrial Mechanic Apprentice Benjamin Aranio how to use the touch screen motor control for dry dock main pumps and valves.

Shop 57 Insulator Apprentice Instructor Edward Apo oversees fourth-year Insulator Apprentice Jonathan Sadoyama's removal of block Insulation from hot piping, using a multi-master.

Code 900T Deputy Apprentice Program Administrators Kerrin Asato and Collette Gibo share responsibilities in providing administration and oversight of the apprenticeship program.



Code 900T Instructor Ednelson Laciste updates skills training for Marine Machinist Mechanic Jerry Neumann, as Neumann works on a standard Navy globe valve. The purpose of this training is to ensure process proficiencies are maintained.



Code 900T Nuclear Instructors Marvin Ma and Grant Hernandez calibrate a personal frisker radiological monitoring device to ensure it is at its maximized operating potential.



Shop 67 Apprentice Instructor Craig Takafuji teaches first-year Apprentice Jaclyn Vilorio the proper protocol for testing a function generator.



Shop 67 first-year Apprentices Kristy Yabui and Marc Arakawa perform a procedure using lab-volt training equipment they learned to use in trade theory class.



Shop 67's Edwin Ogimi wears an arc flash suit to conduct a critical initial voltage verification while EM2 James Hameric supervises the process, using an electrical digital multi-meter.



Shop 71 first-year Painter Apprentice Jason Dela Cruz receives instruction from Shop 71 Painter Apprentice Instructor Testa Waikiki on the new Virtual Reality Simulator training system for spraying/blasting paint coatings in a 3D, video game-like atmosphere. The system provides the students with the use of a physical paint gun/blast hose, a life-like experience for basic spray painting/blasting training, without a paint/blast booth. It also allows the instructors and students immediate feedback for progress, strengths and areas of needed improvement. The instructors can

correct students' spray/blast techniques immediately. System benefits include: no pain materials used during painting exercises; no hazardous volatile organic compound emissions; no waste generated during training; and much lessened cost of training supplies (e.g., pain, thinner, work pieces, air filters, cleaning fluids, tank suits, etc.). With this system, apprentices with no spray painting/blasting experience can learn basic techniques in a mock-up setting prior to doing the real thing.

[Nuts 'n Bolts]

Fish in abundance for 23rd Annual Fishing Tournament, July 11

Story by Curtis Chong,
C109.1 Information Technology Specialist

The waters off the leeward coast of Oahu were primed on July 11 for the 23rd Annual Pearl Harbor Fishing Tournament. Double and triple hook-ups were reported early in the tournament with 40 fish caught by the early morning hours. On the water, conditions were calm. Particularly light winds allowed warmer water to extend further off shore, creating a haven for marine life and favorable conditions for the tournament's 59 fishing boats.

This year's fishing tournament, conducted from the Waianae Boat Harbor, was made possible by the many sponsors and volunteers who generously contributed funding and volunteer support.

The catchers of the largest 15 fish received monetary awards, while a wide range of sponsors provided great fishing supplies and other prizes to tournament participants. As in prior years, if more than one of the large fish had the same weight, the fish with the earlier hook-up time merited the award. This year, a 270.6-lb. ahi and a 301-lb. aku had no competition.

Shipyards Commander Capt. Jamie Kalowsky opened the tournament in the early morning with event volunteers as boats were checked for readiness. At 5

a.m., the tournament commenced. All boats were required to report fish hook-ups and landings to tournament base. By 9 a.m., 24 ahi had been caught.

Weigh-ins started at 2 p.m. Thirty-four boats made it to the scale on time, bringing in a total of four marlin, five ono, six aku, 36 ahi and three mahi. The 15 award-winning fish for the tournament ranged from a 186.6-lb. ahi to the largest (301-lb.) marlin.

Overall, the gorgeous conditions, the volume of fish, the food and prizes made this year's tournament another successful event. Engineering Duty Officer Lt. Dan Hogue was the tournament weigh master. Sarah Freitas, younger sister of Code 980's Bianca "Binx" Freitas, served as the 2015 Fishing Tournament Queen, and Binx took photos of the winning teams.

Congratulations to the tournament winners, and all those who participated and enjoyed this year's tournament. We send a big "mahalo" to Waianae Boat Fishing Club and all the sponsors and volunteers for making this another great Shipyards event. Special thanks go to the Pearl Harbor Federal Credit Union, the National Association of Superintendents, Hawaii Chapter, and the Federal Managers Association, Chapter 19 for their monetary and volunteer support.



1st Place: 301.0-lb. marlin, by Team 52 in the *Nalani Kai*. Tournament Queen Sarah Freitas congratulates boat captain Clarence Adams Jr. and his son and father, Clarence Adams, Sr., on their First Place win.



2nd Place: 270.6-lb. ahi, by Team 3 in the *Wahine Aukai*. Boat captain Thomas Pieper, Kuuipo Todd and Kate Robinson pose with their ahi and Tournament Queen Sarah Freitas.

July Service Awardees

10 Years

Darren Horiuchi, C105.6
Michael Langley, C106.2
Sara Matsui, C260.1B
Dara Watanabe, C610

20 Years

Ailie Souriolle, C410

25 Years

Eric Kobayashi, C710

30 Years

Charles Chu, Jr., C105.3
James Stollenmaier, C260.2

35 Years

Jon Kaneshiro, C250.4

40 Years

William Sullivan, C300
Daniel Verdugo, C950

50 Years

Richard Rodrigues, C900

Fair winds & following seas to July 2015 Retirees

Buena Harding
Kurt Hee Wai
Wendell Hopkins, Jr.
Ronald Ing
Harold Kaneshiro
Walter Kuwabara
Michael Woolsey

CIVILIAN NEWCOMERS - July 2015

Charles Anderson, Jr., C103.3
Cailee Awa, C250
Jeffrey Bailey, C139
Carolyn Baker, C270
Melvyn Carino, C135.2
Albert Carter III, C260
Chong Wai Chan, C270
Mason Chellemi, C260
Kevin Cheong, C105.3
Cara Cheung, C246
Gene Drubek, C246
Michael Giglio, C1143
Ying Huang, C1141
Shehzad Husani, C260

Conan Kahle, C105.3
Matthew Kim, C250
Man Kit Kuok, C250
Daniel Lee, C246
Erica Lei, C105.3
Tiffany, Licata, C246
Benjamin Lozano, C105.3
Shy Eliza Maravilla, C105.3
Thomas Miske II, C246
Mary Mudrick, C260
Jennifer Nagamine, C105.3
Hung Nguyen, C105.3
Nicholas Pang, C250
Jasten Pascual, C246
Shaun Phillips, C260
Alia Riddle, C139
Chelsea Sakamoto, C250
Shanice Sarmiento, C260
Igor Sarygin, C2340
Shawntrelle Sookla, C246
Lee Ann Tome, C105.3
Kevin Tonouchi, C105.3
Joey Wu, C260
Richard Yamane, C290
Jared Yamauchi, C105.3
Shane Yamauchi, C105.3
Taro Yokoyama, C105.3

MILITARY NEWCOMERS - July 2015

MM2 Carlo Alexis Abueg, C930
ET2 Claire Bailey, X-Div
MM2 Michael Bisnar, C300
MM1 Jeremy Bolinger, C105.3
ND2 Kevin Brooks, C760
MM2 Kyle Bulman, C930
LSC Mario Comia, C103
ET1 Thomas Emery, C300N
AWO1 Pamela Esposito, X-Div
MA3 Justin Ford, X-Div
MM1 Ross Grabenbauer, C930
IC3 Kattie Helton, X-Div
MMCS David Hendricks, C103
FC1 Keith Holding, X-Div
MM1 Casey Irving, C900T
EM2 Davita Johnson, C210
MM2 Stephen Karcher, C246
GSM2 Curtis Madden, X-Div
STS1 Darrell Malone, X-Div
ICC Reginald Moore, C103
LT Michael Murphy, C103
MM2 David Ranger, C300
CMDM James Schneider, C100
EN2 Jeremiah Soria, C760
MASN Emily Williams, X-Div