

PHD SENTINEL

NAVAL SURFACE WARFARE CENTER, PORT HUENEME DIVISION
APRIL 2011

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ARAV Wins Packard Award

Value Engineering Award for LERP

ASNE Award Goes to CVN 78 Test Plan



"The division reported cost savings and cost avoidances of \$8.4M for fiscal year 2010."

A Message from the Technical Director



Mr. Timothy Troske

The NAVSEA focus for April is "Executing Total Ownership Cost Reductions." This is an enduring concept, as we all work together to provide the most capable and combat-ready Navy possible. As the surface Navy combat system in-service engineering agent, we are in a perfect position to provide cost-effective solutions that keep our ships tactically relevant.

Port Hueneme Division's role in executing Total Ownership Cost (TOC) reductions is realized through our Continuous Improvement (CI) strategies such as Lean Six Sigma, the Innovation Drives Everyone Ahead (I.D.E.A.) System and the pursuit of Section 219 innovative concepts (explained below). By applying these strategies, you all have a direct or indirect influence on reducing TOC.

We have documented substantial TOC reductions thanks to your hard work and dedication. The division reported cost savings and cost avoidances of \$8.4 million for fiscal year 2010. Our net target for fiscal year 2011 is \$10 million, and at the end of the first trimester, we docu-

mented results of \$4.6 million in cost savings and cost avoidances.

I want to share with you some specific examples of our TOC initiatives.

The first is the newly-implemented I.D.E.A. System, which in the first trimester of fiscal year 2011 yielded over 150 new ideas. This is a "bottom-up" approach where employees implement common sense ways to streamline their daily work tasks.

Secondly, we have documented great success stories from our Lean Six Sigma program. One example is the Life Extension Refurbishment Program (LERP), which just received DoD's 2010 Value Engineering Award. LERP focuses on the MK 57 NATO Seasparrow Missile System and the MK 23 Target Acquisition System and has saved \$46 million to date. Please see the article on LERP on page 3.

And, last but certainly not least, is the pursuit of innovative concepts through the federal funding authorization provided by Section 219 of the Duncan Hunter National Defense Authorization Act & Naval Innovative Science

and Engineering (NISE) Program. This program allows us to focus on up-and-coming technologies that support the Navy's missions while reducing associated costs. The division currently has initiatives that will reduce the cost and improve the quality of distance support, increase the Navy's testing capability of High Energy Lasers (HELs) and decrease the costs of performing preventative maintenance.

The division is committed to identifying and executing initiatives under the umbrella of CI strategies. I encourage all of you to think of ways we can eliminate unnecessary practices, streamline processes and establish cost-saving, innovative concepts in engineering and logistics technology.

For a more in-depth look at the division's TOC efforts, please see the related article in this issue, page 24.

*NSWC PHD engineers take a group photo with Tim Troske (seated left), division technical director, during the National Engineers Week middle school rocket building competition on Feb. 25, 2011.
Photo by Charlie Houser.*



PHD SENTINEL

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NSWC PHD Selected as 2010 Value Engineering Award Winner

By Nancy Kanter, Command Communications Office

The Office of the Under Secretary of Defense, Acquisition, Technology and Logistics recently selected NSWC PHD as one of the 2010 Department of Defense (DoD) Value Engineering (VE) Achievement Award winners for its Life Extension Refurbishment Program (LERP) for the NATO Seasparrow Missile System (NSSMS) and MK 23 Target Acquisition System (TAS). The award will be formally presented at the Pentagon on June 22, 2011.

LERP was developed to address fleet readiness concerns with NSSMS and TAS top-side equipment. By performing LERP, the Navy/government has saved \$46 million to date and will save at least \$277 million in total life-cycle overhaul dollars while maintaining the NSSMS and TAS units. The equipment is monitored and prevented from degrading beyond the LERP range, thereby reducing the need for overhaul.

Other benefits of LERP include extending equipment life-cycle between overhauls, reducing future overhaul requirements and cost, improving equipment condition, increasing combat system readiness, reducing risk of catastrophic failures, decreasing ships' maintenance burden, improving the ship force quality of life, improving customer satisfaction, and decreasing the total cost of ownership.

Team members involved in this effort included: Joseph Aoun (branch manager, Ship Defense and Expeditionary Warfare Department), Jack White (Overhaul Team lead), and Arturo Trejo, Jr. and Tim Ratto (Material Condition Assessment Team leads/members).

The DoD VE achievement awards are intended to stimulate VE activity for the purpose of reducing costs, improving quality, enhancing effectiveness, and increasing efficiency



Jack White (Overhaul Team lead) briefs members of the command and senior leadership on March 11, 2011, about the Life Extension Refurbishment Program. White and fellow team members Joseph Aoun, Tim Ratto, and Arturo Trejo, Jr. were selected as recipients of a DoD Value Engineering Award. Photo by Nancy Kanter.

throughout DoD. Criteria for the award is based on: net savings; savings as a percent of the affected budget; product, process, or service improvement; VE savings/improvements related to mission of organization; VE program growth; leadership; innovation; scope of potential applicability; uniqueness of idea; cross-functional and/or inter-agency teaming; integration with other improvement initiatives/activities; and new VE activity.



Capt. DeBow (r) presents Dr. Steven Messervy (c), deputy to the commander for research, development & acquisition at the U.S. Army Space and Missile Defense Command/Army Forces Strategic Command, with a photo of the Maritime Laser Demonstration Weapon System onboard the Test Ship as a commemorative gift for his visit to NSWC PHD on March 14, 2011. Tim Troske (l), division technical director, was also present. Photo by Naomi Zelaya.

Aegis Readiness Assessment Vehicle Wins Packard Award

By *Cmdr. Bill Harrell, OIC NSWC PHD Detachment White Sands*

The Aegis Readiness Assessment Vehicle (ARAV) is a solid fuel, rocket-based target vehicle that emulates ballistic missile threats. It is a government-managed target system that delivers up to an 85 percent cost savings over other Ballistic Missile Defense (BMD) targets. ARAV is a product of the NSWC PHD White Sands Detachment located on the White Sands Missile Range (WSMR) in southern New Mexico. The ARAV team was recently recognized with the David Packard Excellence in Acquisition Award by Dr. Ashton Carter, USD AT&L. Quoting from the award citation, the team was commended for, "innovative acquisition practices in building, integrating and launching eight ballistic missile targets, including a new highly sophisticated vehicle that provided the United States with the ability to test against complicated threat representative countermeasures."

ARAV traces its heritage to NASA sub-orbital research rockets that the Navy has been launching at the White Sands Missile Range for decades. Research rockets provide launch platforms for science payloads to conduct upper atmosphere experiments for universities and DoD research laboratories. White Sands Detachment currently executes about 10 of these missions per year.

Recognizing the utility of a low cost research rocket for testing, Aegis BMD used ARAV predecessors as early as 1999 to support live tracking exercises that verified hardware and computer program capabilities and demonstrate crew proficiency. Based on early successes, including range instrumentation flights, Aegis BMD directed the assembly of low cost

"ARAVs" to support future test missions. The first missions were conducted in 2005 at the Pacific Missile Range Facility (PMRF) at NAS Barking Sands, Kauai.

Innovative design approaches have helped keep

response comparable to a full scale target.

Other innovative technologies include a "hit grid" feature for onboard reporting of intercept impact location. Upon intercept, the hit grid instantaneously determines the point of impact and transmits a priority message via telemetry signal describing impact location. This entire process occurs within the last nano-seconds of target life.

Recent ARAV missions have incorporated additional threat representative features. The ability to quickly update the vehicles to support evolving mission requirements has redefined customer expectations.

ARAVs are currently deployed in three primary variants. The ARAV-A costs about \$1.2 million and has a range of up to 500 km with apogee up to 140 km. ARAV-B is a larger vehicle that costs about \$3 million and is capable of ranges approaching 1000 km. ARAV-C, which costs about \$16 million, uses



ARAV-C launch at Pacific Missile Range Facility

the relative cost of the ARAV low and the build cycle short. Like Research Rockets, ARAVs make maximum use of surplus rocket motors available in the DoD inventory. Further economy is gained by sharing common sub-systems which are interchangeable between vehicle variants.

Rocket size is also a critical factor in controlling costs. As a sub-scale vehicle, ARAV is less expensive to build and transport. ARAV's nose cone uses a passive design that enables it to appear larger to a ship's radar. Within the nosecone, metal "ribs" are spaced in a specific manner to provide a radar waveform



ARAV-B on the 50K launcher at PMRF

larger rocket motors and more capable payload options.

Other programs have also used ARAV as part of their

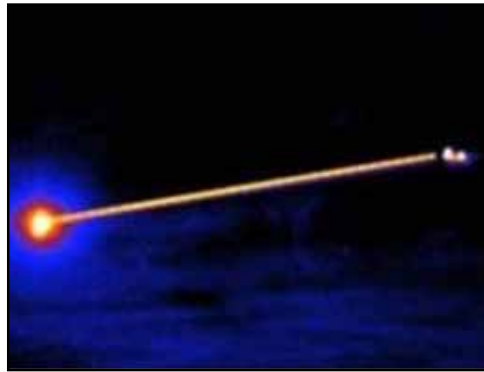


Simultaneous ARAV-B launches

test events. White Sands Detachment has launched eight missions from San Nicholas Island in support of MDA's Airborne Laser Program. The Airborne Laser's first successful "shoot down" was against an ARAV target.

Most recently, ARAV responded to an emergent test requirement to support a tracking exercise for Atlantic Fleet BMD equipped ships. Tasking was received in August 2010; and in only five months, White Sands Detachment was able to provide an ARAV and execute a first time Wallops Flight Facility launch.

Other variants of the ARAV are under consideration. The modular nature of the vehicle provides design options to simulate the kinematics of evolving threats. Current studies consider ARAV ap-



Airborne Laser engagement with ARAV. Lased target is on the left.

plications from sea-based launch platforms providing inbound presentations for land-based weapon systems.

ARAV use has expanded annually. To date, ARAV has executed over 50 successful missions. Cumulative cost savings have been significant; as Commander of Aegis BMD, Rear Adm. Hicks stated that the ARAV family of targets has saved the Navy \$300 million.

USS Sampson Successfully Executes Three Tomahawk Missile Tests

By Elias Salej, Land Attack Department

The guided-missile destroyer USS Sampson (DDG 102) successfully launched three Tomahawk Missiles from its Vertical Launch System during a week-long weapon testing exercise conducted within the NAVAIR Sea Test Range off the coast of Southern California from Jan. 19 to 22, 2011.

The operational test launches (OTLs) were comprised of two Block IV Tactical Tomahawk Land Attack Missiles (TLAMs) and one Block III Conventional TLAM. The launches were highly significant as they were part of a series of flight tests to evaluate the capability of the Tomahawk Weapons System to prosecute targets in an area in which GPS navigation is jammed. The test events incorporated several firsts for the operational test launch program, including the first Tomahawk launch from Sampson and the first evolution during which three consecutive Tomahawk launches from the same surface platform were accomplished.

Tomahawk Weapon System engineers from NSWC PHD supported the three OTLs. The NSWC PHD test team included a platform test coordinator, Tomahawk External Data Extraction System operators, a Vertical Launch System engineer and communications engineer. The platform test coordinator's role



Tomahawk missile executed a planned Variable Dive Maneuver inert warhead impact against aircraft revetment target. U.S. Navy photo.

was to act as a liaison between Sampson and all participating agencies. "It was an exciting challenge for my test team to coordinate all three events; however, it would not have been a success without the outstanding efforts and professionalism of the USS Sampson crew. They knew their system, were fully prepared for the tasks ahead, and were ready to execute," said Pablo Dasalla, NSWC PHD platform test coordinator.

NSWC PHD Engineers' Quick Response Prepares USS Nitze for Deployment

By Nancy Kanter and David Springer



USS Nitze (DDG 94), U.S. Navy photo.

NSWC PHD coordinated and led an assist team, along with an engineer from NSWC Dahlgren, from Feb. 6-11, 2011, to provide support to USS Nitze (DDG 94) in preparation for their 2011 deployment. The team visited the ship to conduct an onboard tech assist in response to a Casualty Report (CASREP) citing command and decision (CND) faults. These faults resulted in a loss of combat system capability. The root cause was identified and corrected during the team's first day onboard. During the re-

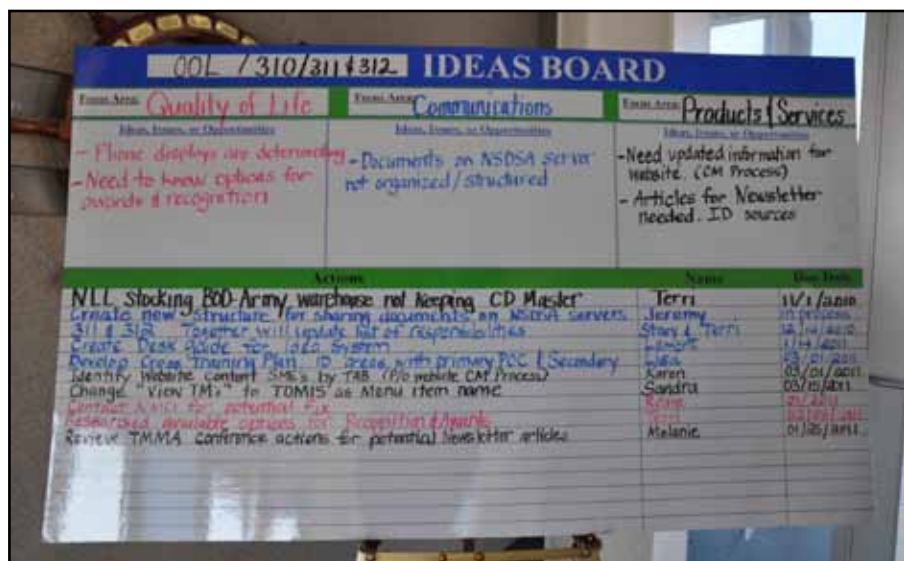
maining four days of the visit, the team continued monitoring and observing fault-free performance of CND, and they assisted ship's force technicians in troubleshooting and correcting additional Aegis Weapon System faults not associated with the original CASREP.

The team was able to respond so quickly to the request for assistance due to the recently implemented Baseline 7.1.2 First Responder initiative as directed by Vice Adm. Kevin McCoy, NAVSEA commander.

"This is a perfect example of what NSWC PHD does so well – quickly responding with the right people at the right time to restore a ship to full combat capability," said David Springer, NSWC PHD Aegis in-service baseline lead.

The team's efforts allowed the ship to fully participate in pre-deployment workup exercises. Following the team's departure, the ship's Commanding Officer, Cmdr. R.D. Brawley, issued a Bravo Zulu naval message acknowledging the team's successful efforts in restoring his combat system to full up-round status.

"NSWC PHD's exceptional dedication and devotion in support of the combat system significantly improved USS Nitze's mission readiness," said Brawley. "Your hard work to restore stability to CND will prove to be crucial to USS Nitze's deployment. The training you provided our technicians not only increased their level of knowledge but will ensure USS Nitze is self-sustainable. Thank you for your support and for a job well done!"



The I.D.E.A. Board for Code 310 was on display during a Transformation Brief-Out held on March 11, 2011, during which Troy Sutton shared his division's ideas. They developed best practices, such as making the I.D.E.A. Board part of regularly scheduled branch meetings and merging boards from several branches into one for the purpose of collaborating and sharing ideas. Photo by Nancy Kanter.

Engineers Recognized for Combat System Integrated Test and Evaluation Plan

By Alyce Moncourtois, Command Communications Office

The American Society of Naval Engineers (ASNE), Channel Islands Section, awarded the NSWC PHD USS Gerald R. Ford (CVN 78) Combat System Integrated Test and Evaluation Plan (CS ITEP) Team as Project of the Year at their annual banquet on March 3, at the Ronald Reagan Presidential Library.

“What a distinct honor it is to be recognized by ASNE for the work that we’ve all been doing for the past several years planning an extensive end-to-end combat system test program for USS Gerald R. Ford,” said Bob Householder, CVN 78 combat system test and evaluation lead. “Also, what a privilege it is for me to accept this award on behalf of all of those who are so deserving of this recognition.”

When CVN 78 is delivered to the U.S. Navy, scheduled for 2015, it will be the first new aircraft carrier since USS George H. W. Bush in 2009, and the first new class of carrier since USS Nimitz (CVN 68) in 1968.

The brand new class of aircraft carrier will be the premier asset for forward pres-



ence, rapid crisis response, endurance on station, early decisive fire power in major combat operations, and multi-mission capability for carrier strike groups, including quality of life improvements for Sailors, and reduced acquisition and life-cycle costs.

Executing and delivering the enormous collection of complex systems brings countless challenges that need to be identified and surmounted to ensure that CVN 78 is ready to deploy, defend herself and carry out assigned missions by 2017. One of the challenges is that ship

systems must plan for longer design/build/test timelines, more complex systems integration and smaller production quantities.

Integrating and executing enterprise testing across multiple systems from end-to-end requires extensive, highly detailed test planning, coordination and scheduling. To better prepare for effective and efficient testing at the combat system level, NSWC PHD is developing the test plan collaboratively with the test and evaluation communities from NAVSEA, SPAWAR, NAVAIR, COMOPTEVFOR and industry. The team is directed and sponsored by PEO IWS, and has been working these unique challenges since February of 2009.

“This effort has included, and continues to include, broad support from both government and industry. There are literally hundreds of subject matter experts from across the Navy community contributing in various ways to the generation of this test plan,” stated Householder.



USS Gerald R. Ford (CVN 78)

All Hands Highlights Leadership, Goals, Diversity

By Nancy Kanter, Command Communications Office



Capt. William DeBow, NSWC PHD commander, held his first official All Hands meeting on Feb. 15, 2011. Among the topics of discussion were his personal leadership strategy, EEO/diversity, the overhead budget plan, and the repeal of "Don't Ask, Don't Tell." Photo by Naomi Zelaya.

Capt. William DeBow, NSWC PHD commander, held his first official All Hands and awards ceremony on Feb. 15, 2011. Audience members stood as vocalist Linda Brown kicked off the meeting with her rendition of the "Star Spangled Banner."

DeBow shared a leadership philosophy which he developed during his 10 years working in management prior to his Navy career. He stressed the three tenets to effective leadership: self, family and Navy. He explained that the self involves taking care of one's health, personal development and preparing to be a professional expert by seeking out educational opportunities. He said that family can be defined in many ways, but that it's important to know how to create success and security within it. By developing the self and one's skill sets and by

taking care of one's family, a person is better able to offer valuable contributions to the Navy.

DeBow also offered his key leadership tools: communication, planning and training. Communication should be up, down and horizontal to the fleet and sponsor customers. Planning involves self-improvement as well as planning on improving the organization. Training involves obtaining certain skills and demonstrating initiative and drive.

He discussed the command's goals and objectives including achieving excellence in providing in-service engineering, integrated logistics support, and test and evaluation with an enabled workforce in a budget-constrained environment. He also discussed objectives to achieve those goals via the Transformation Program

(top-down) and the I.D.E.A. System (bottom-up).

He encouraged the audience to help support communications efforts in getting NSWC PHD's stories told throughout the Navy in order to strengthen awareness of the command's successes.

"PHD has a very positive reputation throughout the Navy," he said, "and it's important that we build on and protect that reputation."

He discussed the command's Mission Accomplishment Focus Areas: compliance, small business, EEO/diversity, overhead budget plan, ERP, technical capability health assessment and definitized tasking.

He mentioned that diversity is a high-profile item for NAVSEA and that there are two goal areas: hiring disabled veterans or "Wounded Warriors," and hiring individuals with targeted disabilities.

"I believe that I owe the Navy a lot and that the Navy owes me an equal opportunity," said DeBow. "I believe that everyone here is owed an equal shot." He then showed a video of the CNO discussing the repeal of the "Don't Ask, Don't Tell" policy and how there's an emphasis on allowing all qualified citizens to serve and be treated with dignity and respect, regardless of sexual orientation.

"I'm very proud that our country is heading toward an environment of greater equality in which everyone gets a fair shot," said DeBow.

The All Hands meeting concluded with an awards ceremony to recognize employee accomplishments.

Division Personnel Recognized by Rear Adm. McManamon

By Nichole O'Grady, Command Communications Office

During a brief visit to NSWC PHD, Surface Warfare Deputy, SEA 21, Commander Rear Adm. James McManamon recognized the achievements of five NSWC PHD personnel at a ceremony March 10, 2011.

Two distinct groups of awardees were acknowledged during the event, including military and command workforce. FC1(SW) James Wickham and FC1(SW) Jared Hofmann received the Navy and Marine Corps Achievement Medal for outstanding technical support aboard Navy ships. Their quick response and unrelenting perseverance were in keeping with the highest traditions of the United States Navy, earning them commendation.

Kevin Neal, Philippe Navarro and Tina Tieu

received recognition for their support in responding to a Casualty Report (CASREP) stating command and decision faults aboard USS Nitze (DDG 94). These faults resulted in a loss of combat system capability. The root cause was identified and corrected during the team's first day onboard improving Nitze's overall mission readiness.

"Congratulations on a job well done," said McManamon. "A critical component of the Navy is having both military and civilian support. The complexity of our jobs demands assistance from everyone in the command, and you exemplify the high commitment and dedication of the team."



Rear Adm. McManamon (second from right), Capt. DeBow (fourth from left) and fellow command leaders pose with FC1 James Wickham and FC1 Jared Hofmann (center l-r) after they received the Navy and Marine Corps Achievement Medal on March 10, 2011. Photo by Nichole O'Grady.



USS Nitze (DDG 94) assist team Kevin Neal, Philippe Navarro and Tina Tieu (center l-r), pose with Rear Adm. McManamon (second from right), Capt. DeBow (second from left) and fellow command leaders upon recognition for assistance and support to the ship's operability on March 10, 2011. Photo by Nichole O'Grady.



Hugh Montgomery, special assistant for science and engineering on the staff of the Assistant Secretary of the Navy, gave a presentation on Section 219 while visiting NSWC PHD on March 9, 2011. Photo by Nichole O'Grady.



NSWC PHD Commander Capt. William DeBow (center right) presents a photo to Hugh Montgomery (center left), special assistant for science and engineering on the staff of the Assistant Secretary of the Navy (ASN), during a command visit on March 9, 2011. Along with the captain, Division Technical Director Timothy Troske (l) helped welcome Montgomery and other ASN visitors. Photo by Nichole O'Grady.



Capt. Heller speaks to high school students during the Pre-Engineering Program introductory class on Feb. 28, 2011. Photo by Naomi Zelaya.

NSWC PHD and Corona Participants Graduate from Leadership Program

By Nichole O'Grady, Command Communications Office



Graduates of the Supervisory Development Program, jointly sponsored by NSWC Port Hueneme and NSWC Corona, posed for a group photo after their ceremony at the Embassy Suites on March 3, 2011. Photo by Naomi Zelaya.

New York Yankee and cultural icon Yogi Berra once stated, "When you come to a fork in the road, take it." Berra's words of wisdom, presented by guest speaker James Thurber, provided the 31 NSWC Port Hueneme and Corona Division participants of the Supervisory Development Program (SDP) food for thought during their graduation ceremony on March 3, at the Embassy Suites.

For the past year, Port Hueneme and Corona employees spent time and effort identifying personal leadership competencies and personnel management skills, including how to coach, counsel and manage employee performance. The SDP graduation marked a significant turning point in their careers that could provide new leadership opportunities through government supervisory positions.

"The investment that our government has—military in particular—in helping people develop leadership is great

and incredibly rare compared with other organizations," said Thurber, distinguished professor of government and founder of the Center for Congressional and Presidential Studies at American University in Washington, D.C.

During his speech, Thurber shared his first-hand experience with leadership having worked directly with President Obama. Upon observing Obama's approach to the presidential election, Thurber concluded Obama was successful in convincing the public of its issues and supplying a solution—a concept he hoped to impart with the graduates.

"We need to have consensus of the situation before accepting a solution," said Thurber. "You have to continue thinking about the strategy of leadership in order to be successful."

SDP was created as a means to achieve succession planning by training future leaders in a variety of work-related topics in preparation

to fill first-level supervisory positions. It is a 13-month course that consists of five, one-week classroom sessions, three, three-day facilitated sessions, individualized personal and team coaching, action learning projects, reading assignments, supervisor interviews, shadowing, and rotational assignments that build effective supervisory and leadership competencies in the participants.

NSWC PHD Commander Capt. William DeBow attended the graduation and remarked on the high-level group of individuals that would continue to provide superior support to the fleet.

"In order to be premier Warfare Centers, we must have the best personnel leading the way," he said. "You were specifically chosen for this task and I'd like to congratulate you on completing the program and for a job well done. You have made us proud."

"SDP was created as a means to achieve succession planning by training future leaders..."

Kids Learn Math and Science Can be Fun at Engineering Competition

By Nancy Kanter, Command Communications Office

The first place finishing team from Monte Vista Middle School poses for a photo with their NSWC PHD engineer Matt Francis and Division Technical Director Tim Troske. Photo by Charlie Houser.



NSWC PHD invited junior high school students from 13 Ventura County schools to participate in an engineering competition held on Feb. 25, 2011. This marked the 11th year that the command has held its National Engineers Week event. Each school's team of five students and one teacher was matched with a NSWC PHD engineer to assist them in building their projects.

The students' mission was to design and construct a missile that would intercept another missile. The students were required to address this engineering challenge with only the materials provided – water bottles, popcorn kernels, coffee stirrers, water balloons, swim noodles, and other miscellaneous household and office supplies.

They also had access to tools such as scissors, string, tape, rubber bands, and hot glue. Some materials needed to be "purchased" by swiping "credit cards" pre-approved for the event. With water bottles costing a mere \$400,000 each, the credit cards' one million dollar limits weren't going to go far without a lot of creativity.

"Some people think that engineering is boring," said Cmdr. Seiko Okano, NSWC PHD Ship Defense and Expeditionary Warfare Department officer during her opening remarks. "But the best engineers I've met are also the most creative."

The students took a short break from their projects to tour the command's Underway Replenishment Test Site where they learned how ships and Sailors receive supplies

while remaining out at sea. This offered another chance to see how math and science skills can be used to come up with real-life engineering solutions.

After the tours, the students were able to test-launch their missiles and make any necessary adjustments prior to the final judging. Each team took turns standing before the panel and presenting their missiles. They offered a rationale for their designs, answered questions from the judges, and then launched their missiles at a target with the help of a blast of compressed air. The projects were judged on accuracy, presentation, creativity and ability to stay within budget.

"Our design is the best because it's sturdy and it doesn't fall apart," said a student from Santa Rosa Technology Magnet School.

Unfortunately, sturdiness alone wasn't enough. First place ended up going to Monte Vista Middle School for their missile's performance, second place to Charles Blackstock Junior High School, and Los Primeros School of Sciences and Arts placed third.

"Our first prototype had a flaw — we had a leak in our fuselage — but our next prototype was more effective," said a student from Blackstock.

The first place team will get the chance to tour a real Navy ship, and students from each of the winning schools received Barnes and Noble gift cards and certificates signed by Timothy Troske, NSWC PHD Technical Director. The other participating schools included: E. O. Green Junior High School, Cabrillo Middle School, Las Colinas Middle School, Anacapa Middle School, Haydock Intermediate School, Fremont Intermediate School, Santa Rosa Technology Magnet



Engineer Marcus Pollard helps a student with the rocket design during the National Engineers Week event. Photo by Alyce Moncourtois.

School, Rio Vista Middle School, Robert J. Frank Intermediate School, and De Anza Academy of Technology and the Arts.

NSWC PHD's National Engineers Week Competition was developed as a way to help students with an aptitude for math and science discover the world of engineering and to expose them to the kinds of problem-solving challenges that engineers face on a daily basis. It is an opportunity for students to apply what they are learning in school to a real-world scenario, assisting them in making connections between their schoolwork and the world of work.

The event also gives NSWC PHD engineers a chance to give back to the community by utilizing their field of expertise. Because one person can make a difference in the mind of a child, it is an excellent opportunity for them to not only help students make important connections, but to act as role models and encourage students to think about their futures.

Volunteer engineers included: Seth Bourn, Matthew Francis, John Anthony Gorospe, Robert Ritchey, Marshall Rice, Andre Casanave, Victor Garcia, Steven Letus, Virginia Shields, Ryan Snooks, Marcus Pollard, Jorge Gonzales, and Thomas Harkins.

Judges for the event included: Okano; Troske; Karen Brower, Office of Engineering and Technology Director and member of the American Society of Naval Engineers (ASNE), Channel Island Section; Jim Vallas, NSWC PHD Deputy Technical Director; Franklin Tomei, Jr., Society of Hispanic Professional Engineers (SHPE) President, Ventura County Chapter; Capt. Scott Heller, Deputy Commander, Office of Engineering & Technology and Chief Engineer; and Noel Camanag, NSWC PHD Senior Leaders and Managers Association (SLMA). ASNE, SHPE, and SLMA also provided generous financial



Engineer Victor Garcia helps a student wrap the base of the rocket during the National Engineers Week event. Photo by Alyce Moncourtois.

contributions that were used to purchase supplies for the event and prizes for the winners.

Membership in professional organizations such as ASNE and SHPE offers the ability to connect with experienced individuals in similar fields and backgrounds for the purpose of networking and sharing knowledge. Additional benefits include mentorship, advice, and assistance with career advancement.

ASNE was founded in 1888 and is the leading professional engineering society for engineers, scientists, and allied professionals who conceive, design, develop, test, construct, outfit, operate, and maintain complex naval and maritime ships, submarines and aircraft and their associated systems and subsystems. ASNE's goals are to advance the knowledge and practice of naval engineer-

ing in public and private applications and operations, to enhance the professionalism and well-being of members, and to promote naval engineering as a career field.

SHPE was founded in 1974, and is a national organization of professional engineers whose goals are to serve as role models in the Hispanic community and provide an opportunity for Hispanic engineers to network. SHPE is committed to enhancing America's position in science, technology, engineering, and math disciplines, and has an independent network of professional and student chapters throughout the nation.

SLMA is a non-profit service organization established in 1982 to provide senior-level leadership support to organizational activities and to enhance the reputation of the command.



Judges (l to r): Cmdr. Okano, Noel Camanag, Frank Tomei, Capt. Heller, Karen Brower, Jim Vallas, and Tim Troske. Photo by Charlie Houser.

NAVSEA Enterprise Resource Planning

Warfare Centers Complete Role-Mapping in March

As Navy ERP is implemented across NAVSEA, it will transform our business practices and undoubtedly change the way we do business. All Warfare Center employees will be Role-Mapped as "Basic Users" and use Navy ERP to enter time and attendance, leave and training requests. "Basic Users" will be required to complete approximately four hours of Web-Based Training (WBT) this summer which can be completed from your desk using your Common Access Card (CAC). Approximately 30 percent of Warfare Center employees have been designated as "Power Users" such as Supervisors, Project Managers and Financial Managers. "Power Users" will receive additional Instructor Led Training (ILT) in a classroom.

"By the end of March, approximately 20,000 Warfare Center employees will have been Role-Mapped in Navy ERP," said Kerry Morrow, the Working Capital Fund Lead. "This is the first major step in preparing the Warfare Centers for a successful transition to ERP in October."

Our PHD Power Users will be required to attend one to two weeks of classroom training that will be located in building 1214 and 1386 between August and early December. Specific training schedules will be coordinated and be distributed to you starting in June.

Calendar items include:

April-June:

School House Instructors (SHIs) complete Web-Based Training (WBT) in April
WFC employees will receive an email from Navy ERP notifying you that your account has been created (early to mid-June)
WFC employees (Basic and Power Users) begin WBT

July:

SHIs are certified to conduct ERP training
All Power Users will be required to complete WBT before attending ILT
Basic Users continue WBT

August:

School House Training for Power Users begins
Basic Users continue WBT

September:

Power Users continue School-house Training
Basic Users continue WBT

October 1: Navy ERP Go-Live

October-December:

During "ERP Cutover," the data from our legacy systems is converted into ERP. As the data is loaded and validated in ERP, we will begin to sunset legacy systems. Training for Basic Users (WBT) and Power Users (WBT/ILT) continues to ensure the workforce is learning how to use ERP. All Basic Users will be required to complete WBT NO LATER THAN Nov. 18 as this will affect the ability to enter/approve time cards. All Basic Users and Power Users will continue to enter their Time and Attendance in SLDCADA (Standard Labor Data Collection and Distribution Application). We anticipate Basic Users and Power Users will begin to enter time and attendance in Navy ERP by mid-November.

December 16: Goal for NAVSEA Warfare Centers to resume Full Operational Tempo (FOT)

If you have any questions, please contact your local ERP site lead, Wayne Honea, at (805) 228-0365 or select the "ERP Drumbeat" rectangular icon on the lower right side of the PHD portal main page.

“Don’t Ask, Don’t Tell” Training Required for Updated Repeal

From NAVSEA Observer

The first update to implement the repeal of the “Don’t Ask, Don’t Tell” law was due to the Defense Department by the service secretaries, March 1. After March 1, each uniformed service is to report every two weeks on the training of military and civilian personnel and regulations updates.

The new procedures are in response to President Obama’s Dec. 22 signing of the provision to repeal Section 654 of Title 10.S. Code, also known as the “Don’t Ask, Don’t Tell” law. A final repeal date remains. It will not occur until 60 days after the president, secretary of defense, and chairman of the joint chiefs certify to Congress that the repeal will be consistent with the standards of military readiness, military effectiveness, unit cohesion, and recruiting and retention of the armed forces. In the interim, no policies, regulations, or benefits will change prior to the final repeal.

“Our goal here is to move as quickly, but as responsibly, as possible,” said Defense Secretary Robert M. Gates. “I see this as a three-step process.”

The process will consist of three different tiers or processes, assignable according to a person’s role.

Tier 1 is for experts who may deal frequently with

repeal issues. Community leaders of these disciplines will develop and deliver the required training. Intended recipients include chaplains, judge advocates, health service professionals, military law enforcement personnel, recruiters, Fleet and Family Support Center personnel, personnel support professionals, Equal Opportunity advisors, and public affairs personnel.

Tier 2 is for command leadership. The Navy is developing, in conjunction with the Department of Defense and other services, a “Commander’s Toolkit” to ensure leadership teams have the tools and information available to provide to their commands.

Tier 3 serves fleet members, including the active force, reserve force, and civilians who supervise military personnel. “The training will emphasize behavior, not attitudes, or personal beliefs,” said Capt. Kate Janac, NAVSEA total force director. “It will focus on informing the workforce about changes in policies, and reemphasize that our high standards of conduct continue to apply to all members of the Navy.”

Commander, Fleet Forces Command, is the executive agent for the Navy’s delivery and tracking of the training

and will lead face-to-face training for command leadership teams (commanding officer, executive officer and command master chief). The command leadership teams will then train their command’s personnel. Command personnel can also conduct and document their training via the Navy Family Accountability Assessment System (NFAAS) at <https://navyfamily.navy.mil> according to the Navy’s Don’t Ask Don’t Tell Repeal Implementation Web site. April 23, is the deadline for Tier 2 training completion. The Tier 1 and 3 training deadline is June 17.

For additional information on training reporting procedures, visit the Navy’s Don’t Ask Don’t Tell Repeal Implementation Web site at www.dadtrepal.navy.mil/.

The following U.S. Fleet Forces Command representatives can answer additional questions:

Training policy and content – Michael Breh, Michael.breh@navy.mil.

Training execution -- Lt. Cmdr. Fiona Halbritter, repeal.execution.fct@navy.mil

Training documentation and reporting -- Lt. Cmdr. Matthew Smith, repeal.reporting.fct@navy.mil.



Correction from January issue, page 22: David Tuton (r) receives his 25-year length of service award from Rear Adm. John Clark Orzalli.



EEO/Diversity Corner

By Suzanne Nicolas, Deputy Equal Employment Opportunity Officer

This section of the *PHD Sentinel* will be used to deliver important EEO and diversity information to our workforce. I feel it is important for me to get the word out in as many venues as possible concerning items and events that are significant for the employees of this command. If you have any questions, you can reach me at x8155.

Command Hosts Wounded Warrior Career Fair

Four NSWC PHD employees hosted the NAV-SEA Wounded Warrior Career Fair at Balboa Career Transition Center in San Diego on March 8, with the hopes of finding potential candidates for employment consideration.

Suzanne Nicolas, Dave Haugland, Armando Ontiveros and Cmdr. Steve Meade talked to nearly 40 wounded warriors about technical and logistics work at PHD. The command has a hiring goal of 22 and is currently at five.

For those departments with possible employment opportunities, the resumes are posted to the S drive under the EEO folder.

Please contact Nicolas at x8155 for more information.



Cmdr. Steve Meade, Air Dominance Department officer, talks to participants at the Wounded Warrior Career Fair in San Diego on March 8, 2011. Photo by Suzanne Nicolas.

Congratulations to Lillian Rodriguez!

NSWC PHD engineer Lillian Rodriguez, Air Dominance Department, was featured in the Society of Hispanic Professional Engineers' (SHPE) magazine, spring issue. Reprinted with permission from SHPE.

COVER STORY

Innovation Afloat

Lillian Rodriguez

TITLE: Computer Engineer,
Engineering Development Lab
EMPLOYER: Port Hueneme Division,
Naval Surface Warfare Center (NSWC)
EDUCATION: B.S. Electrical Engineering,
California State University, Northridge

From designing Environmental Test Racks that support analysis on shipboard equipment to finding new ways to troubleshoot circuit cards, Lillian Rodriguez is never exactly sure of how she'll be innovating on any given week. "Any system, any equipment, any sailor or engineer with a problem can come to us at EDL and we'll help find a solution," Rodriguez said with confidence.

EDL or the Engineering Development Lab, provides in-house engineering capabilities for Naval Sea System Command's (NAVSEA) Naval Surface Warfare Center (NSWC) in Port Hueneme, California. This includes anything from design and development to prototyping and testing. NSWC Port Hueneme's services extend across the U.S. Navy fleet, presenting a unique set of capabilities and solutions.

"Sometimes the greatest obstacle is not having a ship available so that we can test the part," Rodriguez said. "In those situations, we have to locate a land-based facility that has the same system so that we can test fit the part there. Also some of the components being manufactured require that we identify materials that are capable of withstanding the harsh marine environment including wind and salt."

Regardless of the task at hand, Rodriguez approaches each case with a sense of duty to support sailors in the Navy fleet and be resourceful while expanding her knowledge outside of her field. In fact, that's how she went from being a summer aid with the U.S. Navy her junior year of high school to becoming an engineer. "Since I was always good at math and science, I thought of pursuing a degree in math," Rodriguez said. "Working on base, I got to know engineers,

and one in particular encouraged me to pursue the field of engineering."

Today, her responsibilities include using state-of-the-art hardware and software to perform everything from problem analysis to test fitting and proofing-in solutions. This often requires expertise in mechanical as well as electrical engineering. 3D modeling and simulation were among the first things she learned when she joined the NSWC Port Hueneme team 23 years ago. Rodriguez recalled, "I have an electrical engineering background, so coming up with mechanical parts and designing them using innovative software was pretty exciting."

With an expertise in power electronics, Rodriguez is often assigned to redesigns that incorporate state-of-the-art components and technologies in order to maximize end-product reliability and efficiency. At other times, she works as a troubleshooter. One of her more recent projects involved a 19kHz logic power supply in which one of the circuit boards was overheating.

"When those circuit cards break down, they are very costly to repair and replace," Rodriguez explained. Using innovative software, she studied the effects of reconfiguring the cooling air-flow design and running air-flow simulations for each possible configuration. Rodriguez identified a solution that simply involved reversing the power supply's cooling fans, which not only saved a lot of time and money, but also avoided future fabrication problems.

"I'm excited by the freedom to be creative," Rodriguez explained, "but there is nothing like seeing the face of a sailor or engineer light up when you've helped solve a problem."



U.S. Navy Photo by Charlie Houser

NSWC PHD Process Changes Protect Environment and Employee Health

By Roy Buchanan, Code 208, Environmental Protection

NSWC PHD is committed to the conservation and preservation of our environment, and we have an environmental policy that we adhere to. Everyone is responsible for environmental compliance in their daily business operations and practices.

Due to our specific operations and our proximity to residential communities, the command is challenged to provide continual improvement in managing mission-related potential environmental impacts and identifying opportunities to improve core business mission processes through sound environmental management principles. Our goal is to minimize environmental risks and to proactively identify and prevent impacts that could impede mission capability.

The NSWC PHD environmental office established an environmental vision which strongly encourages each employee to regard environmental stewardship and national defense as equally important. To meet the command's environmental challenges, our office has developed an Environmental Management System (EMS) and Pollution Prevention (P2) program as added value to the overall mission. Looking back, we have accomplished some small, but mighty things that have furthered our environmental protection processes and balanced the scoreboard.

Here is a list of some of our accomplishments:

SEMPENs

The first choice for P2 application is source reduction. For example, instead of buying gallons or cans of paint for minor touch-ups, we now purchase spot-paint-applicator SEMPENs which minimize waste and reduce hazardous material cost. We began using these small paint touch-up devices on the MK 99 Fire Control System Planned Maintenance System for the repair of minor damage to the paint on the MK 82 director and AN/SPG-62 antenna. SEMPENs are small, self-contained paint devices that contain only 10CC of the desired paint. The use of SEMPENs means ship force personnel no longer have to order, carry, or store large quantities of paint onboard for minor repairs; they don't need to correctly measure out and mix partial quantities of one-gallon paint kits in order to accomplish minor paint repairs; and they no longer need to store partially used paint kits. Also, this reduces the cost of wasted paint when the unused portion of the paint kits have to be disposed due to expired shelf life. Disposal of the SEMPENs is less costly and reduces the ship's hazardous waste disposal volume.

Phase-out of Methyl Ethyl Ketone at Detachments

EMS discovered that purchasing commercial off the shelf products negates the need to repair circuit boards and makes the use of this chemical unnecessary.

Phase-out of Photographic Chemicals

A photographic processing unit throughout NSWC PHD used to produce aperture cards which were phased out due to the use of digital photography. The unit had a waste stream consisting of silver-bearing photographic fixer waste. The process produced approximately 25 gallons of waste per year.

Compliance with E.O. 13423: "Strengthening Federal Environmental, Energy, and Transportation Management" January 26, 2007

NSWC PHD reduced energy usage from 2003-2010 by installing energy star equipment, bulbs and compact fluorescent lights. In addition, the Facilities Department has revamped their energy plan to include a better monitoring system by measuring their objective and target through metric reporting to senior management.

A67 Electronic Cooling Water System Cooling Skids Process Change

The A67 Electronic Cooling Water System (ECWS) group handles SHIPALTS for the Aegis cooling skids (2351 thru 2353) that, among other things, changes out an old Temperature Regulating Valve (TRV) with a new design. ECWS personnel discovered that the old valve used isopentane and ethyl ether as a working fluid in its temperature control mechanism and added the following to the valve change out procedure to insure that the old valves were properly handled and disposed of. The installation activity will make advance arrangements with the private yard/fleet Industrial Support Centers to dispose of the removed valves in accordance with the current hazardous materials disposal procedures.

Boiler Emission Reductions

NSWC PHD completed an emissions reduction program related to boiler operations. Two 1.8 million British thermal units per hour (MMBtu/hr) boilers were replaced with 950,000 Btu/hr boilers. This replacement reduced energy use as well as exemption from the Title V air permit for this equipment.

Solvent-Free Parts Washers Purchased

Three solvent washers were replaced with solvent-free parts washers. The fluid cleaners

in the new washers are water-based and produce non-toxic by-products.

We have accomplished some great things through our EMS/P2 programs while supporting mission-related projects and operations. Some of the above accomplishments helped the command to win the 2006 Chief of Naval Operations Pollution Prevention Non-industrial Installation Award. EMS and P2 are crucial parts of our organization. When we're able to improve upon our processes and significantly reduce the risk of exposure to hazardous sub-

stances, it makes our environment safer and healthier. In addition, we reduce our direct and indirect costs. Our future focal point will be integrated pollution prevention initiatives that will sustain a healthy balance between business interests, environmental protection, energy and water conservation and other green initiatives.

Keep up the good work NSWC PHD!

Sentinel Innovation Forum Lights up Discussion about Fiber Optics

By Nancy Kanter, Command Communications Office



Dr. Gee-Kung Chang discussed the future of fiber optics during the Sentinel Innovation Forum held on Feb. 24, 2011.

NSWC PHD held its most recent Sentinel Innovation Forum on Feb. 24, 2011. The guest speaker for the event was Dr. Gee-Kung Chang. Chang is the Byers endowed chair professor in optical networking at the school of electrical and computer engineering at Georgia Institute of Technology and an Eminent Scholar of the Georgia Research Alliance. He serves as the co-director of 100G Optical Networking Center and as associate director for the Georgia Tech Broadband Institute.

Chang's presentation offered an overview into

the future of fiber optics. He discussed the current and future of communication technologies such as broadband technology, both wired and wireless. He taught methods on how to achieve high bandwidth and 100GB.

Chang has authored 56 U.S. and international patents and published more than 350 peer-reviewed journal and conference papers. He received a Bachelor of Science Degree in physics from Tsinghua University in Taiwan and a Ph.D. from the University of California, Riverside. He has devoted his career to developing high performance com-

puting and high throughput communication system technologies towards ever smaller dimensions through optimized design and integration of electronic, optoelectronic, and photonic components for broadband optical and wireless access networks. His current research interests cover: 100G transport network, DWDM transport systems, optical label and packet switching system, and very-high-throughput sensor communication systems and wireless over fiber networks.

Sentinel Innovation Forums feature notable speakers who discuss industry best practices in high-technology support. The purpose of these forums is to highlight new technologies and new ways of thinking. The goal is to apply that knowledge and innovation so PHD can improve its responsiveness, capabilities, and competitiveness in supporting the Navy of today and of the future.

January Employee of the Month



Congratulations to Rebecca Wilson, Code L35, for being chosen as NSWC PHD's January employee of the month.

Wilson played a key role in facilitating the transition of MK 160 technical manual (TM) functions from the Louisville Detachment to the Land Attack Department, where she currently serves as TM editor for the MK 160 Gun Weapon System (GWS).

In addition to her TM editor role at PHD, Wilson works

closely with the Center for Surface Combat Systems (CSCS) Unit Dam Neck in Virginia to ensure the TMs, maintenance index pages and maintenance requirement cards are available to support ongoing training courses, such as the first PHD-based United States Coast Guard training course held in January 2011. Wilson's team successfully coordinated the reproduction and delivery of all TMs to support the Coast Guard training event.

Due to her constant professionalism and hard work, Wilson successfully garnered a beneficial relationship between PEO IWS3C and the MK 160 GWS engineering and logistics team, ultimately improving fleet support. Her expertise, hard work and commitment continue to provide numerous improvements to the technical manual pro-

gram, including Optical Sight System (OSS) MK 46 MOD 0, GWS MK 34 MOD 3/GCS MK 160 MOD 10 and the development of Foreign Military Sales (FMS) TMs for Korea, Australia and Japan.

Unyielding in her efforts to promote improvements to the development of TMs, Wilson reviews Integrated Logistics Support Plans (ILSPs), Engineering Change Proposals (ECPs), ILS certifications, Ship Change Documents and participates in the GWS MK 160 quarterly reviews in support of development efforts impacting technical manuals.

Her continuous efforts for improvement are demonstrated in the high quality of the technical manuals provided to the fleet. She is a great asset to the Navy whose primary concern is the welfare of the fleet.

Financial Intern in the Spotlight



Noah Izzard, April's financial intern in the spotlight, entered the Navy's Financial Management Trainee Program (FMTP) in May 2010 and is scheduled to graduate in September 2012. Under this program, he will complete a curriculum of professional development through academic and on-the-job training. Assignments include all aspects of financial management associated with Navy and Marine Corps commands and academic training in a variety of Navy financial management operations.

As a financial intern, Izzard is required to complete four, 60-day rotations before

graduating. To date, he has spent time with Naval Base Ventura County's Human Resources (HR) Department where he learned a variety of HR functions. Izzard was able to give back to the department by helping streamline and automate the monthly process by which employees from test designated positions of the drug testing pool are selected.

Currently, Izzard is working with PHD's Acquisition Division participating in the small and large acquisition procurement closeout processes. He has learned the requirements and functions involved with the awarding and managing of federal contracts.

In late October, Izzard will fly to headquarters in Washington, D.C., to complete his third rotation, before returning to PHD's comptroller office where he will conclude his internship.

Having graduated from Seattle University with a

bachelor's in management, Izzard is putting his degree to work. Thus far, he believes the internship has provided invaluable experience and finds the Navy is ever-changing especially when constrained by today's economic situation.

"I have learned that it is more important than ever for all the functions of our organization to work as a seamless system whereby readiness is heightened and performance gaps are eliminated," he said. "To be the efficient, effective and prepared Navy that our country and Sailors require, it is crucial to look for improvements in our daily jobs and tasks. By understanding our requirements and controlling our costs, it is both possible and necessary to increase our war fighting capability in the present as well as into the future."

Junior Professional in the Spotlight



Reid Tanaka is an electronics engineer in the Air Dominance Department, Code A22, and began working at NSWC PHD in April 2009.

Tanaka is a data collection coordinator for various engineering events, including Combat Ship System Qualifi-

cation Trials (CSSQTs), Ballistic Missile Defense (BMD) and Foreign Military Sales test and evaluation events. As a data coordinator, he is responsible for the recording and handling of classified material in support of engineering testing and live fire missions. Most recently, he was aboard USS Chung-Hoon (DDG 93) for SM-6 developmental testing, the JS Kirishima (DDG 174) for Japan Flight Test Mission-4, and the Republic of Korea's Sejong the Great (DDG 991) for Korea's first KDXIII CSSQT.

He has also supported both BMD and Baseline 7.1.2 efforts to compile and evaluate ships' casualty reports

(CASREPS) in an effort to better provide technical support to the fleet and track trends to make technical distance support more efficient.

He graduated from the Aegis console operations course at Wallops Island and the Combat Systems Officer Course at ATRC in Dahlgren.

Tanaka earned a Bachelor of Science Degree in electrical engineering from UC Irvine; the CSSQT TQS Level 1 Certification for data handling; and the DAWIA SPRDE Level 1 Certification.

In his free time, he enjoys movies, reading, martial arts, and hiking.

Engineer in the Spotlight



Dave Pettingill is an electronics engineer in the Land and Sea Test Department, Code T62, and began working

at NSWC PHD in August 2002.

Pettingill supports the Self Defense Test Ship remote control system, which includes maintaining and upgrading a microwave radio system, networking equipment, computers, a phone system, video surveillance system, and remote control interface units (RCIUs). The RCIUs allow the shipboard weapons, sensors and navigation to be remote controlled from shore. His tasks change with each new test project that is implemented. Some-

times this work is an expansion of the current system or it may involve a completely new addition.

He earned a bachelor's and master's degree in mechanical engineering from Brigham Young University.

When he's not working, he enjoys playing with his two sons and building and fixing things. He likes working on his car, upgrading his computer and doing home improvements.

Technician in the Spotlight



Michael Hopper is a Harpoon FMS installation team lead in the Land Attack Department, Code L32, and began working at NSWC PHD

in 1999.

Hopper is responsible for installing Harpoon Ordnance Alterations (ORDALTs) for foreign countries through the FMS program in support of PMA201. He writes cost estimates for the installation work and also conducts technical reviews of new ORDALTs. His work has also included non-U.S. ORDALT installations on U.S. Navy ships to support live-fire testing.

Hopper provides distance support to the Regional Maintenance Centers and U.S. Navy

ships all over the globe.

He also provides training and assistance for new personnel in MILSPEC cable fabrication, tool use, repair techniques and fire control basics.

Hopper is a retired Sailor and spent five years in Navy schools earning various certifications.

In his spare time, he enjoys making things on his wood lathe.

Logistician in the Spotlight



Maria Martinez began working at NSWC PHD in August 2003 as an availability planner supporting the Air Dominance Department, Code A32.

She currently supports the Configuration Management Branch, Code A36, working as part of the Operational Cycle (OPCYCLE) Planning Team which is responsible for ensuring full logistics supportability for upcoming availabilities. OPCYCLE develops Push to Pull reports for the Aegis Combat System (ACS). These reports are sent to the Naval Sea Logistics Center for initial outfitting requisitions. The

Push to Pull report is a list of parts for each ACS alteration identifying On-Board Repair Part, Maintenance Assistance Module and/or Operating Space Item data. OPCYCLE also develops the Combat System Supportability Assessment Report used by the community to monitor and track integrated logistics support product delivery during availabilities.

Martinez began her career with the Navy as an electrical engineer in August 2001. She worked at NAWCWD Point Mugu providing technical support for the Sparrow Missile Station Test Set. While there, she improved the data collection software which is used to verify the operational status and functions of the Sparrow Control System by remodeling the data in Visual Basic. She also provided technical support for the AQM-37 C Missile Target by examining the target's mission profile and self-testing reports.

Martinez graduated Cum Laude from the Polytechnic University of Puerto Rico with a bachelor's degree in electrical engineering in 2001. In 2006, she earned a master's degree in systems engineering from the Naval Postgraduate School. She is Dawia Level III certified.

Logistics Intern in the Spotlight



Frank Mijares began his internship at NSWC PHD on May 24, 2010, and will complete it on June 1, 2013. He is assigned to Code L34 and is currently rotating in Code L41.

Mijares is responsible for providing engineering and logistics support for in-service land attack systems, including engineering and material support services to fleet/field/depot activities, technical data reviews, supply support management and support and test equipment management. He provides the function of leading the logistics disciplines across multiple programs at platform, system, and equipment levels.

He is currently working on the Total Ship Computing Environment (TSCE) project, including the development of a plan of actions

and milestones. His duties include reviewing actual allowance parts lists (APL) against Configuration Data Managers Database-Open Architecture (CDMD-OA) and extracting and comparing the CDMD-OA extract against TSCE equipment lists. He also examines technical support activities on APLs to check current ownership.

During his internship, Mijares is learning about the requirements for life-cycle logistics planning and how logistics elements relate to the acquisition process. He is learning the principles, tools, application and requirements used for logistics planning and learning about engineering and logistics support for in-service land attack systems. He is responsible for identifying the steps in running a project, defining objectives, and planning and scheduling.

Mijares has a bachelor's degree in civil engineering from the Mapua Institute of Technology, Philippines, and an MSM in project management from Colorado Technical University. He is Dawia Level I certified and is currently working on Level II certification.

Pre-Engineering Program

An educational partnership between NSWC PHD and local area high schools originating in 1998. The bi-annual program is designed to give high school students with an interest in studying engineering the opportunity to apply math and science concepts in real-world scenarios.



Tok-Sun Simpson (l), Pre-Engineering Program (PEP) coordinator, and Jaime Lim (front row, second from left), PEP instructor, are pictured here with PEP students at the Surface Warfare Engineering Facility (SWEF) March 21, 2011. The PEP students in attendance represent Adolfo Camarillo High, Channel Islands High, Hueneme High, Oxnard High, Pacifica High, and Rio Mesa High in the Oxnard Union School District; El Camino High and Foothill Technology High in the Ventura Unified School District; and La Reina High in Thousand Oaks. Photo by Lou DeMars.



NSWC PHD engineer and instructor for the Pre-Engineering Program (PEP), Jaime Lim (in red), conducts a tour of the Vertical Launching System modules at the Surface Warfare Engineering Facility March 21, 2011. Photo by Lou DeMars.

NSWC PHD Shares Best Practices in Reducing Defense Spending

By Nancy Kanter and Mike Engle



NSWC PHD has been using Lean Six Sigma and other continuous improvement strategies since 2005 as a way to move the Navy into the future toward greater efficiency and effectiveness. By fiscal year 2011 to date, the command has provided the Navy and the nation's taxpayers more than \$45 million in cost savings and cost avoidance, and it has developed best prac-

tices that have been adopted by activities throughout the Navy.

These savings and efficiencies are already in alignment with President Obama's recent proposal to cut excessive government spending in several areas, including defense, in order to reduce the deficit. The Secretary of Defense agreed that the military can cut tens of billions of dollars.

"We shouldn't just give our people a government that's more affordable," said Obama during his recent State of the Union Address. "We should give them a government that's more competent and efficient."

NSWC PHD is well on the way toward doing just that. The millions in cost savings and cost avoidances contribute to the reduction in total ownership costs in the command's work processes. NSWC PHD's Continuous Process Improvement (CPI) program has also focused on shared horizontal processes across departments, "grass roots" employee-generated ideas, and national collaborative efforts with other Navy activities.

Notable CPI examples in the past fiscal year include improving and streamlining

processes related to "Sailor to Engineer" technical help, fleet readiness, acquisition, alteration/installation, Combat Systems Ship Qualification Trials, travel, data management, depot level repairs, and parts tracking. These and other improvements resulting in financial or mission benefits have been shared with other Navy activities via the command's Continuous Process Improvement Management System.

To ensure that NSWC PHD remains committed to continuous improvement, the command also employs several best practices such as an I.D.E.A. (Innovation Drives Everyone Ahead) System in which employees come up with common sense ways to streamline their daily work tasks. CPI brief outs every two weeks to communicate command improvement goals and share successes, and improvement teams such as the Value Stream Champion Steering Group and the Black Belt Community of Practice.

Together, these strategies will help NSWC PHD continue its process improvement efforts and will help the Navy become a more efficient and effective force in the defense of our country.

Mark Your Calendars!

Asian Pacific American Heritage Event

May 24

Featuring Dr. James C. S. Meng (SES)

Awards Presented at All Hands, Feb. 15, 2011

20 Years of Service

Coralyn Akers, 201
Elaine Boaz, A33
Carlos Boisselier, T60
Alva Casteel, 210
Mark Dasca, A63
Terry Myers, A23
Elvalinda Rivera, L31
Trish Rodriguez, A03
Eric Romero, L11
Elias Saleh, L25
Roberta Starr, A44
Francisco Torres, S24
Jeannette Veronica, S51
Maria Vitale, 07
Salvador Vizcaino, L03
Jacqueline Vu, S31

25 Years of Service

Leonard Archibeque, A53
Jose Colon, S22
Merle Cruz, 072
Aurelio de la Cruz, L21
Lisa Dodson, L46
Paul Grove, A68
Carl Koch, S21
Joseph McAdams, L44
Cynthia Nedbailo, S03
Frederick Peterson Jr., S04
Chris Puffer, A08
Julie Rocha, 010
Thomas Smith, A67
Ronald Spanier, A42
Gary Szymczak, A64
Ho Trieu, L21
William Watson, S06
Wilfred Yago, A03

30 Years of Service

Mark Donner, S31
Victor Godina, L33
Alan Lajoie, A68
Troy Sutton, 310
Gregory Wakatsuki, A02
John Winstead, T50

35 Years of Service

Thomas Lawson, S41
Michael Stolarz, L45

40 Years of Service

Stephen Blanchard, S33

October 2010 Employee of the Month

Tom Barrett, L33

November 2010 Employee of the Month

Henry Truong, S32

December 2010 Employee of the Month

Connie Tran, S33

LCS 1 Early Deployment Award

Chris Parsell, L26
John Aldis, L26
Steven Aronson, L26
Dave Bograd, L26
Linda Bulick, L26
James Collins, L26
Craig Hackett, L26
Mark King, L26

Richard Langley, L26
Jeremy Manz, L26
Scott Mitchell, L26
Tim McDougal, L26
Christian Oakland, L26
Mara Rathbun, L26
Vic Rivera, L26
Bobby Thompson, L26
Ken White, L26
Yuji Wilson, L26

EEO Award – EEO Committee African American Focus Group

Michael Gibbons, L35
Camille Gaston, A27

EEO Award – EEO Committee Native American Indian/Alaskan Native Focus Group

Mary Anne Rivera, A65

Lean Six Sigma Master Black Belt

Keith Ingram, 105

Naval Air Warfare Center Aircraft Division Commander's Award

Tom Fukuda, L44

Penguin Award

Susan Vargas, 105



Michael Gibbons, Camille Gaston and Mary Anne Rivera receive awards from Capt. DeBow for their outstanding efforts on EEO Committee Focus Groups. Photo by Naomi Zelaya.

Five Tips to Comply with Eye and Face Protection Standards

From the Safety Center

OSHA's Eye and Face Protection Standard says that employees exposed to eye and face hazards such as light radiation, chemicals or flying objects must be provided with eye or face protection. It also sets out criteria for selecting eye and face protection for employees. This standard is a frequent source of violations. To help you comply with the standard, follow these five tips:

Tip 1. Provide Side Protection

Eye protection must defend against all angles of attack. For example, employees exposed to flying debris, such as in a metal shop, require gear with side protection. As long as the eye protection meets all other standards, this side protection can be a detachable clip-on or slide-on side shield.

Tip 2. Ensure Compatibility with Prescription Eyewear

Some employees need corrective lens prescriptions. The protective eyewear equipment these employees use must be compatible with these lenses. You have two options:

- Incorporate the employee's prescription into the lens of the eye protection equipment; or
- Supply eye protection equipment to be worn over the prescription eyewear.

In the latter case, make sure that eye protection equipment and prescription lenses are compatible and that neither obstructs the positioning or proper functioning of the other.

Tip 3. Make Sure Protective Eyewear Is Marked

OSHA requires that eye and face protection equipment be marked so that the manufacturer is easily identifiable. This allows the protec-



tion to be quickly recognized as meeting the certain standards.

Tip 4. Verify that Filtered Lenses Have the Right Shade Number

Certain operations such as welding require the use of filtered lenses to shield the eyes against potentially harmful light radiation. OSHA provides a list of these operations and the appropriate "shade number" filter required in the equipment when performing each operation. Check this list to be sure the eyewear protection provided supplies the proper level of protection for the job.

Tip 5. Make Sure Eye Protection Meets ANSI Standards

Eye or face protection bought after July 5, 1994, must meet the American National Standard Institute's (ANSI) standard ANSI Z87.1-1989. Before buying eye and face protective equipment, check this standard, entitled "American National Standard Practice for Occupational and Educational Eye and Face Protection," and make sure the equipment is up to standard. For more information, visit www.ansi.org.

It's Everyone's Business to Understand OPSEC

From NAVSEA Observer, Feb. 24, 2011

Operations Security (OPSEC) is more than a high level security tool. OPSEC is the process of denying potential adversaries any information about capabilities by identifying, controlling and protecting generally unclassified evidence of the planning and execution of sensitive activities. According to Robert Anderson, NAVSEA OPSEC plan writer, approximately 90 percent of all information gathered by potential adversaries is open source information. This means that OPSEC is a vital "piece of the puzzle" to protecting information at NAVSEA. As a NAVSEA employee, there are several ways you can practice OPSEC.

Recycle Bins and Burn Bags

The perception is that once paper is put into a recycle bin, it is ultimately deposited in a secure facility. The reality is there is no way of tracking what happens to the paper once it leaves NAVSEA. To ensure protection of sensitive materials, employees are encouraged never to place hard copies of emails, personally identifiable information (PII) or controlled unclassified information (CUI) documents into recycling receptacles. When in doubt, shred or otherwise ensure your materials are destroyed in a manner preventing their reconstruction.

Sensitive Conversations

It is not uncommon to hold conversations with fellow workers in public spaces, such as the cafeteria, hallways, designated smoking areas, or even in motor vehicles. However, these are not controlled locations and we are unable to control who may overhear what is said. Remember, many vehicles today are equipped with emergency assistance microphones capable of listening to conversations at any time. You should never discuss work outside of an office or controlled location. Remember that sensitive work must be shared on a "need-to-know basis."

Display of Badges

As a good security practice, all employees are required to show their NAVSEA identification badge to access all NAVSEA buildings. The badge must be displayed at all times, above the waist while in the buildings. However, while commuting to and from work, your badge should never be displayed. Display of a badge in a common location could provide a potential adversary with vital information, such as your full name and exact work location. It also presents an opportunity for a potential adversary to photograph the badge as an aid to reproducing it for infiltration purposes.

Social Media Profiles

Profiles on social media sites allow for the posting of personal information and status updates. It is important to refrain from posting the type of position you hold, the agency you work for and the location of your office, as well as any PII. Anyone with profiles should be reminded to not divulge work information about family members.

Awareness of Surroundings

In addition to taking the appropriate steps to protect your work and PII, awareness of what is going on around you can be vital. If you notice anyone acting suspiciously or something seems out of place, do not be afraid to alert a security guard immediately. According to Anderson, training is the "greatest countermeasure" against potential adversaries. Completion of the annual OPSEC computer-based training is an effective tool for employees. The scenarios in this training simulate situations anyone could experience and should be taken seriously. This year's OPSEC training must be completed by July 1. OPSEC measures, if practiced by every employee, can be critical to reducing the threat of adversary exploitation. Protecting vital information is a job for everyone.





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NSWC PHD employees Keith Ingram (front left) and Frank Tomei speak to potential applicants during the NBVC Job Fair Feb. 17, 2011. Photo by Naomi Zelaya.

