EXWC

EDGE

eMagazine

A Holiday Message from EXWC's CO

EMD Overcomes COVID-19 Obstacles

Welcome Master Chief Melbourne

NAVFAC EXWC

ISSUE #0003

ANTICIPATE – INNOVATE – ACCELERATE

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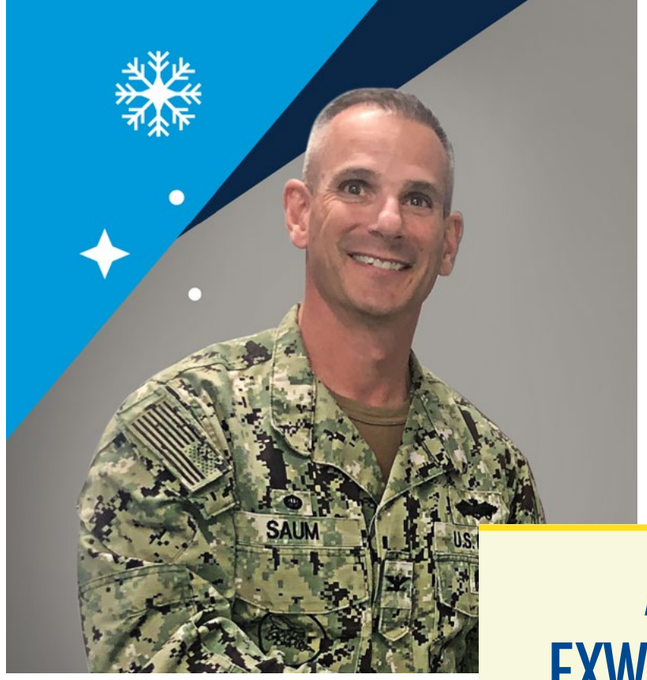
COVER ARTWORK

Welder, Jeremy Hanel showing off his skills for issue #0003 of EXWC EDGE.



MICHAEL R. SAUM, P.E.
COMMANDING OFFICER
Captain, Civil Engineer Corps
United States Navy

A Holiday Message from EXWC's Commanding Officer

Team EXWC,

During "normal ops" at this special time of year, it is Kail and my privilege and honor to not only tell you, but also show you how much leadership appreciates your diligence and hard work. Unfortunately, this year looks different–we are not able to have a holiday luncheon or a cubicle-decorating contest–but the sentiment remains the same. We are celebrating our successes, our camaraderie, and the end to a very unusual calendar year.

All year long, but especially during the holiday season, our thoughts turn gratefully to you–our employees–who have made EXWC's success possible. This year has been trying for all of us; I am not going to candy-coat that. But from adversity comes opportunity! What this year has taught us is that even during the most challenging and unpredictable of times, we can adapt on the fly; come together as a team; grow and mature our systems and best practices; and continue to fulfill our mission of supporting the warfighter. The words can't describe the enormity of what you endured to keep the mission on track...you are resilient and you are agile! There you have it, there is positivity amidst the chaos. I can honestly say even leadership has had our fair share of growing pains, but like you, we have shown up–or stayed in–and continued to do the job that has been asked of us. We do this because who is better equipped to support the warfighter than the scientists, engineers and administrators at EXWC.

I also want to emphasize and send my sincerest gratitude to your families. We cannot forget that by keeping our families safe and healthy these past 8 months, we have had to recreate our working environments, which have likely lead to your own household growing pains. By now, I am sure many of you have worked out an at home battle-rhythm. I understand this is not easy–as does EXWC's leadership. We personally thank you and your families for being flexible as you continue to satisfy the mission.

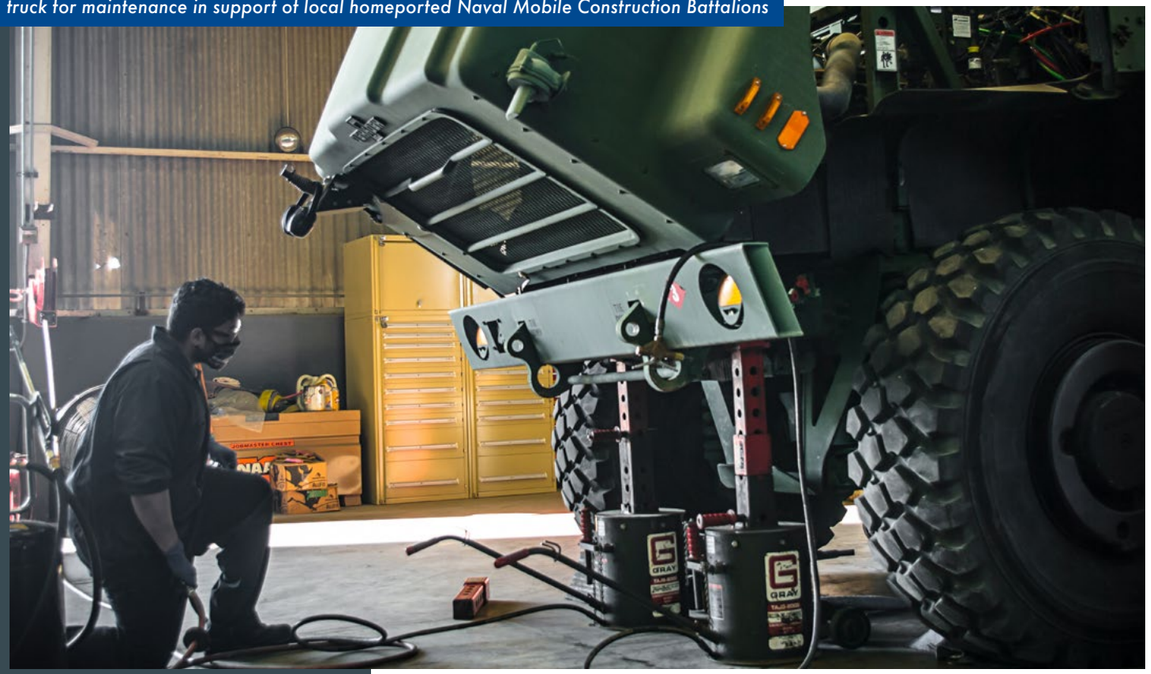
Although we are not physically together to celebrate this year's achievements, we are together in spirit, and look headfirst to what will be another year of EXWC success.

Enjoy this holiday season with your loved ones. Please remember to be safe and stay healthy. On behalf of EXWC leadership, we wish you the very best this holiday season.

MR Saum

Vr/ Captain Mike Saum
NAVFAC EXWC Commanding Officer

Mobile Equipment Repairer Victor Sanchez Jacks up a Medium Tactical Vehicle Replacement truck for maintenance in support of local homeported Naval Mobile Construction Battalions



EXWC's EMD

EXWC's Expeditionary Maintenance Division Overcomes COVID-19 Obstacles to Support the Warfigher

The History of EMD:

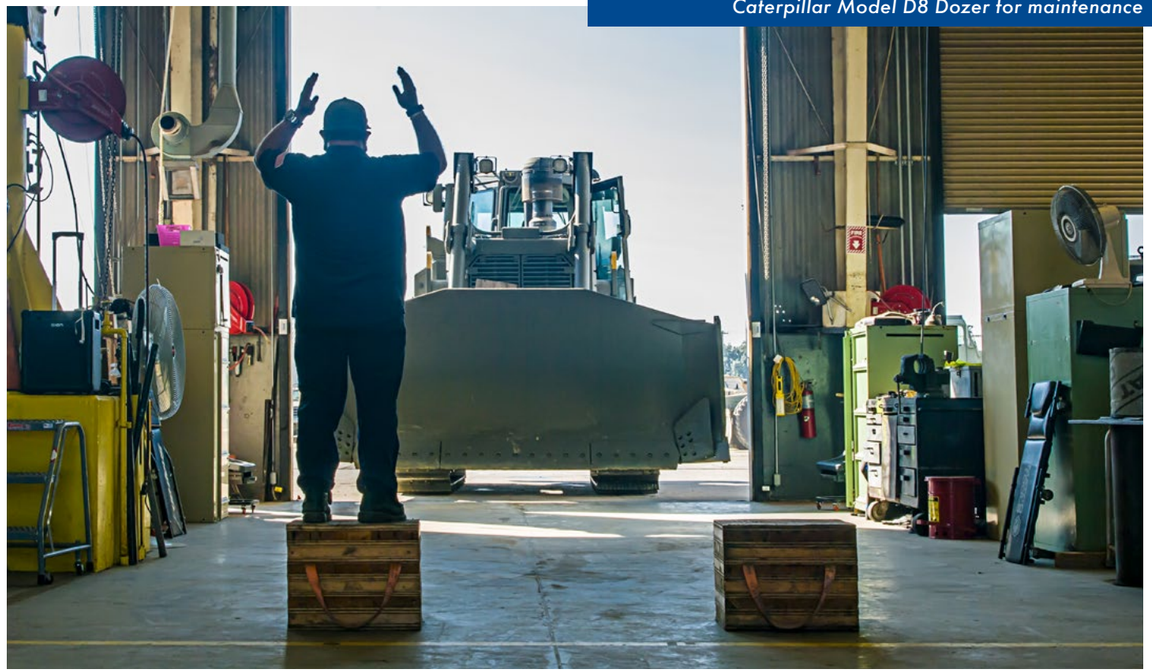
NAVFAC EXWC's Expeditionary Programs Office consists of several divisions and branches aimed to provide expeditionary support to the warfighter. EX9—also known as the Expeditionary Maintenance Division—is comprised of the EX91 Expeditionary Maintenance Center (EMC1) located in Port Hueneme, Calif., EX92 Expeditionary Maintenance Center (EMC2) located in Gulfport, Miss., and EX93 Material Readiness Branch located at both EMC locations.

The EMC's originated in the mid-to-late 1940's. Formerly known as the Construction Equipment Division or CED, the EMC's were originally located at the Naval Construction Battalion Center (NCBC) in Davisville, Rhode Island. Fast-forward a decade; the EMD was reassigned to NCBC Port Hueneme and Gulfport. After several generations of command changes and mergers, EMD officially became part of the Naval Facilities Expeditionary Logistics Center in 2003. Once EXWC was officially stood up, EMD then merged. Fast-forward to present time where in June of 2019, EMD officially became part of ExPO.

What does EMD do?

EMD's services are expansive. Each EMC location offers planning, resource management, work inductance, execution and quality assurance for intermediate level maintenance of military expeditionary assets. EMD also serves as a broker for contracted services they offer. It does not stop there—both EMC locations provide corrective and inactive equipment maintenance for six Navy Construction Battalions, two regiments and two Naval Construction Groups. Their portfolio of services also expands to support engineers with fabrication capabilities by supporting new design projects, and are capable of complete engine overhauls and hydraulic ram rebuilds.

Mobile Equipment Repairer Juan Gonzales guides in Caterpillar Model D8 Dozer for maintenance



How does EMD continue to support the warfighter during stay-at-home orders?

Unlike EXWC branches and divisions, EMC requires in-person, boots on the ground personnel at their facilities in order to complete the equipment maintenance and support services they provide for their customers. Beginning in mid-March, both EMC locations joined the rest of the EXWC community as stay-at-home orders were issued.

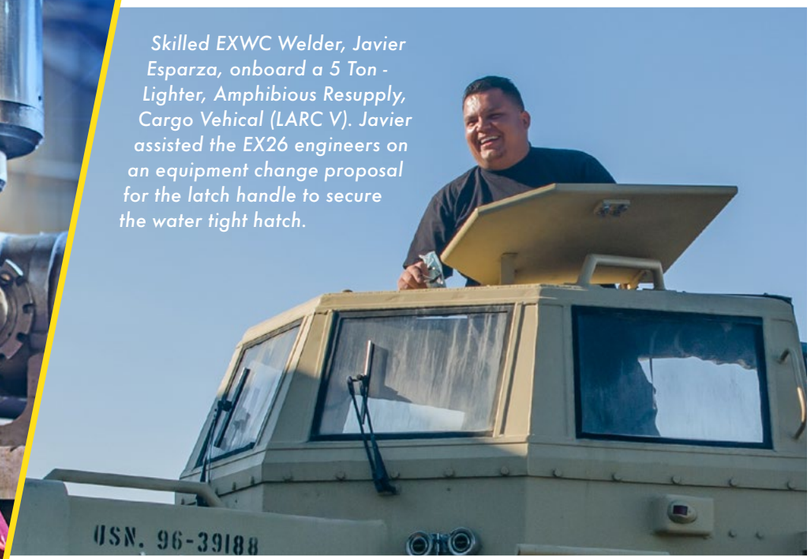
During this time, EMC1 educated themselves on the new Enterprise Resource Planning (ERP) platform that plays a major role in supply purchasing. EMC1 overcame the learning curve to purchase over 600 requisitions in 6 weeks. After submitting hundreds of requisitions, EMC1's supply team became extremely proficient in ERP, and assisted numerous departments for ERP supply purchasing support.

After a few weeks, EMC teams exhausted online training. EMD's supervisors sprang into action to ensure their work could continue in-person in a safe environment. Each EMC location reimagined their office spaces by creating a system of rotating employees and shifts, and over communicating with customers to ensure repairs were completed on time. Thankfully, EMC teams were able to return to their workspaces in May on a rotational basis their supervisors developed.

NAVFAC EXWC

EMD Continues to Overcome COVID-19 Obstacles

Machinist Oscar Cuevas machining a repair part



Skilled EXWC Welder, Javier Esparza, onboard a 5 Ton - Lighter, Amphibious Resupply, Cargo Vehical (LARC V). Javier assisted the EX26 engineers on an equipment change proposal for the latch handle to secure the water tight hatch.

The entire EMD team has consistently succeeded in the face of challenges for over 70 years, and COVID is no different. Although EMC1 and EMC2 had to reassess their working environment–including where they worked and how they worked together–the work continued. This work deserves to be recognized.

"Our EMC teams continue to complete the maintenance that keeps the expeditionary forces in the fight. As the former Director of EMC2 and now Director of EMD, I am proud to be a part of this team of truly professional men and women who complete miracles every day."

- Charles Heatherly
  Expeditionary Maintenance Department Director

"Our EMD resolved issues and overcame a number of first-ever COVID-19 related challenges to pave the way for broader return to workplace planning across the whole Warfare Center".

- Captain Jay Cavnar
  Director of Expeditionary Programs Office

"Our team continues to face the challenges associated with returning to work, they have been extremely professional and selfless in meeting all customer requirements, while ensuring the EXWC mission continues on a daily basis. The EMD workforce has continued to directly serve the warfighter on a worldwide scale, ensuring all equipment requirements have been met, facing the many challenges of 2020."

- Joseph Paris
  Expeditionary Maintenance Center
  One Director

Mobile Equipment Mechanic Robert Prevost inspecting spindle during repair of a Medium Tactical Vehicle Replacement truck

EMC1 Notable Achievements:

The EMC1 team continued to meet mission requirements by rotating 2 supply chain personnel to receive daily materials at Naval Base Ventura County

EMC1 teams inspected, documented, and requisitioned repair materials for 275 pieces of CCA Civil Engineer Support Equipment (CESE)

EMC1 teams inspected, documented, and requisitioned repair materials for 200 pieces of Naval Construction Group One CESE

Two EMC1 mechanics volunteered to assist Naval Construction Group One with equipment shipments during stay-at-home orders

EMC1 performed over 4,800 ships maintenance and material management (3M) preventative maintenance actions on table of allowance (TOA) assets and naval construction group construction capability augment (CCA) assets

EMC2 Notable Achievements:

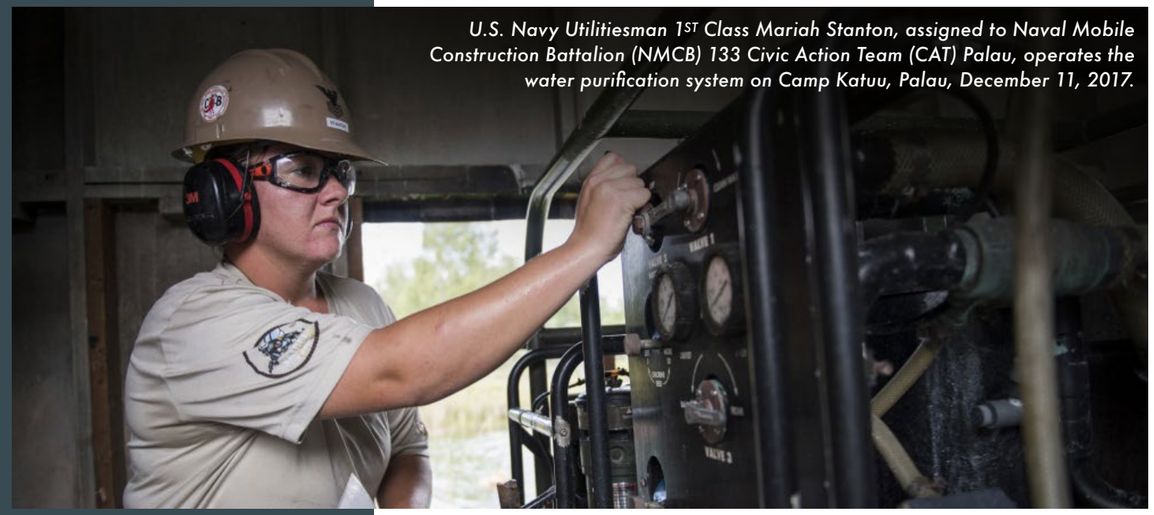
During the COVID-19 stay-at-home orders, six EMC2 teammates met the priority shipment of 18 Highly Mobile Multi Wheeled Vehicle (HMMWV)'s and 10 Medium Tactical Replacement Vehicle (MTVR)'s

Despite COVID-19 restrictions, EMC2 teams kept Lighter Amphibious Resupply Cargo (LARC) repairs on a manageable schedule to meet customer requirements

The EMC2 engine room achieved an expedited mission critical delivery of 2 LARC engines shipped to Sasebo, Japan

EMC2 overhauled three hydraulic booms off three separate 40 on Hydraulic Cranes for NMCB 1/11/133 assigned to Naval Construction Group Two

EMC2 stood up a surveillance crew of three personnel who were responsible for cycling equipment and vehicles to perform minor repairs; when finished, the assets were turned over to Naval Construction Group Two



U.S. Navy Utilitiesman 1ST Class Mariah Stanton, assigned to Naval Mobile Construction Battalion (NMCB) 133 Civic Action Team (CAT) Palau, operates the water purification system on Camp Katuu, Palau, December 11, 2017.

Photo by Petty Officer 1st Class Benjamin Lewis

EXWC in the NEWS

Have you spotted EXWC in the NEWS lately? Check out these latest headlines from the month of November!

NAVFAC EXWC's Seawater Desalination Test Facility Aids Armed Forces with Reliable Potable Water Solutions

Story by Sarah G. MacMillan, NAVFAC EXWC Deputy Public Affairs Officer

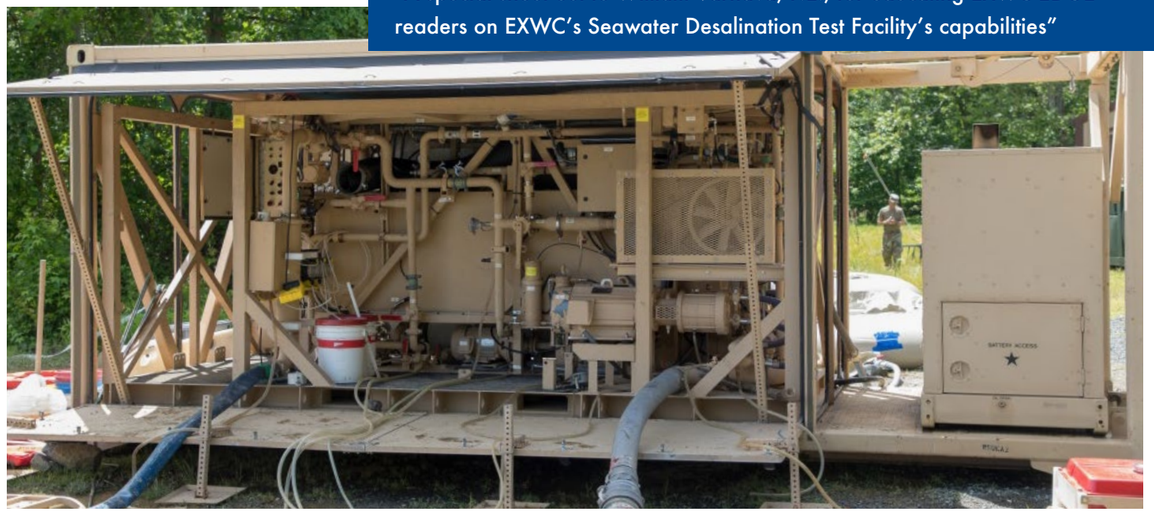
The Seawater Desalination Test Facility (SDTF) located at Naval Facilities (NAVFAC) Engineering and Expeditionary Warfare Center (EXWC), has a long history of supporting the Department of Defense (DOD), federal agencies, and private sector companies with unique water purification, testing and evaluation.

The SDTF is ideally located off the coast of Southern California, offering direct access to natural seawater. Operating 24/7, the SDTF provides a real-world testing environment for water purification components such as high-pressure pumps, reverse osmosis membranes, energy recovery devices, and various microfilter and ultrafilter pretreatment technologies. Of the services the SDTF offers, DOD agencies—such as the U.S. Army—have relied heavily on the SDTF's expertise to support the enhancement of their tactical water purification system—or TWPS.

TWPS is a potable water purification system that filters and purifies brackish water comprised of dissolved metals, nitrates, chlorine, mineral salts, and other water pollutants. Using microfiltration pretreatment, energy recovery devices, and automated processes, TWPS can produce 1,200 gallons per hour of clean, potable water originally derived from seawater, or 1,500 gallons per hour of clean, potable water originally derived from freshwater.

TWPS is arguably one of the Army's most important pieces of equipment, offering water for drinking, personal hygiene, and meal prepping. According to an Army press release, a fully manned armored brigade combat command can consume between 19,000 to 20,000 gallons of potable water in a 24-hour period.

"A special shout out to William Varnava, P.E., for educating EXWC EDGE readers on EXWC's Seawater Desalination Test Facility's capabilities"



A 1500 Gallons Per Hour (GPH) Tactical Water Purification System | Photo by Spc. Bill Li

In the past, the Army has relied on bottled water to meet their water consumption needs. The logistics of transporting bottled water supplies in contested environments proved to be an immense challenge for the DOD's expeditionary forces. By acquiring TWPS, expeditionary warfighters can treat and produce potable water from a wide variety of water sources without having to rely on bulk water supply.

In the early 1990's, the DOD wanted to replace the current 600 gallon per hour reverse osmosis water purification units (ROWPU) with a system that offered greater water production capability without increasing the magnitude of the system. The SDTF was then funded by the Army, and began conducting several engineering studies on pretreatment systems, which led to the development and fielding of TWPS.

Over the past 15 years, the SDTF team has provided engineering and lifecycle support to the Army's Program Management Office. In an effort to further increase potable water capacity, the SDTF team began developing a prototype for a 3,000 gallon per hour TWPS—or 3K TWPS.

3K TWPS is a replacement system for the predecessor 3,000 gallon per hour ROWPU fielded by the Army in the late 1980's. The Army chose to develop an in-house TWPS design that offered greater water production capacity, with the goal of providing technical data packages to potential contractors. In doing so, the Army asked NAVFAC EXWC's SDTF subject matter experts to assist with the design and development of 3K TWPS.

Different from TWPS, 3K TWPS is more mechanically robust, uses manual controls, and incorporates the best practices from several military water purification systems. The prototype uses a customized media and cartridge filter design that incorporates an energy recovery system. It operates from a 60-kilowatt tactical generator that has the flexibility to fit inside a large, standardized shipping container. Several of the components used in 3K TWPS are tied to existing national stock numbers to make the system easier to maintain.

Like past TWPS prototypes, 3K TWPS will undergo extensive testing and validation at the SDTF.

"Testing at the SDTF helps identify issues with equipment, and prove technical solutions through long-term testing," said William Varnava, P.E., NAVFAC EXWC Water Technology Product Lead. "The more hours a piece of equipment undergoes testing in a relevant environment, the higher the overall reliability will be."

Varnava added that increasing water production capacity would reduce the amount of time it takes to produce the amount of water needed for deployable forces. By offering this greater flexibility, the Army can reduce the need to resupply bulk water and become water self-sufficient.

3K TWPS has yet to be acquired by the Army, and continues to be further developed and tested.

The World of STEM

STEM Puns & Riddles:
Why was the software engineer bankrupt?
He'd used all his cache.

EXWC STEM Program Mission

INSPIRE future and current generations of STEM professionals to pursue naval-relevant STEM opportunities.

ENGAGE students and professionals to enhance their capacity and confidence in areas of naval relevance.

EDUCATE students and current professionals to be well prepared for, and successful in STEM careers that support the Navy and Marine Corps.

ATTRACT & EMPLOY a highly competent STEM workforce and network to sustain the Navy and Marine Corps' technological superiority.

DEVELOP & RETAIN a STEM-proficient workforce and network to drive naval science and technology innovation.

COLLABORATE across the Department of Navy, federal government, and broad STEM community to promote an effective and efficient portfolio of naval STEM investments.

The DoD is committed to providing learning opportunities from elementary school through graduate school to inspire and cultivate a diverse pool of exceptional STEM talent. If you are looking for educational resources and activities for your students this holiday break, look no further. The DoD offers a variety of online learning opportunities provided by members of the DoD's STEM Defense Education Consortium and DoD military branches.
Check them out for yourself here:

Conversations with STEM Educators:
https://stemecosystems.org/stem-community-conversations/

Design Activities:
https://www.firstinspires.org/sites/default/files/uploads/resource_library/educators/GB-matt-denton-design-lesson-plan.pdf

Cyber Activities:
https://cyber.org/news/cyber-home

Learn to Code:
https://www.ncwit.org/blog/14-computing-related-activities-do-home

Make Cool Stuff and Learn:
https://www.firstinspires.org/community/home-learning

Did you know the U.S. Department of Commerce reported STEM occupations are growing at 17% annually?

STEM workers play a key role in the sustained growth and stability of the U.S. economy and are a critical component to helping the U.S. continue to persevere. National security requires our future workforce to engage in STEM fields, beginning before college.

STEM Skills Requirement 80%
80% of Jobs will require STEM skills in the next decade

SMART Scholar Retention 71%
71% of SMART Scholars are still employed by the DoD after their service commitment

STEM Employment 46%
46% of The DoD employs nearly half of scientists and engineers in the Federal government

If you or someone you know has a college student looking for a summer internship opportunity, visit the following links for more information. Act quickly because application cycles are ending November 30!

Science and Engineering Apprenticeship Program:
https://seap.asee.org/apply

Naval Research Enterprise Internship Program:
https://nreip.asee.org/apply

SMART Scholarship for Service:
https://smartscholarshipprod.service-now.com/smart

Congratulations to Our Newly Selected Chief Petty Officers

EXWC is proud to announce that five of our First Class Petty Officers have been selected for advancement to the rank of Chief Petty Officer.

Congratulations to:

Anthony Arcilla
SCW/FMF/IW

Jeramie Hoffer
SCW/IW

Luke Leifeste
SCW/IW

Matthew Tatro
SCW/EXW

Colby Wightman
SCW/SW

EXWC Welcomes

EQCM(SCW) Marvin A. Melbourne
Senior Enlisted Leader

A native of Kingston, Jamaica, Master Chief Marvin Melbourne enlisted in the Navy and departed for Recruit Training Command Great Lakes in April of 1996. Upon completion of basic military training, Melbourne attended additional training for equipment operation in Fort Leonard Wood, Missouri.

Melbourne's first duty station was Naval Mobile Construction Battalion (NMCB) 3, where he completed deployments to Souda Bay Crete, Rota Spain, Sigonella Italy, Kosova, Bosnia and Guam. During his NMCB-3 tour, Melbourne participated in the Disaster Recovery Operations in Guam after Hurricane Paka, the Alaskan Airline recovery at Point Mugu, and served with the Kosovo Force. Melbourne then departed the battalion as a petty officer second class with an advanced Navy Enlisted Certification for equipment operation.

In 2001, Melbourne reported to the Southwest Regional Maintenance Center at Coronado in San Diego, California, where he was assigned as the lead operator for the landing craft recovery unit, and served as the mission lead petty officer from 2001 to 2004. Melbourne then advanced to petty officer first class, and received orders to report to NMCB-5 as first platoon chief, transportation supervisor, and crane crew supervisor.

In 2007, Melbourne was selected as chief petty officer, and in 2008, received orders to report to the Naval Construction Training Center in Port Hueneme as the equipment operator schoolhouse director.

In 2018, Melbourne received new orders to report to NMCB-4 as the company master chief for Alfa Company. Then in October of 2020, Melbourne onboarded at NAVFAC EXWC to serve as the command's senior enlisted advisor.

Melbourne is married to the former Sheryl T. Brown, and is the proud father of three beautiful daughters; Shani, Amira, Elsada, and son Delano.

Melbourne is qualified in Seabee combat warfare and holds a master training specialist title. His decorations include four Navy Commendation Medals, four Navy and Marine Corps Achievement Medals, two Army Achievement Medals, and various other campaign and service awards.

What is EXWC up to?

NAVFAC EXWC professionals conduct an unmanned aircraft systems survey over the Port of Hueneme.

Courtesy U.S. Navy Photo

EXWC Unmanned Aircraft Systems Program Participates in Coastal Trident/NAVSEA PHD Advanced Naval Technology Exercise PP Approved

This past fall, NAVFAC EXWC's Unmanned Aircraft Systems (UAS) Program comprised of Kyle Abrahamsen, Christian Bowers, and Jean Pan, Ph.D., and NAVFAC EXWC's Capital Improvements' Geographic Information Systems experts Shea Broussard and Steven Willis, conducted a small UAS survey over the Port of Hueneme as part of the Coastal Trident Advanced Naval Technology Exercise (ANTX). The focus of the exercise was to conduct UAS operations in an environment that is similar to Navy installations, capturing data that would be useful for NAVFAC surveys and inspections. Over the course of the exercise, multiple UAS and payloads flew above the Port of Hueneme. The survey areas included both sides of the port and buildings encompassing the port. By surveying the Port of Hueneme, the UAS team collected data for future use to develop and refine data analyses and data products that can be provided to EXWC customers.

The Navy is adopting UAS for several uses, particularly in circumstances where situational awareness needs improvement, specifically for reducing personnel safety risks.

The Naval Innovative Science and Engineering Program sponsored UAS' participation in ANTX.

http://online.fliphtml5.com/fedq/yqbx/#p=45%20!

Army Visits EXWC's Microgrid Power Systems

After reading Bryan Long's The Military Engineer (TME) article on microgrid test beds, the 249th Army Battalion reached out to EXWC's Public Works Department to schedule an in-person visit of EXWC's microgrid test bed facility. The daylong visit took place at the end of September, and focused on EXWC's microgrid capabilities—specifically microgrid modeling, CAT batteries, and the upcoming Microgrid Academy hosted by EXWC and the Office of Naval Research.

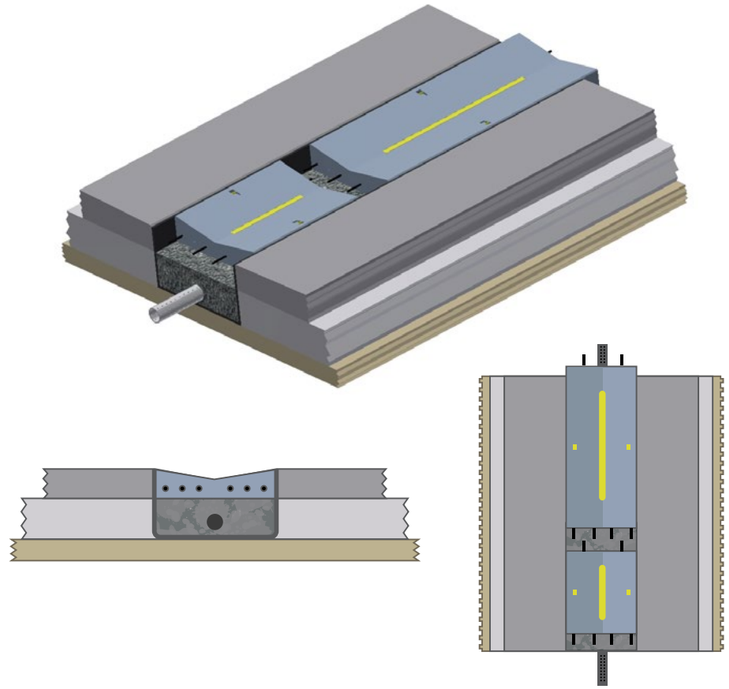
The visit was immensely successful. Industry partners from Xendee (microgrid modeling software program) and Caterpillar (CAT battery supplier) also virtually participated in the visit.

Public works operations across the armed forces require contingency planning for base electricity—especially in contested environments—should the power go out. The 249th Battalion is no different; and is looking to EXWC's subject matter experts to support their mission with enhanced electric power. The visit ended with the enlisted Army personnel presenting a "Coin of Excellence" to EXWC's microgrid test bed presenters.

Bravo Zulu EXWC's Public Works Department and a special Bravo Zulu to Bryan for the continued interest in his microgrid TME article!

What is EXWC up to?

continued...



EXWC Adds the Modular Porous Swale Filtration System to its Impressive List of Patents

Dennis How, P.E., NAVFAC EXWC Mechanical Engineer, and newly retired EXWC employees Gary Anguiano and Mark Foreman have received the official Notice of Allowance for their Modular Porous Swale Filtration System patent.

The Modular Porous Swale Filtration System is a configurable technology that reduces environmental contaminants in storm water runoff. The primary components are:
1) pre-cast concrete surface panels with a reticulated foam drainage slot,
2) customizable media bed, and
3) underdrain conveyance system, see Figure 1. The media bed is tailored to the contaminant of concern and the underdrain system can carry the treated water to an additional treatment system if required. The initial set up involves very little site preparation. Once the site preparation is completed, protective and interlocking concrete panels with drainage slots are placed on top.

Bravo Zulu to Dennis, Gary and Mark on their newly developed patent!

Great News!

EXWC is pleased to announce the selection of our new Oceans Facilities (CIOFP) Department Head, Mr. Chris Kinsey. Please welcome him as EXWC's newest department head. Mr. Kinsey brings a wealth of knowledge and expertise from both his military and civilian careers. Well done Chris.

Recent Executive Leadership Development Program graduates gather for a group photo.

Courtesy U.S. Navy Photo
**The courtesy photo was taken pre pandemic.*

EXWC Celebrates Executive Leadership Development Program Graduate

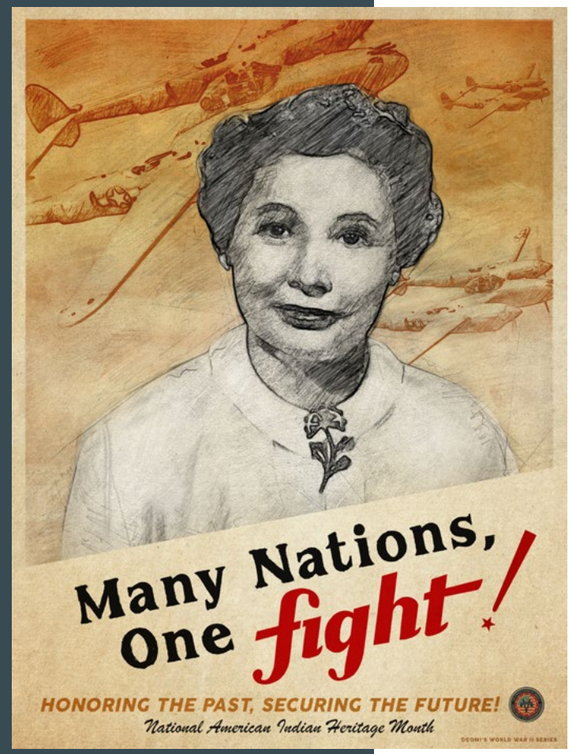
Ocean Mechanical Engineer Vincent "Vinny" Pecchia, P.E. PMP, has successfully completed the Executive Leadership Development Program (ELDP). The "flagship" leadership development program, designed for high potential employees, is managed and funded by the Department of Commerce. ELDP provides leadership development opportunities and addresses key competencies, resulting in a cadre of well-trained and well-qualified employees for leadership roles in the Department of Defense. Participants are self-starters who balance 16 months of curriculum, in addition to balancing their current job duties. "The ELDP has been an incredible journey for me to develop and grow as a federal employee," said Pecchia. "The curriculum [broke] down leadership, starting with the self and expanding to your team, then to the command. [Participants} were put into situations that would stretch our mental capacities while we dealt with constant change." Pecchia added that the networking alone was worthwhile, as he now has over 60 other people from various offices across the DoD to reach back for guidance and support. Congratulations Vinny on a job well done!

EXWC Presents Additive Manufacturing to Oxnard-Ventura Chapter of the Society of American Military Engineers

On October 22, NAVFAC EXWC Mechanical Engineer Christian Bowers presented an overview of Navy Expeditionary Combat Command additive manufacturing for the Oxnard-Ventura chapter of the Society of American Military Engineers. The presentation focused on identifying various additive manufacturing systems currently utilized by the Naval Construction Groups, and future additive manufacturing systems and materials that addressed various capability gaps and requirements. The presentation also included real additive manufacturing use cases within the Department of the Navy and considerations when additive manufacturing is used for in-the-field applications.

"The presentation to SAME was an excellent opportunity to inform both uniformed and civilian engineers on additive manufacturing's role in improving system life-cycle sustainment from depot level to organizational level maintenance. Additive manufacturing enables solving complex fabrication issues through point-of-need production of innovative design solutions such as custom tooling and system modifications."

– Christian Bowers



Department of Defense 2020 National American Indian Heritage Month Posters

National American Indian Heritage Month

Honoring the Past, Securing the Future!

In 1990, Public Law 101-343 announced the United States would observe National American Indian Heritage Month every November. Each year the President issues a Proclamation in recognition of the annual observance. National American Indian Heritage Month recognizes American Indians for their respect of natural resources and the Earth, having served with valor in our nation's conflicts, and for their many distinct and important contributions to the United States.

The Department of Defense recognizes that today's military successes depend heavily on Native Americans:

31,000 American Indian and Alaska Native men and women are on active duty today, serving in Iraq, Afghanistan, and elsewhere around the world.

160,000 living Native Americans are veterans. 11.5% of these veterans are female, as compared to 8% of all other ethnicities.

18.6% Native Americans served in the post-9/11 period in a higher percentage than veterans of other ethnicities; 18.6% vs. 14%, respectively.

Approximately 15,000 active duty, reserve, and civilian members of the Navy's total force declare themselves American Indian or Alaska native.

Native American Code Talkers

Did you know tens of thousands of Native Americans joined the United States armed forces during World Wars I and II? Yes, 44,000 Native Americans served in World War II; the entire population of Native Americans was less than 350,000 at the time.

Native Americans have risen above unparalleled challenges to defend our nation with pride and honor, often providing unique talents critical to the war effort. In particular, towards the end of World War I, the military realized the usefulness of indigenous languages in wartime communication. The government then assembled what was once called telephone squads—or groups of Native American soldiers—who used their languages to create coded messages. During World War II, the United States formalized the use of Native languages, asking Soldiers from several different tribal nations to work as cryptologists who developed secret battle communication based on their languages.

America's enemies never deciphered the coded messages sent.

Code Talkers—the name profoundly used after World War II—are the twentieth Century American Indian heroes who significantly aided the victories of the United States and its allies.

One way to say "Navy" in Navajo—a language used by code talkers—would be "tsah (needle) wol-la-chee (ant) ah-keh-di-glini (victor) tsah-ah-dzoh (yucca)."

NAVFAC EXWC

Work Together, Work Safely

How to Avoid Holiday Electrical Hazards from OSHA

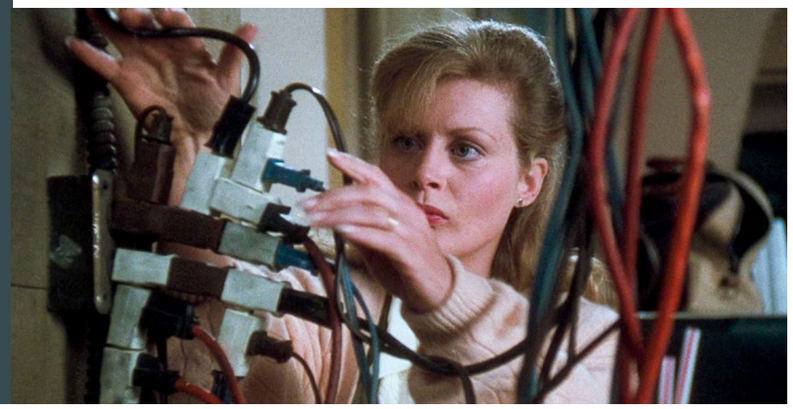
With the holiday season rapidly approaching, the Occupational Health and Safety Administration (OSHA) provided a comprehensive list of electrical safety resources persons are encouraged to follow.

General Safety Precautions: Safety to personnel and safe operation of machines and tools should be of utmost importance in all considerations of using electricity on the jobsite or at home. Electrical hazards are among the most frequently cited OSHA violations. Many specific standards address electrical safety.

Ground Fault Circuit Interrupters: The Ground Fault Circuit Interrupter (GFCI) is a fast–acting device that senses a small current leakage to (the) ground. Within 1/40 of a second, it shuts off the electricity and "interrupts" the current flow. The GFCI provides effective protection against shocks and electrocution. Consider using GCFIs or an assured equipment grounding conductor program on construction sites, at home, or for specific projects.

Extension Cords: Extension cords are convenient ways to provide power to portable equipment. However, they are often misused, resulting in injuries and possible shock hazards. It is an important thing to remember that extension cords are for temporary use only. Inspect extension cords for physical damage before use; check the rating on the tool being used with an extension cord; do not use an extension cord that has a lower rating; do not plug one extension cord into another.

Electrical Fires: On construction sites or home projects, an electrical fire that may occur when portable tools overload a power source. If possible to do safely, immediately disconnect the tool or power cord from the power source. This usually results in the electrical fire being extinguished. If the electrical fire has not been extinguished, a trained person can use a Class "C" or multi-purpose fire extinguisher to PASS over the fire. PASS – Pull Aim, Spray and Sweep.



Oceans Says Farewell to HQ Teammate Dr. Phil Vitale

Over the lifetime of EXWC's Oceans Facilities Department, revolving teams have leaned on industry professionals outside EXWC's walls to provide technical guidance and advocacy of EXWC's unique capabilities. One of EXWC's biggest advocates, Dr. Phil Vitale, is now retiring from NAVFAC headquarters as the Director of Ocean Engineering.

Dr. Vitale has been a constant source of leadership and advocacy for anything and everything related to seafloor and offshore infrastructure and construction. During his tenure, Dr. Vitale has consistently supported EXWC's Oceans Facilities Department, including leading the SYSCOM level engagement concerning EXWC programs that support Commander Navy Installations Command, Naval Sea Systems Command, and Navy Expeditionary Combat Command. Dr. Vitale has also advised the Director, Oceans Facilities Program (OFP) over the years, and mentored countless OFP officers who have risen through the ranks–many of which have worked at EXWC.

Whether you just began your commitment to public service, or are several decades in, Dr. Vitale's remarkable career is a testament to why working for the Department of Defense is not just about getting a paycheck, but rather about the mission and making a difference.

Dr. Vitale, how long have you been in federal service?

46 years total. Beginning November 1974 through December 2020.

Where did you begin your federal service career?

I worked for the Army Corps of Engineers Coastal Engineering Research Center as a GS-7 hydraulic engineer. In 1983, I was hired as an ocean engineer in the ocean construction project office within the Chesapeake Division Naval Facilities Engineering Command (CHESDIV). In 1994, CHESDIV became part of the newly formed Naval Facilities Engineering Service Center (NFESC). In 2004, I moved to NAVFAC Headquarters as the Director of Ocean Engineering.

Were there any projects you worked on during your career that were incredibly significant to you?

I enjoyed my work at the NFESC as the program manager of the underwater inspection program and the magnetic silencing facilities programs. I liked that I was responsible for executing the projects from design through installation and acceptance. These [programs] gave me the background I needed to move into the job as the director of ocean engineering at NAVFAC headquarters.

What projects have you worked on with EXWC that were your favorite, and why?

I have enjoyed working with the EXWC Ocean Facilities Department in support of the wave energy test site (WETS) off the coast of the Marine Corps Base Hawaii. [WETS] is a unique facility in the United States that will continue to advance ocean energy technology. I was also pleased to have initiated our relationship with NAVSEA's University Affiliated Research Center office. Through this relationship, we have been able to sponsor tremendous marine hydrokinetic energy research and design efforts by the University of Hawaii Applied Research Lab and the University of Washington Applied Physics Lab.

Do you have a favorite quote you would like to share with the EXWC EDGE audience?

Yes, from Calvin Coolidge: "Nothing in the world can take the place of persistence. Talent will not; nothing is more common than unsuccessful men with talent. Genius will not; unrewarded genius is almost a proverb. Education will not; the world is full of educated derelicts. Persistence and determination alone are omnipotent."

What advice can you provide for the upcoming scientists and engineers looking to shape the Navy's warfighting capabilities?

Stay focused on the warfighter in everything you do.

So what are your plans for retirement?

I am hoping to stay involved by reviewing ocean energy and other ocean engineering-related proposals for EXWC, the Department of Energy, and other federal agencies. Also, grandchildren. ☺

EXWC's All-Hands/ Town Hall Shout Outs

RESILIENCE

October's All-Hands/Town Hall focused on the character trait "resilience".

So what is resilience? Resilience is a diverse word, but in its basic form, means to have the capacity to recover quickly from difficulties. Resilience relates to toughness, or elasticity. An object, person, or substance that is resilient can spring back into action.

So how does resilience relate to the work we do at EXWC, for the warfighter, and for the government at large? Resiliency is an imperative character trait to possess. In order to meet the Navy's mission and protect our country from foreign adversaries, EXWC must hire and retain personnel who embrace mistakes and failures, and use them as opportunities to grow back and learn. In the wake of setbacks, resilient people learn the skill of recovery—EXWC's personnel are no different. They fight back; even when the initial battle is lost, and even the next battle may likely be lost.

The following EXWC personnel have continuously displayed resiliency in the face of uncertainty:

Commander Charles Bisgard
(Ocean Facilities Deputy Department Head):
Since this past January, Cmdr Bisgard has put forth an extraordinary display of resilience. In addition to his normal duties of being the oceans department deputy, through two acting department heads, Cmdr Bisgard also was an acting division director due the gapping of that position. Cmdr Bisgard has actively participated in the command's reorganization working group, and has continued to participate in the command's acquisition improvement effort.

Lieutenant Commander Dallas Gipson
(Operations Department):
Resiliency perfectly articulates Lt. Cmdr. Gipson. He is continuously driven and dedicated to EXWC and the Civil Engineer Corps, which resulted in his well-deserved selection for Commander. Lt. Cmdr. Gipson continues to support the oceans department portfolio with a forward thinking initiative and a calm demeanor.

Construction Electrician 1st Class Zachary Joerger
(Public Works Department - Mobile Utilities Support Element):
Formally trained as a construction electrician and a prime power production specialist, CE1 Joerger has exemplified professional resiliency when he assumed the role of NAVFAC EXWC Auxiliary Security Force Watch Coordination. CE1 Joerger's ability to remain flexible and adapt to a fluid work environment ensured the timely execution of 1,000 hours of sentry watch to support the Citadel Shield training exercise, and to meet Naval Base Security Force personnel shortages due to COVID-19 during two, 14-day Auxiliary Security Force activations.

Karla Harre
(Environmental Restoration - EV3):
Karla has shown resilience in leading EXWC's Environmental Department during the first critical months of the COVID-19 response. She rotated into the environmental department head position on March 15, the week before EXWC employees were sent home on 100% telework. During the last few weeks in March, she developed and implemented a solid pathway for management and employee communication using a variety of means prior to the deployment of MS Teams. When one method such as DCS failed, she quickly moved to another means of communication, never losing connection with the staff. Karla's resolve to perform her duties, and recover functionality of the EV team, is just one example of her continued resilience.

Kelsey Pauxtis-Thomas
(Restoration Technology Traffic and Central Program - EV32):
Kelsey Pauxtis-Thomas has demonstrated the trait of resilience in taking on new roles while overcoming obstacles in her professional and personal life. At the onset of the pandemic, Kelsey enthusiastically took on the new role of managing EXWC's Environmental Restoration Technology Transfer Program, which significantly increased her workload. She not only continued with on her previous assignments associated with the Environmental Restoration and BRAC (ERB) website, but also worked with NAVFAC headquarters to give a presentation on MS Teams live events to a public audience regarding the website.

Robert Turner
(Test & Evaluation Branch - EX51):
Robert Turner has demonstrated tremendous resilience during his time at EXWC. For multiple years, Robert has proposed several projects, some of which have been accepted and have incurred funding delays and deferrals. His persistence has paid off; the Regional Materials Availability Analysis has recently begun and the Saltwater Concrete Project begins in fiscal year 2021. In addition, Robert has continued to support ancillary functions outside of his core role (such as ExPO OPSEC Coordinator and EX5 Plant Property Custodian). Through all of this, he has pushed, kept a positive attitude, and continued to work towards advancing expeditionary capabilities.

Mark Patterson
(Technology Transfer and Central Programs - EV12):
Over the past year and a half, Mark Patterson has rotated through three positions within environmental leadership, is an active participant on the EXWC Strategic Organization Committee, and has spearheaded use of virtual solutions for collaboration in a telework environment. Mark has consistently and quickly overcame learning curves with each position, tries new solutions for virtual collaboration when existing methods fail, and recovers quickly with new ideas to respond to changes in EXWC strategic mission goals. Mark's determination to get to the goal, and ability to quickly recover from setbacks are excellent measures of his resilience.

The following are superstar ExPO individuals who are directly responsible for executing and obligating over $6.5M in mobile mission support funding, and for ExPO meeting the end-of-fiscal-year benchmarks for both 2019 and 2020.

Szuying Stephens (Business & Financial Mgmt. Division - EX3): Although not assigned to support EX23, Szuying's volunteered to work with EX23 on all end-of-fiscal-year procurement actions.

Aimee Sargent (Mobile Mission Support Program - EX23): Aimee serves as the procurement point person in all ExPO dealings with General Services Administration (GSA) and Defense Logistics Agency (DLA) contracting officers, ensuring all packages were in the contracting agency acceptable format. Aimee has continuously displayed a unique ability to work between EX23, EX3, EXWC Financial Management Department, DLA, and GSA to get all entities to work together to meet goals.

Tony Ayala (EX23): Tony was the procurement creator for all EX23 fiscal year buys. Although Tony was new to procurement writing and his position, he rose to the challenge to learn the intricacies of enterprise resource planning procurement and doggedly saw all procurements through to success.

EXWC Leadership Wishes Happy Holidays to You & Yours!

"Warmest wishes to you and your families for the holidays and the New Year!"

– The Saum Family

"From my family to yours - May blessings in abundance grant you safety, health, and prosperity in the coming year and eternity"

– Craig Clutts,
Executive Officer
NAVFAC EXWC

"Wishing everyone at EXWC and your families the very best over the holiday season – please take some time to decompress, enjoy time with family and friends, and be exceptionally proud of all you accomplished in 2020!"

– Brant Pickrell,
Business Director

"Wishing you a special time for Thanksgiving during the culmination of an extraordinary year."

– Thomas Webb,
Acting Environmental Department Head

"I'm thankful for the great work you do which ultimately supports the warfighter who stands the watch for us and our way of life. All the best to you and yours!"

– Cmdr. Vince Fonte
Our sole Navy Supply Corps Officer
in the NAVFAC enterprise

"Wishing you the happiest holiday season and a well-deserved time off with family, friends and loved ones!"

– Joe Culhane,
Capital Improvements Department Head

"Happy Holidays! I'm proud to be a part of the EXWC family of incredible professionals. Thank you for the hard work, for pulling together, and for pressing on during one of the most challenging times in our personal and professional lives. Hope everyone takes time off to recharge your batteries and take care of yourself this holiday season. Have a wonderful holiday season."

– Jill Thomas,
Chief Contracting Officer

"Wishing everyone a merry and safe holiday and a very Happy New Year!"

– Jackie Wright,
Counsel

"As we enjoy this holiday season, I give thanks for the many blessings we enjoy as a nation and as a community working to defend our freedoms."

– John Kunsemiller,
P.E., Acting Deputy Technical Director

"May this holiday season bring to you the music of laughter, the warmth of friendship and the spirit of love. Take time to relax, rejuvenate and enjoy time connecting with family and friends."

– Jennie Dummer,
P.E., EXWC Science and Technology Reinvention
Laboratory Transition Champion

"To all of my EXWC teammates, have a healthy, safe and happy holiday season!"

– Tony Mrgudic,
Deputy Director Expeditionary Programs Office

"With humble gratefulness for all that you've accomplished in a year filled with challenges, my very best wishes to all of EXWC for a Happy Holiday Season spent with those who bring you joy or in the place where you find peace."

– Chris Kinsey,
Oceans Department Head

"May the holiday season fill your home with joy, your heart with love, and your life with laughter."

– Marvin A. Melbourne,
EQCM(SCW) Senior Enlisted Leader

"Your Human Resources Office wishes you a safe, and healthy holiday season filled with love, laughter and goodwill. Best wishes to you and your families for happiness always"

– Carol Frash
Human Resources

"May this holiday season bring you peace of mind, success and prosperity in the new year, a wealth of happiness, health and safety for you and your family, fun around every corner, energy and excitement to chase your dreams, and that your holidays sparkle with love, laughter, and goodwill."

– Diane, Margaret, Leticia, and Marie,
EXWC Travel Office

"In unity with all cultures and faith backgrounds that makeup the fabric that is EXWC, we wish you Season's Greetings from the "Tiny but Mighty" Public Affairs Operations Team."

– Palmer Pinckney II, Sarah MacMillan, and Chase Close

NAVFAC
Need-to-Know

The Hatch Act

NAVFAC EXWC civilians, this is an important reminder of The Hatch Act and DoD policy that restricts partisan political activities of civilian employees. Partisan political activity is defined as any activity contributing directly toward the success or failure of a partisan candidate, political party, or partisan political group. The purpose of this law is to assure the public that federal programs administered by the government are without the influence of partisan politics.

New Individual Development Plan Resources

Do you need help completing your individual development plan (IDP)? Do you need help assisting your direct reports as they complete their IDPs? NAVFAC is now offering two new resources for those looking for additional guidance.

Find them at:
https://www.navfac.navy.mil/jobs/workforce-development/ccrc/emp_resources/idp.html

Insider Threat Awareness

Understanding insider threats is an essential component of the U.S. Navy's comprehensive security program. By proactively reporting early warning signs, your awareness and action can protect our national security. Remember, if you see something, say something.

To contact the Insider Threat Hub, email:
insiderthreat.fct@navy.mil

Mental Health Resources

The Department of Defense is continuing its efforts to provide mental health resources to service members, their families, and the Department of the Navy civilians. If you or someone you know is dealing with mental health issues, find support with the following resources:

DON Civilian Employee Assistance Program
https://magellanascend.com/

TRICARE Telemental Health Services
https://tricare.mil/CoveredServices/IsItCovered/TelementalHealth

Military One Source
https://www.militaryonesource.mil/health-wellness/mental-health

Kudos to Our Contributors

A special thank you to EXWC EDGE's contributors this month:

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Water Technology Product Lead

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VISION

Accelerate innovation to enable fleet lethality at sea and ashore

MISSION

Provide research, development, testing and evaluation and in-service engineering to deliver specialized facility and expeditionary solutions to the warfighter

GUIDING PRINCIPLES

Integrity:
We serve our warfighters and our nation with Honor, Courage, and Commitment

Accountability:
We operate safely, ethically and urgently, driven by our supported commanders' priorities

Initiative:
We anticipate and act with agility through teamwork to achieve high velocity outcomes

Toughness:
We promote bold, credible leadership to overcome challenges in all phases of operations

Would you like to contribute to the EXWC EDGE?

The EXWC EDGE is always looking for fresh, applicable and compelling new content for our monthly publication. Issue #0004 will launch in early January 2021. Please send your contributions before December 28, 2020 for inclusion.

CONTACT:
navfacexwcpao@navy.mil
In advance, thank you for contributing!

NAVFAC EXWC

ANTICIPATE – INNOVATE – ACCELERATE