

# ALL HANDS

MAGAZINE OF THE U.S. NAVY

NOVEMBER 2020



# TOP NEWS

## NAVY RESEARCHERS EVALUATE UV LIGHT SOURCES TO COMBAT COVID-19

From Naval Research Laboratory Public Affairs Office

**U.S.** Naval Research Laboratory researchers evaluated commercial ultraviolet (UV) light sources for viral disinfection combatting COVID-19 on land and at sea, and they established a dedicated UV characterization lab in five days, to ensure safe introduction and effective operation of UV sources across the Fleet.

The Navy is investigating UV-C band (UVC) light as a potential disinfection technique for niche applications against COVID-19 with materiel going onto a ship, for common use areas on a ship, and for general room disinfection on ships or shore facilities.

In a short period of time Brett Huhman, in NRL's Plasma Physics Division, reconfigured a laboratory space, conferred with subject matter experts across the NRL Materials Science and Component Technology directorate, and borrowed needed equipment to establish a UV characterization laboratory.

"Testing at NRL includes UV unit longevity and reliability, identifying easy-to-use dosimeters, reflections from shipboard surfaces, and secondary ozone generation from these UV systems," Huhman said. "Scientists at other Navy labs are using NRL data to help them test efficacy against viral loads on Navy and Marine relevant surfaces, such as bare metal tools and painted metal surfaces, and cardboard boxes."

Numerous companies offer products that produce UV light and are designed for a variety of small and large-scale applications. The Naval Sea Systems Command (NAVSEA) requested NRL scientists to study and characterize the energy density, UV spectrum, and reliability of commercially available units.

"As the Navy wishes to quickly evaluate the efficacy of these commercial sources before procurement, a small investment was deemed necessary, in order to help the Navy 'verify before we buy,'" said Joseph Schumer, branch head for NRL's pulsed power physics group and program manager. "We have learned a lot about the reliability of commercial sources."

Ultraviolet (UV) is light with wavelengths between 200 and 400 nanometers (nm). UV can be divided into 3 bands in this range: UVA (315-400 nm), UVB (280-315 nm), and UVC (200-280 nm). Each band represents a specific part of the UV spectrum and travels through the atmosphere differently. UVC from the Sun is unable to get to the Earth's surface, as the atmosphere will block it.

Testing began in mid-April after NRL received 15 18-watt, hand-held wands from NAVSEA. Since then, the team has tested nine different mercury- and xenon-based UV sources with plans to evaluate both LED and plasma-based excimer sources.

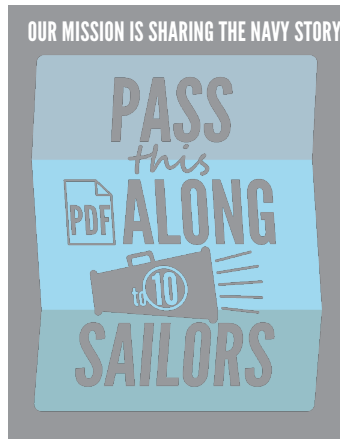
"LED and plasma-based sources are emerging technologies, and represent the use of wavelengths not traditionally used for germicidal disinfection," said Huhman. "Mercury sources have historically dominated the market."

Navy researchers continue to evaluate commercial units already being used in hospitals and for other applications for efficacy on Navy-relevant surfaces. The NRL UV team is receiving items on a bi-weekly basis to evaluate.

NRL's work will help identify situations where use of UV provides sufficient viral disinfection at a particular energy level and will also develop standard operating procedures to ensure safe UV operation for the Fleet.

About the U.S. Naval Research Laboratory: NRL is a scientific and engineering command dedicated to research that drives innovative advances for the Navy and Marine Corps from the seafloor to space and in the information domain. NRL headquarters is located in Washington, D.C., with major field sites in Stennis Space Center, Mississippi, Key West, Florida, and Monterey, California. It employs approximately 2,500 civilian scientists, engineers and support personnel.

For more information, contact NRL Corporate Communications at (202) 480-3746 or [nrlpao@nrl.navy.mil](mailto:nrlpao@nrl.navy.mil).



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FRONT COVER: U.S. Marine Corps Staff Sgt. Ruben Arzate, attached to the "Lucky Red Lions" of Marine Medium Tiltrotor Squadron (VMM) 363, lowers a payload from an MV-22B Osprey to the Ohio-class ballistic-missile submarine USS Henry M. Jackson (SSBN 730) in the vicinity of the Hawaiian Islands. (U.S. Marine Corps photo by Cpl. Matthew Kirk/Released)

BACK COVER: Recruits recite the Sailors Creed during a capping ceremony inside USS Trayer at Recruit Training Command. Trayer, more commonly referred to as "Battle Stations", is the crucible event that recruits must pass prior to graduation, testing their knowledge and skills in basic seamanship, damage control, firefighting and emergency response procedures. (U.S. Navy photo by MC1 Spencer Fling/Released)

# TOP NEWS

## NAVY UPDATES SAILOR OF THE YEAR PROGRAM TO ADD FOCUS ON TALENT MANAGEMENT

From Chief of Naval Operations Public Affairs Office

Based on recommendations from a Navy working group of top senior enlisted leaders throughout the Fleet, the Navy announced today that it is updating its Sailor of Year (SOY) program, to better align with Sailor 2025 initiatives.

The most significant change is the number of SOYs meritoriously advanced from four to 18. Additionally, this update gives each type commander the authority to promote their top-performing eligible First Class Petty Officers ahead of the regular Chief Petty Officer selection board.

“We’re affording greater opportunity

for advancement across the Sailor of the Year program, by extending authority to advance more Sailors of the Year at a level appropriate to the size of the competitive field,” said Master Chief Petty Officer of the Navy Russell Smith. “They have proven through their performance, with validation by multiple rigorous levels of the competition process, that they are now ready for the roles and responsibilities of a Chief Petty Officer.”

Other updates include specifics for SOY competition timelines, board member composition requirements, and revising the nomination format to align with the CPO selection

board precepts and convening order. Also, those selected as a Sailor of the Year will be meritoriously advanced on September 16, after completing CPO Initiation with other Chief Petty Officer selects from the regular selection board.

“Without a doubt, the Chief’s Mess is an institution within the U.S. Navy, and it is absolutely fundamental to our success,” said Chief of Naval Operations, Adm. Mike Gilday. “Updating our Sailor of the Year policy will give Fleet leadership increased opportunity to recognize and promote those Sailors who will lead our Navy far

into the future.”

Established in 1972, the SOY Program recognized Atlantic and Pacific Fleet Sailors; however, in 1973, the program was expanded to recognize one outstanding shore-based Sailor. In 1982, the program was further expanded to include the Navy Reserve SOY.

To read the new SOY program instruction visit: <https://www.secnav.navy.mil/doni/Directives/01000%20Military%20Personnel%20Support/01-700%20Morale,%20Community%20and%20Religious%20Services/1700.10P.pdf>



## CLOTHING, TEXTILE RESEARCH FACILITY PIVOTS 3D KNITTING RESEARCH TO FACE COVERING DEVELOPMENT

From Navy Clothing and Textile Research Facility, Public Affairs Office

The Navy Clothing and Textile Research Facility (NCTRF) announced the commencement of a study and evaluation of 3D knitted face coverings. NCTRF is a business line of the Navy Exchange Service Command (NEXCOM), whose parent command is Naval Supply Systems Command (NAVSUP). As such, in March 2020, NAVSUP directed NCTRF to pivot their 3D knitting research from Flight Deck Jerseys to personal protective face coverings in order to prevent the spread of COVID-19.

“At the onset of COVID-19, when the Honorable James Geurts asked to pull together ideas to respond to COVID-19 and support the defense industrial base, the Navy’s Small Business Innovative Research (SBIR)/Small Business Technology Transfer (STTR) team rose to the challenge,” said Brian Shipley, Commercialization Program Manager, Department of the Navy’s SBIR/STTR Program Office. “This

effort was quickly determined to be a way to pivot an existing SBIR Phase II project to support COVID-related efforts to assemble a solution using technology already in development in our SBIR Program.”

“The utilization of 3D knitting technology has proven to provide a more streamlined and efficient approach to producing an item,” said Laura Winters, Director of NCTRF. “Our continued work with small businesses and new technologies like 3D knitting will continue to move technology forward and greatly benefit our Navy’s warfighters.”

Using the standards of the N95 mask as a baseline, NCTRF developed the laboratory evaluation protocol for these non-medical face coverings. The yarns used to construct the 3D knitted face coverings are evaluated for comfort and filtration efficiency and the designs are assessed for durability.

A wear test was conducted over the summer and included a broad range

of participants within NAVSUP, NEXCOM and Naval Sea Systems Command (NAVSEA). Using data collected during the wear test of the initial prototypes, a second face covering prototype was developed with design and performance improvements. The wear test of the second prototype will occur this fall.

“Assembling a team and collaborating on solving a problem by identifying a technological solution has served as a great example of our ‘Team of Teams’ approach to innovation at NAVSUP,” said Karl Larson, Command Science Advisor and Innovation Program Manager, NAVSUP. Seamless 3D knit technology enables rapid prototyping, short lead times and sustainable production of textile products. The evaluation of the second prototype is expected to conclude by the end of 2020, with anticipated commercialization in 2021. NCTRF will continue to pursue new technologies and present new solutions to meet the

requirements of Sailors within variable Navy environments.

The Navy Exchange Service Command is one of 11 commands under Commander, NAVSUP. NEXCOM oversees six business lines that include Navy Exchange (NEX) stores, Navy Lodges, the Ships Store Program, the Uniform Program Management Office, the Navy Clothing and Textile Research Facility and the Telecommunications Program Office. NEXCOM’s mission is to provide authorized customers quality goods and services at a savings and to support Navy quality of life programs for active duty military, retirees, reservists and their families. Since 1946, NEXCOM has given \$3.6 billion to support Navy MWR quality of life programs. Shop online at [myNavyExchange.com](http://myNavyExchange.com).





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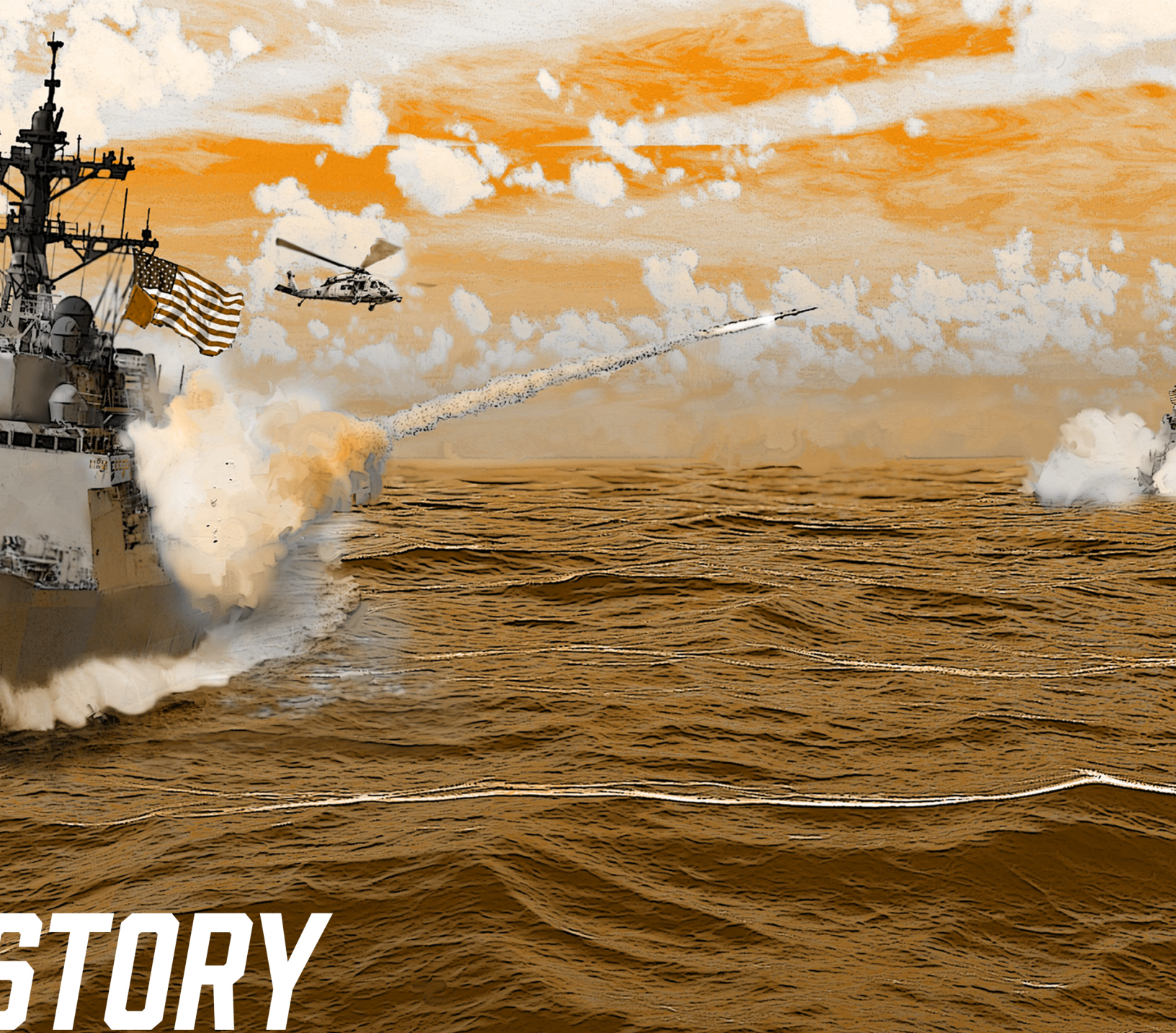
***BY MASS COMMUNICATION SPECIALIST 2ND CLASS LEVINGSTON LEWIS***

“The French called her the Yankee race horse, for her speed and the damage she immediately inflicted upon her fleet,” said Secretary of the Navy Kenneth J. Braithwaite during the announcement of the new Guided Missile Frigate class of ships.

Braithwaite explained that the new class of ships is named after the USS Constellation, which was part of the original six frigates in the United States Navy. The Constellation was originally built in Baltimore, Maryland, and fought ships like the French frigate “Vengeance” in 1800. During that particular

battle with the Vengeance, Constellation damaged the ship so badly that her captain intentionally grounded her to prevent her from sinking. Braithwaite went on to say that the same energy and intrepidity of the original Constellation, will be ingrained into the fibers of these new class of ships.

“As the first in her class, these ships will now be known as the Constellation Class Frigates, linking them directly to the original six frigates of our Navy and carrying on the traditions of our great service that’s been passed down from generation to generation



# STORY

of our Sailors,” said Braithwaite.

The Navy is all about carrying on tradition and carrying on the spirit of those who have gone before us, so much so that it’s in our Sailor’s Creed. “A section of the Sailor’s Creed states, ‘I represent the fighting spirit of the Navy and those who have gone before me to defend freedom and democracy around the world.’ This new class of ship, its mission, and its spirit an aggregate part of the Navy.

“I’ve gotta say that it’s an honor to be a part of this long tradition of being a Sailor. From the lingo, like saying scuttlebutt, to the actual work that we

do. It’s an indescribable feeling to be in the Navy, especially when you’ve had family members who have gone before you to serve. It makes serving on a ship personal and somewhat spiritual with Sailors that have served on that ship with you, before you, and even after you.”

“Our course for the future can be found in the foam of our wake,” said Braithwaite. “Our future success depends on leveraging history lessons and the stories of those who sailed into harm’s way to inspire the service of those who wear the uniform today and those who will wear it tomorrow.”

# ELECTION

## DO'S

VOTE  
VOTE  
VOTE

★ While off-duty, you can express personal, non-partisan views on social media, and "Like" / "Friend" / "Follow" a particular candidate or party as long as your account doesn't identify you as a service member.



★ **VOTE!** Make your voice heard. In fact, encourage others to vote! Just don't try to influence who fellow service members vote for.

★ If your social media identifies you as a service member, make sure your social media account states: "The views expressed here do not reflect those of the DoD or its services."

★ You can participate in peaceful, non-partisan demonstrations to express your opinions so long as you are OFF-duty and NOT in uniform.

★ Remember, whoever wins the national election will be our Commander in Chief. Be respectful and maintain your professionalism both on and off duty.



## DON'TS

★ Do not participate in partisan political activity or act in a manner that could imply the DoD's approval or disapproval of any political party, candidate or policy in a partisan election.

★ Do not attempt to influence the specifics of a vote of any other service members.

★ Do not share partisan content with subordinates.

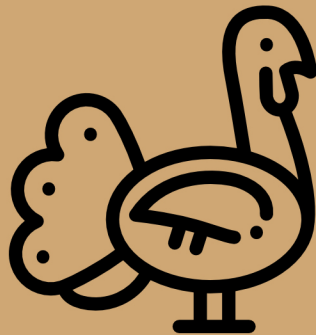
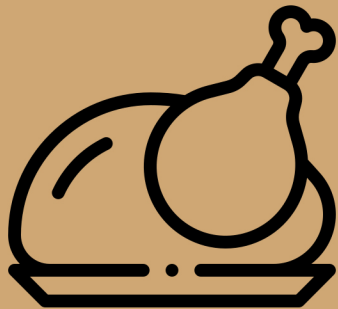
★ Do not fundraise or solicit support for a particular party, candidate or policy.

★ Do not use your social media account to suggest that other coworkers or service members "Like" / "Friend" / "Follow" a candidate, partisan account.

★ Do not actively participate in a public demonstration that is organized by a political party, campaign or candidate.



# Thanksgiving Turkey Safety



## THAWING

There are three recommended methods:

- 1) Submerge your bird in water, and change the water every 30 minutes. \*MUST cook immediately after thawing\*
- 2) Microwave: use defrost function based on the weight of the bird. \*MUST cook immediately after thawing\*
- 3) Refrigeration: Allow approximately 24 hours for every 4 to 5 lbs. USDA Recommended method. After thawing, you can keep bird in the refrigerator another 1 to 2 days.

## COOKING

In the oven:

Bird isn't safe until it reaches 165 degrees.  
(You can't tell by the color!)

3 places to check the temperature:

- Thickest part of breast
- Innermost part of wing
- Innermost part of thigh

When the bird is removed from the oven, let it stand for 20 minutes to allow juices to settle.

Deep Fry:

Roughly 3 minutes of cook time per pound of turkey  
Only fry turkeys that are 12 lbs. or less.

Turkey **MUST BE** fully thawed and dry before going into the oil!

Water or ice hitting the oil will splash and could cause an explosion!

Wear protective garments, cover bare skin and use oven mitts or pot holders to handle equipment.

Speaking of equipment, have the appropriate items:

- Thermometer for oil
- Stock pot with lid
- Sturdy stand for stock pot
- Lifter for bird.

# WE ARE HERE WE ARE STRONG



## PERSPECTIVES ON INDIGENOUS AMERICAN HERITAGE BY MASS COMMUNICATION SPECIALIST SEAMAN COLBY C

November is National Indigenous Americans Month, and a time to reflect on the contributions, culture, and legacy that Indigenous Americans have made in this country as well as in The Navy. The Navy thanks Indigenous American service members for all of their hard work in making our great Navy what it is. Native Indigenous Americans Month is celebrated to recognize native cultures and educate the public about the heritage, history, art, and traditions of the American Indians and Alaskan Natives.

American Indians have been a vital part of American history long before its inception, serving with distinction in military operations and battles for more than 200 years. Their courage, determination, and fighting spirit were recognized by American military leaders as early as the 18th century. Indigenous soldiers were highly regarded as scouts and light troops including many tribes who served in the War of 1812, Civil War and other American conflicts.

In 1986 Congress passed a law and President Ronald Reagan signed the proclamation authorizing American Indian Week, four years later President H.W. Bush formally established November as Native Indigenous

Americans month to celebrate the diverse culture and distinguished history of Native American people.

According to the National Congress of American Indians, there are over 570 federally recognized tribes that have relationships with the United States.

3% of enlisted Navy is made up Indigenous Americans, while 0.8% of officers are of this demographic.

Nearly 19 percent of Native Americans have served in the armed forces, compared to an average of 14 percent of all other demographics according to the National Museum of the American Indian.

During World War I, 3,000 to 6,000 American Indians enlisted and another 6,500 were drafted into the military. About two-thirds served in the infantry, winning widespread praise for bravery and achievement.

By November 1918, the end of WWI, American Indians owned \$25 million in war bonds, about \$75 for every American Indian man, woman, and child.

Several Indigenous American Sailors shared what it means to observe National Indigenous Americans Month in their own words.





## NOVEMBER MONTH FROM NATIVE AMERICAN SAILORS

GARDNER

“November is one of our biggest opportunities to educate others,” said Mass Communications Specialist Second Class Petty Officer Anita Chebahtah. “It can be overwhelming sometimes, but sharing my culture and people’s history is important.” Due to the miseducation or limited education about indigenous Americans, Chebahtah believes that it is her responsibility to educate those who want to learn.

“Sometimes I am the only Native American my shipmates have met,” said Cryptologic Technician (Maintenance) Seaman Shayne Chebahtah. “It is not an uncommon experience for us to be the token Native. I don’t take that responsibility lightly. Although Native Americans have the highest percentage of military service per capita, we may be the only person of our culture on deployment. I want to always represent my people with respect and honor while educating non-Natives about who I am.”

“It is a time to reflect on the culture of our people and see how we have overcome generations of adversity and still remain a proud people and proud Americans,” shared a deployed service member.

“For me personally, it makes me feel proud to know that we are still here as Native Americans,” said retired Hull Maintenance Technician 3rd Class Eugene Taylor. “It gives us an identity that some people didn’t even know existed.”

When asked if he feels obligated to share his culture,

he said, “My family and I do share our culture. I am half Choctaw and half San Ildefonso Pueblo. My kids love to dance in pow wows and I love to gourd dance. I was raised on the Navajo Reservation here in New Mexico and we have so many tribes out here that I encourage everyone out there to come out here and visit us.

“I encourage all non-natives to learn about the Native American. We all have different cultures and beliefs. We exist and we are strong.”

The United States military honors the accomplishments and service of Indigenous Americans for their centuries-old legacy of serving with pride, bravery and determination. To learn more about the contributions of Indigenous Americans in the Navy visit [www.defenseculture.mil/special-observances](http://www.defenseculture.mil/special-observances).

<https://www.loc.gov/law/help/commemorative-observations/american-indian.php>

<https://denix.osd.mil/na/military/>

<https://www.nicoa.org/american-indian-veterans-have-highest-record-of-military-service/>

<https://digitalcommons.lasalle.edu/vietnamgeneration/vol1/iss2/6/>

**MANY NATIONS, ONE FIGHT!**

V



*Never was so  
much owed  
by so many*



VETERANS  
DAY  
2020

*...ed  
many to so few.  
-Winston Churchill*

