



## CNO releases Navy Family Framework Version 2.0

By Admiral John M. Richardson  
Chief Of Naval Operations

Our Navy is charged with maintaining maritime superiority. We execute this charge with our Navy team—our Sailors, civilians, and their loved ones. Navy families are an integral part of our Navy team and a vital contributor to mission success. The Navy Family Framework describes the role that families play in fulfilling our strategic objectives and the responsibilities that the Navy has to our families. It outlines our commitment to enhance mutual support between the Navy and our families. We recruit a Sailor, but we retain a family. Stronger families make a stronger fleet.

Family Framework Version 1.0, released in November 2017, was the first-ever guiding document to align Navy efforts to

» See **FRAMEWORK** | **A7**



U.S. Navy



Chief Operations Specialist Anna Penrod, left, assigned to the guided-missile destroyer USS Rafael Peralta (DDG 115), and Lt. Aaron Van Driessche participate in an air defense scenario at the Combined Integrated Air and Missile Defense (IAMD) and Anti-Submarine Warfare (ASW) Trainer (CIAT). CIAT is the Navy's newest combat systems trainer. Rafael Peralta became the first warship to pilot the advance warfare training curriculum at CIAT.

## TRAINING SURFACE WARRIORS TO FIGHT AND WIN

By Kimberly M. Lansdale  
Center for Surface Combat Systems Public Affairs

### DAHLGREN, VA.

The Center for Surface Combat Systems (CSCS) headquarters staff oversees 14 learning sites and detachments located throughout the continental United States, Hawaii, Spain and Japan. CSCS trains over 38,000 U.S. Navy and international Sailors each year. As a global organization, technology plays a key role in how we train surface warriors to fight and to win.

In an ever-advancing technological society, CSCS implements a variety of training enablers to achieve the ultimate goal of Sailor 2025's Ready, Relevant Learning (RRL) pillar – provide Sailors the right training at the right time in the most effective manner throughout their careers. The Navy introduced Surface Training

Advanced Virtual Environment (STAVE) in 2015 to provide better quality training resulting in more rapid qualifications of Navy officers and Sailors. Instructional systems and simulated physical environments provide watchstanders and maintainers the ability to gain proficiency through repeatable exercises, drills, and evolutions ashore.

### STAVE-CS (COMBAT SYSTEMS) SOLUTIONS

Combined Integrated Air & Missile Defense (IAMD) and Anti-Submarine Warfare (ASW) Trainer (CIAT)

The purpose of CIAT is to provide a warfighting training laboratory that is realistic and relevant in training our Sailors and officers to employ the full range of the combat system capability against advanced threats in complex operating environments. CSCS has two CIATs, one in San Diego, which opened December 2018, and one in Norfolk, which opened July 2019. In addition, there are two Reconfigurable Combat Information Center Trainers, a CIAT minus the ASW capability, at the AEGIS Training and Readiness Center.

CIAT provides our watchstanders a state-of-the-art training lab to detect, control and engage simulated modern threats in challenging environments. With an emphasis on realism, it replicates a warship's actual combat suite. We can reduce visibility, increase wave heights, degrade weapons systems, overwhelm the radars

» See **SURFACE** | **A7**

## Gravely conducts PASSEX with Royal Danish Navy

From Commander, U.S. 2nd Fleet Public Affairs

### ATLANTIC OCEAN

U.S. Navy Arleigh Burke-Class guided-missile destroyer USS Gravely (DDG 107) and Royal Danish navy Absalon-class command and support ship HMDS Absalon (L 16) conducted a passing exercise (PASSEX) in the Arctic waters off the coast of Greenland, Aug 16.

PASSEXs are unit exercises requiring cooperation, communication and interoperability between two or more navies, testing advanced ship maneuvering and tactics. It affords the opportunity to improve crews' knowledge and demonstrate shared tactics.

"This exercise was a unique opportunity for Gravely to conduct training with the Danish navy and to demonstrate interoperability in strategically important waters," said Cmdr. Michael O'Reilly, commanding officer of Gravely. "As our navies share many common tactics, techniques and procedures, it was great to see how quickly we were able to establish communications and exercise our combined warfighting and seamanship skills."

The PASSEX started with a rendezvous of the ships, followed by the landing of Absalon's MH-60R helicopter on the flight deck of the Gravely. The ships conducted four, pre-planned close maneuvers allowing the ships to safely come within 250 yards. The operations allowed Gravely Sailors to draw from the wealth of experience and knowledge our ally has in northern latitude operations, and as highly skilled, technologically advanced, militarily interoperable neighbors.

"Events like today's passing exercise not only deepen the relationship between our two countries but also strengthen our maritime security capabilities in the North Atlantic," said O'Reilly.

USS Gravely's operations in the Arctic are a step toward further enhancing our Navy's proficiencies operating in Arctic climates. GRAVELY is underway to conduct Arctic operations as part of an 8-month deployment.

### Chief Selects gain valuable experience

Each year, the most qualified and motivated first class petty officers are selected for advancement to the rank of chief petty officer. Chief selects undergo weeks of training and mentorship to mold them into stronger Sailors.

» See **A3**



### U.S., allied forces kick-off EOD exercise

Expeditionary forces from Australia, Canada, New Zealand and the United States conducted the opening ceremony for Explosive Ordnance Disposal (EOD) training exercise HYDRACRAB, Aug. 19.

» See **B1**

### Fun on the field at NFL training camp

50 military members from hit the field for a bootcamp. But this one, held at the Washington Redskins' training camp, was different.

» See **C1**



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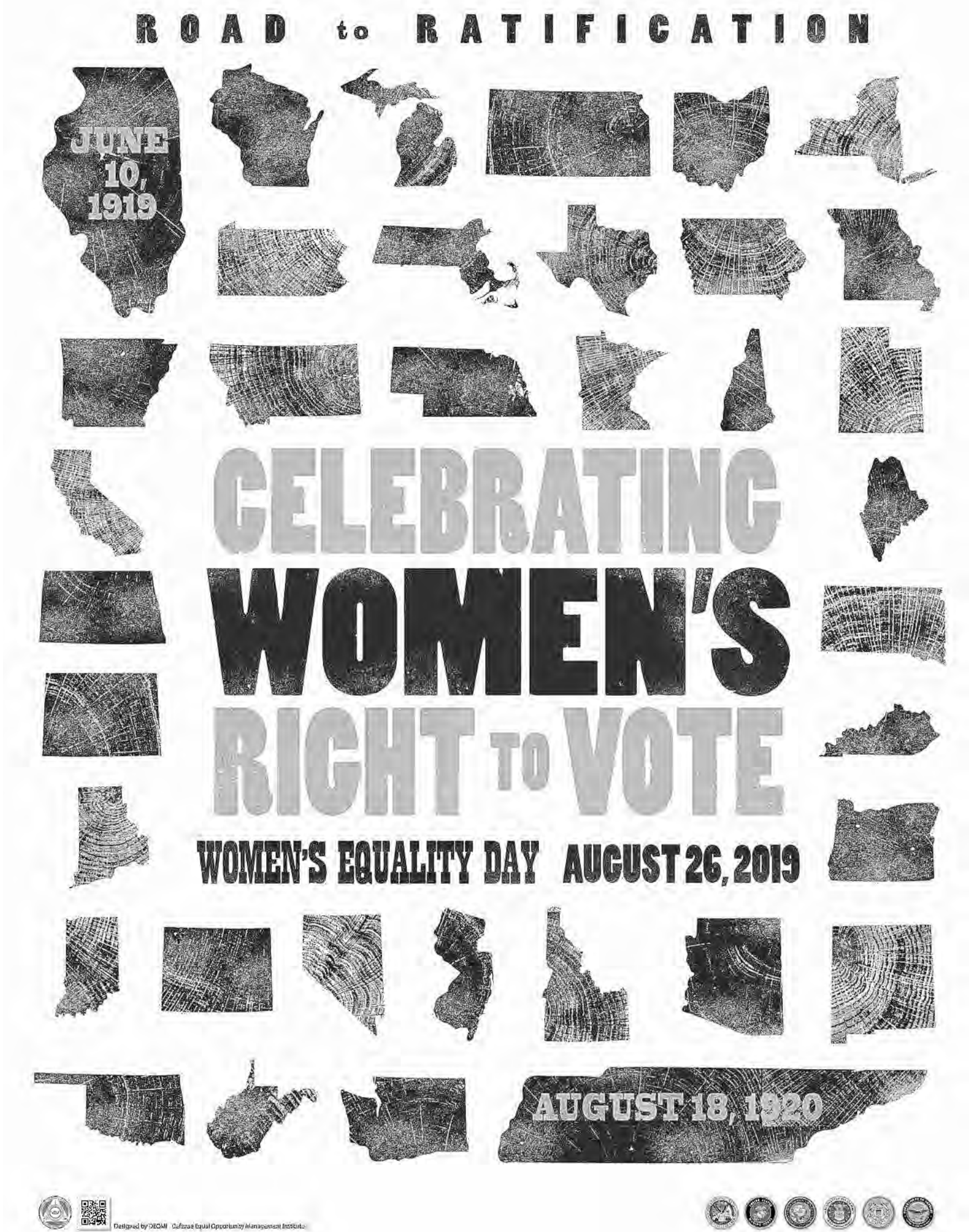
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# Women's Equality Day: Still making strides

**From Defense Equal Opportunity Management Institute**

Women's Equality Day, August 26, 1920, celebrates the passage of the 19th Amendment to the Constitution which guarantees women the right to vote.

Before 1920, the U.S. Constitution left the boundaries of suffrage undefined. The only directly elected body created by the original Constitution was the House of Representatives, and voter qualifications were determined by each state separately.

This year's poster showcases the 36 states, beginning with Illinois and ending with Tennessee, that were needed for a two-thirds majority to ratify the amendment. Each state is represented by a wood stamp, typical of the age, but whose different wood grains signify the different paths each state took to ratify the amendment.

Women in the Armed Forces, public service, and government have long served this nation by working to clear barriers, enforce laws, implement new ideas, and change people's attitudes.

Women's Equality Day gives us an opportunity to reflect on the many benefits of true

equality and the role of women in our nation.

The 19th amendment guarantees all American women the right to vote. Achieving this milestone required a lengthy and difficult struggle; victory took decades of agitation and protest. Beginning in the mid-19th century, several generations of women's suffrage supporters lectured, wrote, marched, lobbied, and practiced civil disobedience to achieve what many Americans considered a radical change of the U.S. Constitution. Few early supporters lived to see final victory in 1920.

Mississippi became the last state to ratify the 19th amendment in 1984, finally condoning the right of women to vote.

In the fall of 2013, there were 10.9 million women enrolled in undergraduate college and graduate school. Women comprised 56.2 percent of all undergraduate and graduate college students. Of women 25 and older, 32 percent had obtained a bachelor's degree or higher as of 2014.

President Lyndon B. Johnson signed Public Law 90-130 in 1967, giving women in the Armed Forces equal promotion and retirement benefits. The law also removed the 2%

restriction on how many women could serve in the military. At the signing, President Johnson stated, "I realize that a few of our gentlemen officers may not be too enthusiastic about this possibility...but from now on, the officers and men of our Armed Forces will just have to take their chances in open competition along with the rest of us."

In 1975, the Department of Defense reversed policies and provided women with the option of electing discharge or remaining on active duty upon becoming pregnant. Before 1975, women were forcibly discharged from service upon pregnancy or adoption.

In 1981, the U.S. Supreme Court overturned a law that stated a husband is "head and master" of his wife's property.

As of January 2013, women make up about 14.5 percent of the 1.4 million active-duty personnel in the Army, Marine Corps, Navy and Air Force.

On August 21, 2015, for the first time in the more than 65-year history of the Army Ranger tab, two women graduated from the grueling 62-day course. Less than two months later, the third woman—and first Reservist—made it through. Capt. Kristen Griest, 1st Lt. Shaye Harver, and Maj. Lisa Jaster each completed a course with the same trials as their male counterparts.

Many women veterans face challenges when returning to civilian life that are different from those of their male counterparts, including raising children on their own or

dealing with the psychological effects of events such as military sexual trauma. These issues, without intervention, can put women veterans at greater risk of becoming homeless.

Although many of the accomplishments and contributions of women have been lost from the history books, women have played a vital role in the course of human civilization. From raising families to leading armies, women have made untold contributions to history. In the 96 years since the 19th Amendment was certified, women have made strides in every facet of American life. More and more, the world is looking to our daughters to lead us, to heal us, to employ us, to thrill us on fields of play, and to protect us on fields of battle.

### Resources

- [www.ourdocuments.gov/doc.php?flash=true](http://www.ourdocuments.gov/doc.php?flash=true)
- [www.usconstitution.net/constamrat.html](http://www.usconstitution.net/constamrat.html)
- [www.census.gov/newsroom/facts-for-features/2015/cb15-ff05](http://www.census.gov/newsroom/facts-for-features/2015/cb15-ff05)
- [www.wood.army.mil/eop/EO%20FILES/EOLC/women.ppt](http://www.wood.army.mil/eop/EO%20FILES/EOLC/women.ppt)
- [https://en.wikipedia.org/wiki/Head\\_and\\_Master\\_law](https://en.wikipedia.org/wiki/Head_and_Master_law)
- [www.cnn.com/2013/01/24/us/military-women-glance/index.html](http://www.cnn.com/2013/01/24/us/military-women-glance/index.html)
- [www.army.mil/article/154286/First\\_women\\_graduate\\_Ranger\\_School/](http://www.army.mil/article/154286/First_women_graduate_Ranger_School/)
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MC3 Mark Thomas Mahmood

Fiscal year 2019 chief selectees march in formation during “chief season” on board Naval Air Station Oceana. Once selected for advancement, chief selectees undergo weeks of training and mentoring to mold them into wiser leaders.

# NAS Oceana Chief Selects gain valuable experience

By MC3 Mark Thomas Mahmood

VIRGINIA BEACH, VA.

Each year, the most qualified and highly motivated first class petty officers are selected for advancement to the rank of chief petty officer.

Once selected for advancement, chief selects undergo weeks of training and mentorship to mold them into wiser leaders and stronger Sailors.

Upon completing “chief season,” the

selectees will join the family of over 30,000 chiefs as they become members of CPO Messes throughout the fleet.

Naval Air Station Oceana’s fiscal year 2019 chief selects are Culinary Specialist 1st Class Krishina McCray, Aviation Boatswain’s Mate (Handling) 1st Class Julian Ortiz, Master-At-Arms 1st Class Mario Osman, Air Traffic Controller 1st Class Nicole Robinson, and Navy Counselor 1st Class Shunika Walker.

McCray, who has been in the Navy for

over 9 years, said being a chief selectee has already been a challenging and rewarding experience.

“The best part of this whole experience is connecting with other chief selects and learning about the heritage of the chief petty officer,” said McCray. “Everybody has different qualities they’re bringing to the table, and we all continue to learn from each other.”

Being stationed on Naval Air Station Oceana affords chief selects the opportunity to train and learn with the selectees from each tenant command on the installation.

Aviation Structural Mechanic 1st Class Nicolai Corey, a chief select assigned to Strike Fighter Squadron (VFA) 106, has been in the Navy for almost 22 years, making him the most senior in his class of

chief selects.

“It’s all about camaraderie and networking,” said Corey. “You get to work with people you normally wouldn’t. I don’t see people from VFA-211 very often, as they on the opposite end of the flight line. It is great that I’m able to meet them here. I’m able to network up and down the flight line.”

Being able to work with Sailors from many technical backgrounds allows the chief selectees on board Naval Air Station Oceana to have a more well-rounded training experience.

Naval Air Station Oceana’s “chief season” officially ends Sept. 13 when the fiscal year 2019 chief petty officers are pinned with their anchors for the first time in front of their friends and families.

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Tom Perkins

# Preventing pollution from our use and disposal of household chemicals

**By Amy E. Hardy**  
Public Works Department NSA Hampton Roads Water Program Manager

Stormwater pollution results when precipitation such as rain or snowmelt runs over surfaces picking up pollutants like pesticides, fertilizers, construction site sediments, pet waste, litter, etc. These pollutants can significantly degrade water quality and threaten aquatic, wildlife and human health. In addition, stormwater pollution impacts our drinking water supplies and use of waterways for recreational activities such as swimming, fishing or boating.

Runoff from our lawns, rooftops, and driveways enter into the storm drain system. This system discharges directly to nearby streams, lakes, and bays without receiving treatment. Because of this, it is important for us to prevent pollutants from being washed into these storm drains from our use and disposal of household chemicals.

When household chemicals are either ac-

cidentally washed into a storm drain or intentionally dumped outside and drain into the stormwater system, it is referred to as an "illicit discharge." Common examples of the materials that lead to household illicit discharges include:

- Paint and paint thinner
- Motor oil and gasoline
- Antifreeze
- Fertilizer, herbicides, and pesticides
- Bleach, solvents and cleaners
- Swimming pool chemicals and chlorinated water

The everyday products that we use can be very harmful if not stored, used, and disposed of properly. These products can be classified as: toxic (pest fumigants, ant traps, and old fire extinguishers), corrosive (drain cleaners, rust removers and oven cleaners), oxidizers (chlorinated pool chemicals and various peroxides), and flammables (gasoline, kerosene, fuel oil, butane, oil-based paints and paint thinners).

If you have products that are no longer needed that contain hazardous materials, it is important to properly dispose of them. Never dispose of them outside, allowing them to enter a storm drain because the stormwater runoff is not treated before flowing into our nearby waterways. Many of these materials should also not be placed in the trash because this could lead to groundwater contamination as the materials leak from a landfill.

Some tips and facts about household hazardous waste include:

- As little as one quart of motor oil can contaminate millions of gallons of water.
- Used motor oil can be re-refined into re-usable lubricating oil. Reprocessing one gallon of used motor oil and burning it as fuel generates enough electricity to power everything in your home for a day.
- Don't rinse paint brushes outside where the rinse water can enter the stormwater system. Clean water-based paint brushes in the sink and oil-based paint brushes by using

paint thinner. If possible try to use water based paints!

- Keep paints and solvents in sealed containers where they cannot become pollutants.
- Recycle all unused paints at local Hazardous Waste Collection Centers.
- Avoid over applying fertilizers and pesticides, or applying them immediately before it rains!
- For all household materials try to purchase and use non-toxic alternative when possible.

All materials should be used and disposed of in accordance with manufacturer specifications. The best way to dispose of household chemicals is to take them to a local hazardous waste recycling center or to participate in a local waste collection event. Visit [www.AskHRGreen.org](http://www.AskHRGreen.org) to learn about local waste recycling efforts here in Hampton Roads and more you can do to prevent stormwater pollution.

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SN Imani N. Daniels

The American Red Cross Summer Youth Volunteer Program participants pose for a group photo.

# NMCP, American Red Cross presents teen volunteers with awards

By SN Imani Daniels  
Naval Medical Center - Portsmouth

**PORTSMOUTH, VA.** Naval Medical Center Portsmouth (NMCP) leadership and American Red Cross staff recognized nearly two dozen teenage volunteers for their service at the medical center while participating in the American Red Cross Summer Youth Vol-

unteer Program, Aug. 16. During the ceremony, the teen volunteers were presented with certificates. Three special awards were also presented – Kennedy Dryden and Samuel Smith both received the Great Leadership Award, and Isabella Eddy received the Outstanding Performance Award. “To the volunteers, thank you for

putting your time in this summer,” said Capt. Carolyn Rice, NMCP’s executive officer. “Thank you for taking the time out of your summer break to provide care for our patients, it says a lot about you all and NMCP really appreciates that.” Each summer, teenage family members of active duty and retirees are eligible to volunteer in clinics and offices throughout the medical center, with the expectation they will gain insightful experience as they decide to pursue a career within the health care field. Each volunteer must be age 14 – 17 and must volunteer a minimum of 40 hours throughout the summer. “We want to thank you for coming to this year’s youth volunteer recognition ceremony,” said Eugenia Anteh, American Red Cross Summer Youth Volunteer Pro-

gram director. “To all the youth, we want to say thank you so much for generously giving your time, talent and effort to help the American Red Cross provide services to our military and the medical center.” As the U.S. Navy’s oldest, continuously-operating military hospital since 1830, Naval Medical Center Portsmouth proudly serves past and present military members and their families. The nationally-acclaimed, state-of-the-art medical center, along with the area’s 10 branch health and TRICARE Prime Clinics, provide care for the Hampton Roads area. The medical center also supports premier research and teaching programs designed to prepare new doctors, nurses and hospital corpsman for future roles in healing and wellness.



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MC2 Jake Carrillo  
Chief of the Swedish Royal Navy Rear Adm. Jens Nykvist, left, Vice Adm. Andrew Lewis, middle, commander of U.S. 2nd Fleet, and Commander in Chief of the Finnish navy Commodore Jori Harju pose for a photograph on the flight deck of the Nimitz-class aircraft carrier USS Harry S. Truman (CVN 75). Harry S. Truman is moored at Naval Station Norfolk conducting targeted maintenance and training and remains operationally ready.

# U.S. 2nd Fleet hosts Swedish and Finnish heads of navy delegation

From U.S. 2nd Fleet Public Affairs

NORFOLK

Vice Adm. Andrew Lewis, commander of U.S. 2nd Fleet and of Joint Force Command Norfolk, hosted the Chief of Royal Swedish Navy, Rear Adm. Jens Nykvist, and the Commander of the Finnish Navy, Commodore Jori Harju, for a series of trilateral and bilateral discussions August 12-14. The United States, Sweden and Finland being three of the eight Arctic nations, the engagements focused on expanding shared understanding and situational awareness of northern-latitude operations and reinforcing transatlantic linkages. Maintaining strong ties with Nordic allies and partners promotes security and stability, and ensures the U.S. Navy’s continued success in maintaining open sea lanes of communication and freedom of navigation around the world, alongside our allies and partners.

The purpose of the discussions was to expand cooperation and coordination between the U.S. Navy and two of its most capable and likeminded partners. “Our relationship with Sweden and Finland is critical to naval operations,” Lewis said. “In the naval profession, we put a premium on something called local knowledge. Nordic nations, to include Sweden and Finland, have a wealth of experience in northern latitude operations, and as highly skilled, technologically advanced, interoperable military partners.” During their visit, members of the Finnish and Swedish delegation toured the Nimitz-class aircraft carrier USS Harry S. Truman (CVN 75). “Establishing cooperation with U.S. 2nd Fleet strengthens the transatlantic bridge and the Royal Swedish Navy’s ability to interact with partners” says Rear Admiral Jens Nykvist. “We have taken credible steps



MCSN Donovan M. Jarrett  
Vice Adm. Andrew Lewis, left, commander of U.S. 2nd Fleet, speaks with Chief of the Swedish Royal Navy Rear Adm. Jens Nykvist, center, and Capt. Kavon Hakimzadeh, commanding officer of the aircraft carrier USS Harry S. Truman (CVN 75), on the flight deck aboard Harry S. Truman.

during this trip and look forward to further upcoming events.” U.S. 2nd Fleet exercises operational and administrative authorities over assigned ships, aircraft and landing forces on the East Coast and the North Atlantic. Additionally, it plans and conducts maritime, joint and combined operations as well as trains and recommends certification of combat ready naval forces for maritime employment and operations around the globe.

# NMCSD researchers investigate data for IDEO™ patients one year post-rehab

By MC1 Vernishia R. Vaughn  
Naval Medical Center San Diego Public Affairs

KISSIMMEE, FLA.

Researchers from Naval Medical Center San Diego (NMCSD) shared study findings associated with limb trauma involving patients, one year post-rehabilitation, during the Military Health System Research Symposium (MHSRS), the Department of Defense’s four-day educational meeting, Aug. 19. “Our research took a look at the long-term functional and patient-reported outcomes of service members using the Intrepid Dynamic Exoskeletal Orthosis (IDEO™) brace,” said Trevor Kingsbury, clinical biomechanics lab interim director. “This research also took a look at biomechanical changes being seen in the current modular design.” Used by patients who have lost lower limbs, the IDEO™ is a customizable, hand fabricated device that stores energy in carbon fiber rods to remove painful pressures and forces on a patient’s ankle and foot. The NMCSD research team of eight, including Kingsbury, took a look at walking biomechanics both in and out of the brace as well as patient-reported outcome measures (PRO). It was also noted where little was known about how patients are using their brace after leaving the program. “Our research program involved patients completing a four-week return to run



MC2 Zachary Kreitzer  
Richard Miltenberger Jr., a prosthetist at Naval Medical Center San Diego (NMCSD) Comprehensive Combat and Complex Casualty Care(C5) department, instructs his patient Michael Docarmo jumping techniques while wearing an Intrepid Dynamic Exoskeletal Orthosis (IDEO) brace. Sixty-five percent of service members under C5’s care who receive an IDEO brace return to active duty.

(RTR) training program, and learning to properly use device,” said Kingsbury. “This is a device that is worn during high level functional activities to reduce pain and enhance training capacity.” The study evaluated 13 patients who first had to meet the parameters of the study’s inclusion criteria. Biomechanical data was collected at self-selected walking velocity in and out of the brace. “Our findings also reveal that patients wearing the brace walked significantly faster on their affected side,” shared Kings-

bury. “What we’ve found appears to support the conclusion that removing pain barriers with the device to enable high level training, in turn, manifests as carryover into functional gains and decreases in perceived disability, especially when not wearing the brace.” The goal of the research team is to share their findings with health care providers and support efforts to improve the care, treatment and interventions for warfighters and patients, contributing to improved quality of life.

The MHSRS is the Department of Defense’s premier scientific meeting bringing together scientists, academia and industry to exchange information on research and health care advancements. NMCSDs mission is to prepare to deploy in support of operational forces, deliver quality health care services, and shape the future of military medicine through education, training and research. The vision of the hospital is to be the nation’s premier military medical center, providing world-class care anytime, anywhere.



FRAMEWORK | Navy families are an integral part of our Navy team

Continued from A1

assist Sailors and their families. The Framework was designed to evolve over time as we developed and implemented family support programs and policies.

In this new version, we continue to address the Navy’s commitment to our families while supporting their crucial role in our Sailors’ lives. The Framework builds upon existing DoD and Navy instructions, with reference to DoD Instruction 1342.22 “Military Family Readiness” and OPNAV Instruction 1754.8 “Command Family Readiness Program.”

The first reason for updating the Family Framework was to set new goals in light of the progress that we’ve made since Family Framework Version 1.0 was released. To improve communication and transparency with our families, we established “Live Well” resiliency webinars and local commands held more than 150 all-hands calls and 100 town halls. To ease the burden of a Permanent Change of Station (PCS) move, we created the mobile applications MyPCS and PiF (Pay it Forward) and implemented a program to reimburse spouses for licensure costs arising from relocating to another state. We also continue to update and refine the Spouse Education Continuum and other education resources available on military installations, within the local community, and online.

The favorable response to these initiatives encouraged us to release Family Framework Version 2.0 and move forward with the work yet to be done.

The second reason for updating the Framework is in recognition of the ever-increasing diversity of the Sailors and families serving our nation today. Navy families come in all shapes and sizes, and no two families are exactly alike. Every Navy family faces unique challenges; they have varying requirements and distinct needs.

What defines a Navy family is a tradition of dedication and devotion. Navy families are distinguished by personal and professional sacrifice, resourcefulness and resilience, creativity and commitment, heart and heroism. It is through these traits that individual families form the larger Navy family to which we all belong.

Finally, we are updating the Framework to reflect the vast amount of feedback we have received through many avenues—online forums, the Spouse Engagement Study, Spouse Experience Groups, and in-person focus groups. Based on these suggestions and recommendations from Navy families and Sailors, we’ve updated our goals to make sure we are addressing the issues that are the most important to our Navy team.

The Navy’s mission is to protect America from attack, promote American prosperity, and preserve America’s strategic influence. To prevail, we must achieve our objectives of the present while we “strengthen our Navy team for the future,” as stated within the Gold Line of Effort in A Design For Maintaining Maritime Superiority Version 2.0 (Design



U.S. Navy



U.S. Navy

What defines a Navy family is a tradition of dedication and devotion. Navy families are distinguished by personal and professional sacrifice, resourcefulness and resilience, creativity and commitment, heart and heroism. It is through these traits that individual families form the larger Navy family to which we all belong.

2.0).

When we consider how to best strengthen our Navy, we aren’t just talking about building ships, we are talking about building Sailors. As described in the Navy Leader Development Framework Version 3.0, this involves strength-

ening their character, competence, and connections. Navy families play a pivotal role in each of these.

Our families are a pillar of our character—a constant reminder of who we are, what we believe in, and why we fight. Families are integral in the development

of our Four Core Attributes: integrity, accountability, initiative, and toughness.

Families’ positive contributions and daily sacrifices allow Sailors to acquire the focus and expertise required for competence, mastery of the arduous tasks set before them. Family readiness affects Sailors’ job satisfaction, job performance, and retention.

Families provide connections. These connections foster new relationships with new individuals, new experiences, and new insights. They represent their Sailors in the Navy community and serve as a foundation to their sense of connectedness and belonging.

Download the revised Family Framework at [https://navylive.dodlive.mil/files/2019/08/CNO\\_Family\\_Framework\\_2019.pdf](https://navylive.dodlive.mil/files/2019/08/CNO_Family_Framework_2019.pdf).

SURFACE | CSCS headquarters’ staff oversees 14 learning sites and detachments

Continued from A1

with clutter returns, and in the end, force every single watchstander in combat to adapt to challenging threats. We have to ensure our Sailors have trained and succeeded in a “worst case” scenario.

What makes CIAT unique is its ability to replay all decisions from a scenario in a full debrief. We synchronize all console and headset communications against the scenario ground truth to show each team the cause and effect of every decision. CIAT’s approach to immersive training has had an immediate impact on watch team cohesion and effectiveness and is unlike anything we have seen before.

AEGIS ASHORE TEAM TRAINER (AATT)

Managed by CSCS Unit Dam Neck, in Virginia Beach, Virginia, AATT serves as the single site for training and certifying rotational Ballistic Missile Defense (BMD) crews to serve at the Aegis Ashore site in Romania and a future site in Poland. It houses a mock-up of the shore-based Aegis Combat Information Center and Communication Center and hosts a complete replica of the tactical warfighting, communication and information technology systems resident at Romania.

The AATT course includes an eight-week training and certification pipeline, a five-week basic phase conducted by CSCSU Dam Neck, a one-week qualification phase conducted by Afloat Training Group (ATG) Norfolk, and a two-week certification phase conducted by Tactical Training Group Atlantic (TACTRAGRULANT). During weeks one and two, CSCS instructs students on basic system capabilities and limitations, theater operational procedures, console operator familiarization, and BMD mission planning.

During weeks three through five, the watch team executes a series of increasingly complex tactical team scenarios, flexing the extensive capabilities of the high fidelity trainer while turning the students into a cohesive tactical team. After the five-week basic phase, the crew completes their BMD Qualification (BMDQ) administered by ATG Norfolk. Following a successful BMDQ, TACTRAGRULANT supervises the execution of a BMD Exercise (BMDEX), in coordination with theater ballistic missile defense assets, as a capstone to the AATT course of instruction.

AATT allows us to train, qualify, and certify our Sailors so when they arrive in Romania they are immediately prepared to contribute. This represents the next evolution in combat systems training and sets a clear standard for what we will strive to achieve in future training endeavors.

HIGH FIDELITY SHORE-BASED TRAINERS

The Littoral Combat Ship (LCS) Training Facility (LTF) is the first surface warfare

training facility to provide integrated bridge and combat systems tactical scenario training for Sailors serving with an LCS. The LCS drives a new approach to individual, team, and unit-level training to accommodate the minimum manning and rotational crewing concepts.

Operational demands do not allow sufficient time for under instruction watchstanding or proficiency training during operational periods, and crews do not have organic training teams or embedded training systems.

This new approach drives the need for the shore-centric Train-to-Qualify and Train-to-Certify concepts, which rely heavily on high-fidelity shore-based trainers.

Currently, an LTF in San Diego provides training for both LCS variants. Fleet Anti-Submarine Warfare Training Center (FLEASWTRACEN) operates it. CSCS has a second LTF, located at Naval Station Mayport, which CSCS Detachment Mayport operates. It provides training for the LCS 1 variant.

LCS’s small crew size and lack of embedded systems mandate the use of high-fidelity training systems ashore to achieve crew training and readiness objectives.

LOOKING AHEAD

These are just a few of our STAVE-CS initiatives. STAVE-CS is already improving combat readiness by providing better-trained, better-qualified Sailors to the fight. CSCS will continue to implement new technologies that shape the Sailor of today and tomorrow. An example of this is Distributed STAVE-CS, which encompasses instruc-

tional systems and simulated physical environments that can be taught from one location and delivered simultaneously through high-bandwidth communications flow to multiple other sites. It will provide tactical watchstanders and maintainers the ability to gain proficiency through repeatable exercises, drills and evolutions ashore.

TO VIEW OUR STAVE-CS VIDEOS:

Surface Training Advanced Virtual Environment - Combat Systems (STAVE-CS)

This video highlights how STAVE-CS provides significant advantages by training in a virtual environment using courseware and simulators owned and implemented by the Navy.

■ Video: [https://youtu.be/\\_Uf3WtQ-phY](https://youtu.be/_Uf3WtQ-phY)

Combined Integrated Air and Missile Defense (IAMD) and Anti-Submarine Warfare (ASW) Trainer (CIAT)

CIAT was delivered in 2018 as the most capable combat systems trainer developed for the Navy surface force. This video highlights how CIAT trains operators of current AEGIS Baselines in IAMD and the latest AN/SQQ-89A(V)15 ASW deliveries using virtualized tactical code in San Diego and Norfolk. CIAT includes an in-depth, integrated debrief capability for individual and team analysis by recording simulation of scenario ground truth, instructor and watchstander console displays and audio for after-action reporting in support of student and instructor analysis.

■ Video: <https://youtu.be/YPJKsFhBp30>  
For more information about CSCS, visit [www.netc.navy.mil/centers/cscs/](http://www.netc.navy.mil/centers/cscs/)





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**USS Michael Murphy returns home**  
The Arleigh Burke-class guided-missile destroyer and the “Easyriders” of Helicopter Maritime Strike Squadron (HSM) 37 returned to their homeport of Pearl Harbor following a successful deployment

See B3

SECTION B | FLAGSHIPNEWS.COM | 8.22.2019



## NAVSTA Newport wins SECNAV award for energy efficiency

Naval Station Newport was awarded the 2019 Department of the Navy Energy Excellence Award. The children at Child and Youth Programs made posters that were displayed at today's virtual conference call so that regional leaders could see their hard work.

U.S. Navy

### From NAVSTA Newport Public Affairs

#### NEWPORT, R.I.

The Fiscal Year 2019 winners of the Department of the Navy's Energy Excellence Awards program were announced, and Naval Station Newport won for the "Large Installation" category, alongside Camp Lejeune.

The winning commands are selected by the Secretary of the Navy (SECNAV) for excellence in the areas of energy security, new technology, innovation, program management, and efficiency.

"We have been continuing to track and adjust how we consume energy to decrease consumption for many years," said John Reichert, NAVSTA Newport's energy program manager. "This award was a surprise

to us, but we are thrilled. It is always wonderful to be recognized as a team, for our various efforts, which often go unrecognized."

One way the installation tackled a reduction in energy consumption was focusing on large consumers, like the Naval Undersea Warfare Center. NUWC consumes 52 percent of NAVSTA Newport's electricity and 40 percent of campus steam heating.

Even with an increase of 1,500 personnel since 2017, NAVSTA Newport was able to reduce energy use at NUWC by close to 50 percent.

NUWC replaced lighting in 600,000 square feet of high bay production areas in 15 buildings with LED (light emitting diode) light fixtures. In total, they invested \$593,000 for the LED lighting project and

realized \$187,000 in the form of a rebate from the R.I. Energy fund/National Grid for saving 7,500 Mega Watt Hours of electricity and providing annual energy savings of more than \$1.6 million.

Another example of energy reduction efforts is a move toward energy-saving fleet vehicles. The NAVSTA Newport GSA vehicle fleet contains both Electric Vehicle (EV) passenger cars and alternate fuel hybrid vehicle passenger cars.

In fiscal year 2018, NAVSTA Newport installed two electric vehicle charging stations, each one capable of charging two vehicles simultaneously. This year, the installation of three additional electric vehicle charging stations is being funded, each of which is capable of serving four vehicles simultaneously.

In addition to the energy reduction efforts, awareness about energy conservation was shared across the base.

Child and Youth Programs worked with their summer campers to create posters outlining ways to conserve energy and its importance.

NAVSTA Newport has a long and successful performance history in the SECNAV Energy Award program having earned SECNAV honors in 2007, Platinum level performance in 2007, 2009, 2012, 2013, 2014, and Gold level performance in 2006, 2008, 2010, 2011, 2015, 2016, 2017, & 2018.

The award winners are authorized to fly the SECNAV Energy Flag for one year, as well as receive a plaque honoring the accomplishment.



A U.S. Navy Sailor assigned to Explosive Ordnance Disposal Mobile Unit 5 (EODMU 5) fast-ropes from an MH-60S Seahawk helicopter during HYDRACRAB at Santa Rita, Guam, August 19. HYDRACRAB is quadrilateral exercise conducted by forces from Australia, Canada, New Zealand, and U.S. Naval forces. The purpose of this exercise is to prepare the participating Explosive Ordnance Disposal (EOD) forces to operate as an integrated, capable, and potent allied force ready to respond to a changing and complex maritime environment in the Indo-Pacific region.

## U.S., ALLIED FORCES KICK-OFF EOD EXERCISE HYDRACRAB

By MC2 Kelsey Adams  
Commander Task Force 75

#### SANTA RITA, GUAM

Expeditionary forces from Australia, Canada, New Zealand and the United States conducted the opening ceremony for Explosive Ordnance Disposal (EOD) training exercise HYDRACRAB, Aug. 19.

HYDRACRAB is quadrilateral exercise conducted by more than 100 Sailors from Australia, Canada, New Zealand, and U.S. Naval forces. The purpose of this exercise is to prepare the participating EOD forces to operate as an integrated, capable, and potent allied force ready to respond to a changing and complex maritime environment in the Indo-Pacific region.

"The operational environment is changing and the threats continue to increase and become more complex," said Capt.

Oscar Rojas, EOD Group One commanding officer. "It is fitting that HYDRACRAB is to be conducted on Guam. The island of Guam is no stranger to war, and exercising on former and potentially future battle fields better prepares our forces for the challenges of tomorrow."

According to Rojas, HYDRACRAB will provide the opportunity for all partner nation military forces involved to train and enhance their skills therefore ensuring the citizens of Australia, Canada, New Zealand, and America will pass their current freedoms they enjoy today onto the next generation.

"We are very excited to host our foreign partners and friends for the inaugural exercise HYDRACRAB 2019," said Cmdr. Andrew Cook, EOD Mobile Unit 5 commanding officer. "This exercise serves as a

unique opportunity to share tactics, techniques and procedures with integrated maritime and air assets that will help increase our collective warfighting effectiveness."

During the exercise, forces will combine to practice a wide range of expeditionary competencies to include visit, board, search, and seizure (VBSS), land and sea insertion techniques, joint demolition operations, small arms proficiency, counter improvised explosive device (CIED) operations, and anti-terrorism force protection (ATFP) diving operations.

Representing U.S. forces are personnel from Explosive Ordnance Disposal Mobile Unit 5, Coastal Riverine Squadron 2, assigned to Coastal Riverine Group 1 Detachment Guam,

III Marine Expeditionary Forces, 36th Civil Engineering Squadron, and Helicopter Sea Combat Squadron (HSC) 25.

U.S. 7th Fleet provides security alongside allies and partners throughout a free and open Indo-Pacific. As the U.S. Navy's largest forward-deployed fleet, 7th Fleet operates roughly 50-70 ships and submarines and 140 aircraft with approximately 20,000 Sailors.

## MyNavy HR Career Development Symposium wraps up

From Navy Personnel Command Public Affairs

#### EVERETT, WASH.

The MyNavy HR Career Development Symposium (CDS) wrapped up three days of briefings and on-site detailing to Sailors based at commands throughout Navy Region Northwest, Aug. 12-14.

MyNavy HR CDS brought senior Navy leadership directly to Sailors, showcased new programs and initiatives, explained how these changes will affect the fleet, demonstrated new capabilities, and offered Sailors the opportunity to ask questions and voice concerns.

"This was an incredible series of CDS events across all four bases in the PACNORWEST where we received valuable feedback from Sailors, their spouses and fleet leadership," said Vice Adm. John Nowell, Chief of Naval Personnel (CNP). "I was impressed by the level of engagement and thoughtful questions. The feedback that we received will help the MyNavy HR team to continue to improve fleet readiness with better talent management processes, policies and systems embodied in Sailor 2025."

Senior leaders discussed the ways that MyNavy HR team — the re-branded name for the Manpower, Personnel, Training, and Education enterprise — is transforming to better meet Sailors needs. This included highlighting the MyPCS Mobile recently released that provides a permanent change of station (PCS) checklist, lean orders, and PCS Entitlements Calculator to enhance the PCS move experience.

Nowell emphasized the new MyNavy Career Center (MNCC) as the future for how Sailors and their





Julie Mitchell

For the first time, the four military exchanges are synching up to learn about the latest in electronics, ensuring Soldiers, Airmen, Sailors, Marines and Coast Guard members have the brands and products they deserve ahead of the holiday selling season.

# For the first time, military exchanges join forces at electronics expo

From Navy Exchange Service Command Public Affairs

## VIRGINIA BEACH, VA.

For the first time, the four military exchanges are synching up to learn about the latest in electronics, ensuring Soldiers, Airmen, Sailors, Marines and Coast Guard members have the brands and products they deserve ahead of the holiday selling season.

More than 450 managers and associates from the Army & Air Force Exchange Service, Navy Exchange Service Command, Marine Corps Exchange and the Coast Guard Exchange are gathering through Aug. 23 in Chesapeake, Va., for the Military Exchange

Electronics Expo (ME3). The theme “One Family, One Mission” highlights the collaborative spirit that has long existed among the exchanges to benefit service members and military families.

“This expo represents a milestone for military resale,” said Army & Air Force Exchange Service President and Chief Merchandising Officer Ana Middleton. “The exchanges have a history of working together to make life better for Warfighters and their families, but this conference marks the first time our electronics teams are joining forces to learn from each other and our vendor partners.”

Combined, the four military exchanges are the 12th largest electronic retailer. In 2018,

electronics accounted for more than \$1.23 billion in revenue across the military exchanges.

Throughout the week, associates will learn about the newest products and selling techniques from more than 50 vendors, just in time for the critical holiday selling season. Smart home devices and TVs, particularly 8K, are expected to be hot sellers this year.

Buyers also discussed joint opportunities as the fourth quarter approaches. “A joint learning environment like this event is key to the development of all our associates and will greatly benefit our customers as we leverage learnings to drive true innovation across the military resale community,” said Rich Honiball, Executive Vice President, Global Chief Merchandising & Marketing Officer, Navy Exchange Service Command. “For our associates to hear directly from the vendor about the latest technologies, will provide our Nation’s bravest with a wealth of knowledge to make smart purchasing decisions for their own lifestyle tech needs.”

For more news from Navy Exchange Service Command, visit [www.navy.mil/local/nexcom/](http://www.navy.mil/local/nexcom/).

# Space Force: One giant leap for military spouses

By Lisa Smith Molinari  
The Meat & Potatoes of Life

While Congress hashes out the details of Trump’s proposed “U.S. Space Force” — who will oversee it, how many personnel are needed, whether we can afford it, where will it be located — I am selfishly wondering what the future holds for the military spouse community after this 6th branch of the armed forces stands up.

If Trump’s plan is implemented, there will be 15,000 personnel serving in the Space Force in 2024. Since about 51 percent of military servicepersons are married, that means there could be up to eight thousand new Space Force military spouses in a few years.

What will life be like for Space Force spouses and what effect will they have on our military spouse community?

As a military spouse of many years, I’ve learned that, although we undoubtedly have our fellow spouses backs when the chips are down, we’re also pretty competitive. If I had a dollar for every time I heard military wives brag about how many times their husbands were deployed, or how long their husbands’ deployments were, or how many times they’ve PCSed, or how many pieces of furniture were broken in their moves — I’d have enough money to replace the microwave cart our military movers broke back in ’98 during move number three.

Throw eight thousand Space Force spouses into the spouse mix, and they’ll beat the rest of us Army, Navy, Air Force, Marine and Coast Guard wives and husbands, hands down. Imagine, if you will, a typical spouses club brunch, in a combined club dining room, on a joint base a decade from now. Spouses from the various branches exchange idle chit chat at their table while they wait for crystal



NASA

bingo to begin.

“Billy’s going down range again,” one Army wife laments with a pitiful sigh.

“Jimmy’s been at sea all summer,” a Coast Guard wife moans, resentfully spearing a cube of cantaloupe with her fork.

“Tammy’s off to Bosnia for 170 days,” an Air Force husband says while picking mournfully at his quiche.

“Ricky’s halfway through his one-year IA tour,” a Marine wife sighs while absently buttering a croissant.

“When Johnny’s done with work ups,” a Navy wife says with a pregnant pause, “he goes out on a carrier for another nine month deployment.... It’s his third.” She sips her mimosa with smug satisfaction. Her life is most definitely the worst, she thinks with pride.

But then, the Space Force wife chimes in. “Frankie was supposed to be home from the Lunar Station before our fifth PCS, but his unit got sucked into a worm hole during a routine expedition, and now they’re telling me he won’t be back until 2050. The good news is, he’s promised to bring home jewelry from the Mars BX.”

The other spouses slump into their chairs in silent defeat.

The existence of a U.S. Space Force presents more ridiculous scenarios than there are stars in the galaxy, but we better buckle up and get ready to blast off, because it’s coming in 2020 whether we like it or not. Before long, this new corps of superior military spouses will be prancing around our base neighborhoods like Jane Jetson, sipping Tang martinis and bragging about their spouses’ latest exploits on the final frontier. Our own tales of our spouses’ experiences with state of the art ships, tanks, drones, cyber technology, missiles and fighter jets will be dwarfed by their stories of rocket launches and Moon landings.

There’s no way for us to compete without looking pathetic. What can we say? “Well, at least Navy wives don’t put freeze dried snickerdoodles in our husbands’ care packages! Take that you fancy Space Cadet Wives!”

Let’s face it, the best thing for military spouses to do, is to stop competing altogether. Why do we pit ourselves against one another in a competition for who has it worse, anyway? It’s pretty ridiculous when you think about it. We all face the ups, downs, rewards and challenges of this unique lifestyle. So whether our spouses fulfill their duty to serve on land or sea, in air or outer space, let’s all take this giant leap into the future — together.



**Q: I am coming from an involuntary unaccompanied tour to an accompanied tour. Is special consideration given to this circumstance for my control date?**

**A.** Yes. The control date for members returning PCS from an involuntary unaccompanied tour, or from assignment to ships operating in specifically designated areas to an accompanied PCS tour will be the date of detachment from the prior accompanied PCS tour.

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Arleigh Burke-class guided-missile destroyer USS Michael Murphy (DDG 112) returns to its homeport of Pearl Harbor, Hawaii. Michael Murphy was deployed to the U.S. 3rd and 4th Fleet areas of operation. MC2 Justin R. Pacheco

# USS Michael Murphy returns from deployment

From Commander, U.S. 3rd Fleet

## PEARL HARBOR

The Arleigh Burke-class guided-missile destroyer USS Michael Murphy (DDG 112) and the “Easyriders” of Helicopter Maritime Strike Squadron (HSM) 37 returned to their homeport of Pearl Harbor following a successful deployment to the 3rd and 4th Fleet areas of operations, August 19th. While deployed to the U.S. 4th Fleet area of operations, Chile hosted Michael Murphy and its crew of more than 350 Sailors, along with maritime forces from 11 partner-ing countries – including Brazil, Columbia, Costa Rica, Ecuador, Germany, Honduras, Mexico, New Zealand, Peru, Turkey, and

the United Kingdom – to participate in exercise UNITAS LX (60). UNITAS, Latin for “unity,” is the world’s longest-running multinational maritime exercise. Conceived in 1959 and first executed in 1960, UNITAS is a demonstration of U.S. commitment to the region and the strong relationships forged between partnering nations and their militaries. During deployment, the ship also participated in exercise Teamwork South, a biennial Chilean naval exercise that focuses on conducting training scenarios in intermediate and advanced anti-surface and anti-sub-marine warfare operations. “Multi-national operations and exercises like UNITAS and Teamwork South under-

pin the U.S. Navy’s collective maritime ef-forts in the Indo-Pacific region,” said Cmdr. Christopher Forch, Michael Murphy’s com-manding officer. “The variety of operations the ship conducted during deployment de-manded excellence from the crew; we op-erated with flexibility and professionalism that is second to none.” Michael Murphy also conducted exten-sive training during its routine operations that prepared the crew to successfully re-scue five stranded mariners off the coast of Peru. “Helping spot those fishermen was easily the high point of my naval career,” said Gunner’s Mate 2nd Class Ryan Buck. “I couldn’t believe what I was seeing at first, but then I saw them frantically waving makeshift flags made of jackets and pants, just to make sure we saw them.” Michael Murphy also conducted a num-ber of live-fire gunnery exercises – includ-ing its 5-inch gun, close-in weapons system, Mark-38 25mm machine gun, .50-caliber

machine gun, M240 machine guns, and a two-day small-arms qualification – and HSM 37 tallied 266 flight hours over the course of 84 flights. “This has been an excellent deployment,” said Forch. “Along with our allies and part-ners, we all operate toward the same end-continued security and stability that result in a free and open Indo-Pacific. I couldn’t be more proud of my sailors for their accom-plishments and dedication to mission.” U.S. 3rd Fleet leads naval forces in the Indo-Pacific and provides the realistic, rele-vant training necessary for an effective global Navy. U.S. 3rd Fleet works con-stantly with U.S. 7th Fleet to complement one another and provide commanders capa-ble, ready assets across the spectrum of military operations in the Pacific. For more news from Commander, U.S. 3rd Fleet, visit [www.navy.mil/local/c3f/](http://www.navy.mil/local/c3f/). For more news from USS Michael Mur-phy, visit [www.public.navy.mil/surfor/ddg112/Pages/default.aspx](http://www.public.navy.mil/surfor/ddg112/Pages/default.aspx).



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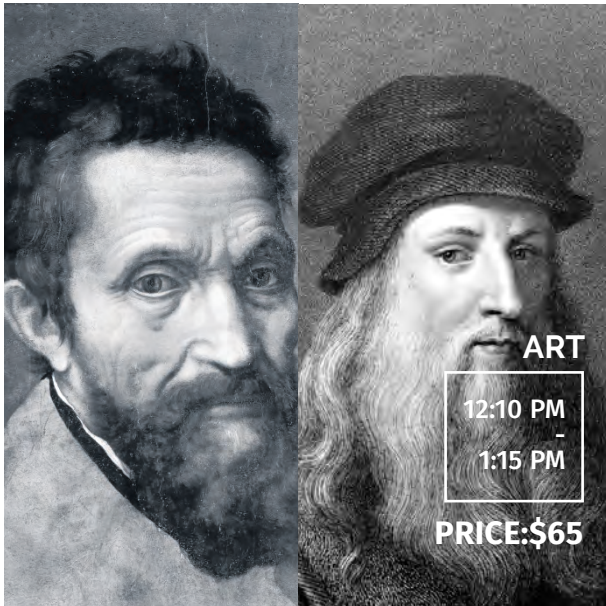
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An Air Force MQ-9 Reaper remotely piloted aircraft awaits an engine test prior to intelligence, surveillance and reconnaissance operations in Southwest Asia, July 23.

# DIA DIRECTOR OUTLINES TOP 3 PRIORITIES

By David Vergun

Within a decade, China and Russia’s militaries will be using data visualization, artificial intelligence, machine learning and possibly quantum encryption and communications, the director of the Defense Intelligence Agency said.

These tools are used to collect, analyze and secure data accurately and at high speeds. Both China and Russia realize that “whoever can leverage the data and understands that can dominate,” Army Lt. Gen. Robert P. Ashley Jr. said today at the 2019 Department of Defense Intelligence Information System Worldwide Conference in Tampa, Fla.

China already is moving rapidly ahead with digital advances, he said, citing Huawei’s Smart City Intelligent Operation Center, which is using big data, 5G, machine learning and AI to collect, monitor and analyze security, transportation and emergencies, and to track people.

DIA’s efforts at improving intelligence gathering have a three-pronged focus:

- First, the general said, the agency needs

to ensure that its intelligence-sharing tool, the Joint Worldwide Intelligence Communications System, has adequate resourcing to ensure it remains secure, reliable and resilient.

- Second, Ashley said, the Machine-Assisted Analytic Rapid-Repository System, which is still in development, will become DIA’s database of the future, using cloud computing, AI and machine learning, automating many of the tasks currently done manually by operators.

- Third, open-source intelligence will be used to a much greater extent. Open-source intelligence is data collected from publicly available sources. When combined with other intelligence data, it can provide a much more accurate intelligence picture that will further DIA’s mission of “providing intelligence on foreign militaries to prevent and decisively win wars.”

In addition to systems, Ashley said, people are the agency’s foundational strength.

People work best when they are on teams to use one another’s strengths, he said. DIA has organized analytic data teams composed of data scientists, tool developers,



DoD video still

Defense Intelligence Agency Director Army Lt. Gen. Robert P. Ashley Jr. speaks at the 2019 Department of Defense Intelligence Information System Worldwide Conference in Tampa, Fla., Aug. 19.

methodologists and all-source analysts to look at information and refine algorithms to get a more accurate intelligence picture.

DIA also needs to strengthen its teaming with allies and partners, Ashley said, notably data sharing. Currently, a brigade is pretty good at speed in sharing intelligence within the brigade, he said.

However, when it comes to sharing intelligence between brigades and between each of the military services, it slows down, he said. And, it’s even slower between allies

and partners.

It took World War II to compel better information sharing between allies, he said. The U.S. cracked Japan’s Purple Encryption Machine early in the war. About the same time, the United Kingdom cracked the Enigma Machine used by the Germans. A decision was made at the very top for the two nations to share their work, and it probably shortened the war by two years.

It shouldn’t take another war like that to enable intelligence sharing, Ashley said.

# Comfort arrives in Colombia to provide medical assistance

By MC3 Kryzentia Richards  
U.S. Naval Forces Southern Command & U.S. Fourth Fleet

## SANTA MARTA, COLOMBIA

The hospital ship USNS Comfort (T-AH 20) arrived in Colombia for its fifth medical mission in Central America, South America and the Caribbean, Aug. 18.

While in port, a joint team of U.S. and partner nation service members and non-governmental organization civilians will work alongside host nation specialists to provide medical assistance to help relieve pressure on the health system strained by the Venezuelan migration crisis.

“Delivering medical care to a large number of people in such a short amount of time is an enormous undertaking,” said Lt. Cmdr. Daniel Dean, one of the two temporary medical treatment site officers-in-charge. “Having the support of our partner nation counterparts makes the experience both possible and rewarding.”

The Comfort team consists of more than 900 personnel including military, non-governmental organization volunteers and



MC2 Morgan K. Nall

The hospital ship USNS Comfort (T-AH 20) prepares to anchor off the coast of Santa Marta, Colombia as the ship prepares for a medical mission. Comfort is working with health and government partners in Central America, South America, and the Caribbean to provide care on the ship and at land-based medical sites, helping to relieve pressure on national medical systems strained by an increase in Venezuelan migrants.

personnel from partner nations.

“We have worked closely with the U.S. embassy and Santa Marta’s Ministry of Health to bring the very best in humanitarian and civic assistance to the people of Santa Marta,” said Capt. Patrick Amersbach, commanding officer, USNS Comfort. “We’re doing something really important here, and I’m excited be a part of

bringing this opportunity to Santa Marta on this next leg of our mission.”

This marks the sixth Comfort visit to Colombia and the seventh to the region since 2007. The embarked medical teams will provide care aboard Comfort and at two land-based medical sites.

This mission stop is part of the U.S. Southern Command’s Enduring Promise

initiative and reflects the United States’ ongoing commitment to friendship, partnership, and solidarity with partner nations in the Caribbean, Central America, and South America.

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# New F-35 modification facility brings strategic capability to FRCE

CHERRY POINT, N.C.

A recently-completed facility will bring a new strategic capability to Fleet Readiness Center East and the F-35B Lightning aircraft line next year. When the new F-35 laser shock peening facility is fully operational in 2020, FRCE will be one of two sites in the world that will use laser technology to strengthen F-35 structural components.

Construction of the \$6 million facility wrapped in July, and the contractor providing the laser shock peening service will take occupancy in early spring, said Donald Jeter, portfolio manager of the F-35 aircraft line at FRCE. Under that timeline, the first F-35 aircraft inducted for laser shock peening would arrive in June to undergo the validation and verification process, and then the depot will begin work on the remainder of the F-35 fleet that requires the laser shock peening modification.

“This facility is a big get for Fleet Readiness Center East,” Jeter said. “It’s very exciting. Being able to perform this laser shock peening process adds a huge strategic capability to our depot. With it, we’ll be able to provide a critical support element to the F-35B program and act as a force multiplier for the fleet and the warfighter.”

The 16,000-square-foot facility comprises two bays, where the actual laser shock peening process will take place, and a connected area that will house the laser generator. The state-of-the-art laser shock peening process will allow FRCE to conduct heavy structure modifications that will strengthen areas of the F-35’s airframe without disassembling the entire aircraft, said Matthew Crisp, the F-35 Joint Program Office site lead at FRCE.

The process strengthens designs without adding additional metal or weight, which increases the aircraft’s life and reduces maintenance costs. It has been used on the F-22 Raptor and in manufacturing aircraft



Courtesy photo

Fleet Readiness Center East is the lead site for depot-level maintenance on the F-35B (short takeoff-vertical landing). A recently constructed laser shock peening facility will bring a new strategic capability to Fleet Readiness Center East and the F-35B Lightning aircraft line next year.

components including engine blades, Crisp said, but has never been employed for the F-35. Now, FRCE will use the technology to help Marine Corps aircraft reach their full life limit.

Aircraft maintenance professionals at FRCE will conduct prep work and some structural modification on the F-35s inducted into the depot, then turn them over to the contractor running the laser shock peening operations. The contractor will complete the process to strengthen the bulkheads and airframes, and FRCE will put the jets back together, perform all the flight test functions and get them back out to the fleet, Jeter said. The end result is aircraft that have been reinforced without adding additional weight, which would reduce the fighter’s capabilities by limiting its fuel or weapons carrying capacity.

Shot peening is not a new process, Crisp said, but laser shock peening is unique in that it produces a uniform result across the surface being treated. In laser shock peening, the surface of the media is first coated with an ablative layer and covered with a water tamping layer. A high-energy laser beam is fired at the metal, which creates an area of plasma on the metal’s surface. The impact creates a shock wave, which travels through the metal, and compressive residual stresses remain. This compression helps improve the metal’s damage tolerance, fatigue life and strength.

“(Shot peening) has been done for decades,” he explained. “It’s where you take a solid media, like glass beads or some kind of metal, and you hit the surface of an item – kind of like sandblasting. You just randomly throw it at the surface, and it creates all these surface dimples. What you get is a very inconsistent surface profile, because it’s not controlled.”

With laser shock peening, the process is very controlled, Crisp said.

“They create a laser beam that’s actually square, and the intensity is consistent across the entire laser beam – it’s the exact same at the very edge of the beam as it is in the middle,” he said. “They come up with a grid pattern and stack the squares up right beside each other, so the entire surface of the part is completely uniform. You don’t have the weak spots in between these areas that would then induce cracking later.”

Jeter said he expects laser shock peening to be a main focus of the F-35 line for the next four to five years. Once the first two aircraft have undergone the validation and verification process, it will be a sprint to the finish to complete modifications on the remainder of the F-35B fleet that requires this treatment.

“After that val/ver event, the aircraft will basically be nose-to-tail,” Crisp added. “We’ll completely fill every aircraft stall that’s here, and for the next five years, when one leaves another will come in. That’s criti-

cal, because this process has to be done on every single airplane that requires it.”

The workload does not include every F-35 ever produced, although it does include B and C models, and also encompasses F-35 aircraft owned by partner nations. FRCE will focus solely on the B variant, while Ogden Air Force Base in Utah will work on the F-35C models and take any F-35B overflow.

After the first round of laser shock peening modifications, what comes after that is still to be determined, Crisp said.

“I’m sure there will be some follow-on work,” he said. “And beyond the F-35 program, this is a little bit exciting, because this really is cutting-edge technology and we have it here at FRCE. I think maybe within the engineering community here, as people find out more about it, they may open additional discussions about how we could implement this on other aircraft lines. We might find a future capability we want to look at.”

FRCE is North Carolina’s largest maintenance, repair, overhaul and technical services provider, with more than 4,200 civilian, military and contract workers. Its annual revenue exceeds \$720 million. The depot generates combat air power for America’s Marines and Naval forces while serving as an integral part of the greater U.S. Navy; Naval Air Systems Command; and Commander, Fleet Readiness Centers.



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Joe Bullinger  
Naval Information Warfare Center (NIWC) Atlantic employee Jason Bartlett demonstrates a prototype technology called Spectrum Hunter to a U.S. Marine Corps Second Lieutenant assessor at the 21st Century Combined Arms Advanced Naval Technology Exercise (ANTX) East held at Marine Corps Base Camp Lejeune, July 9-20.

# NIWC Atlantic demonstrates augmented reality technology to increase warfighter safety

By Diane Owens  
Naval Information Warfare Systems Command (NAVWAR)  
CHARLESTON, S.C.

A Naval Information Warfare Center (NIWC) Atlantic team is developing and refining a hands-free system to protect U.S. military members from inadvertently revealing their location via radio frequency (RF) waves.

The prototype, known as Spectrum Hunter, is a radio frequency emission detection and localization technology that uses an augmented reality display aimed at increasing warfighter safety.

Warfighters use a plethora of equipment that emits RF waves afloat and on shore, including hand-held radios and cell phones, Wi-Fi, SOS beacons on aircraft and radar antennae on tanks, ships and structures. Emissions from these devices and others can

be deadly if they are not deactivated properly during “radio silence” and an adversary detects them.

“The military principle, ‘If you’re transmitting, you can be found’ applies,” said Jessica Sinclair, NIWC Atlantic information technology specialist.

Warfighters currently use a 10-pound handheld tablet and a handheld sensor to detect and locate the source of their own radio waves; the RF source is more narrowly refined by walking and waving a wand (sensor).

“The Spectrum Hunter system under development is hands-free. As the user packs a similar-but-smaller geolocator receiver in a backpack and wears a headset inside a helmet that allows them to ‘see’ images of RF waves on an augmented reality screen superimposed over heavy sunglasses,” Sinclair

noted. “The helmet is fitted with a sunshade so the equipment operates outdoors.”

Users can make verbal commands or hand gestures to make selections and interact with the augmented reality display to gain additional information about detected RF waves. The heads-up holographic user interface guides users toward the RF emission source without the harmful possibility of distraction from real world dangers such as moving people or vehicles.

“Our team is initially focusing on detecting handheld radios and will expand the scope later to detect cell phones and other devices,” Sinclair continued. “In the future, we plan to modify it to identify RF waves emitting from enemy forces.”

Spectrum Hunter developers demonstrated a prototype of this exploratory technology during the Fight the Naval Force Forward Advanced Naval Technology Exercise East July 9-20 at Marine Corps Base Camp Lejeune, North Carolina. Active duty military members and representatives from more than 35 government agencies, industry and academia tested the equipment during realistic military training scenarios and provided feedback on ways to improve and ad-

just the technology.

“The sky is the limit for potential uses for Spectrum Hunter,” said NIWC Atlantic Acting Executive Director Peter C. Reddy. “Augmented reality can enable an operator to more quickly and easily locate the source; this is a paradigm shift toward capabilities of the future.”

Sinclair’s team applied for and obtained a provisional patent and is sharing their concept outside the command. They continue networking with potential sponsors and developing multiple use cases to attract a program office or commercial vendor interested in transitioning the concept to a physical product.

As a part of Naval Information Warfare Systems Command, NIWC Atlantic provides systems engineering and acquisition to deliver information warfare capabilities to the naval, joint and national warfighter through the acquisition, development, integration, production, test, deployment, and sustainment of interoperable command, control, communications, computer, intelligence, surveillance, and reconnaissance, cyber and information technology capabilities.

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Cpl. Amy Phan

Military leaders from Latin American partner nations welcome official party members with a salute during the opening ceremony of UNITAS LX on Naval Base Rio de Janeiro at Ilha Mocangue Grande, Brazil, Aug. 19. UNITAS is the world’s longest-running, annual exercise and brings together multinational forces from 11 countries to include Brazil, Colombia, Peru, Chile, Argentina, Ecuador, Panama, Paraguay, Mexico, Great Britain and the United States.

# UNITAS LX kicks off in Rio de Janeiro

From U.S. Naval Forces Southern Command & U.S. Fourth Fleet Public Affairs

## RIO DE JANEIRO, BRAZIL

Over 3,100 Naval Forces from 13 countries kicked off UNITAS LX (60), the 60th anniversary of the annual multinational exercise, in Rio de Janeiro, Aug. 19.

Comprised of both Atlantic and Amphibious phases, UNITAS participants include Naval Forces from Argentina, Brazil, Chile, Colombia, Ecuador, Great Britain, Japan, Mexico, Panama, Paraguay, Peru, Portugal and the United States.

This year’s exercise is hosted by the Brazilian Navy and will conduct operations off the coast of Rio de Janeiro, focusing on demonstrating regional maritime cooperation in a humanitarian assistance and disaster relief (HA/DR) response scenario, as a means to develop a multinational maritime task force.

USS Carter Hall (LSD 50) embarked with approximately 350 Sailors and Marines arrived Aug. 18 to support UNITAS.

During opening ceremonies, Adm. Greg Faller, commander U.S. Southern Command gave the troops a message.

“It’s an honor to be here, seize this opportunity,” said Faller, “Trust is the building block of our ability to work together as a team. When I look at you, when I see the ships, the staffs, I know you are professionals that represent democracies that fight for freedom. Let’s have a successful exercise and be well.”



Cpl. Amy Phan

Comandante de Operacoes Navais do Brasil (Brazilian Chief of Naval Operations) Adm. Leonardo Puntel speaks with U.S. Navy Adm. Craig Faller, commander of U.S. Southern Command, during the opening ceremony of UNITAS LX on Naval Base Rio de Janeiro at Ilha Mocangue Grande, Brazil, Aug. 19.

UNITAS is designed to train Navy and Marine Corps to conduct joint operations and increase interoperability among partner

nations. 14 surface vessels, eight helicopters, five fixed wing aircraft and one submarine are participating.

“This is a professional experience that will make each one of you stronger and better. Take every advantage of the opportunity to learn, to teach and to make new friends. This is how we are going to fight, as like-minded democracies, and as friends,” said Faller.

UNITAS, which is Latin for “unity” was conceived in 1959, first executed in 1960, and has been held every year since. UNITAS develops and sustains relationships that improve the capacity of our partners maritime forces to achieve common goals. This annual exercise fosters friendly, mutual cooperation and understanding between participating navies and Marine Corps.

## CDS | Series brought senior Navy leadership directly to Sailors

Continued from B1

spouses can quickly address pay and personnel concerns. MNCC represents how legacy systems are becoming digital, making them more accessible and user-friendly.

Other speakers highlighted the Detailing Marketplace and Meritorious Advancement Programs as a means to empower Sailors to take charge of their careers.

In addition to the speakers, Sailors met with detailers, community managers, and a wide array of advisors and representatives for a host of topics such as shore special programs, Voluntary Education, and Career Waypoints.

“I’m happy that they’re taking the time to spread out and reach as many Sailors as they can. I can go to the CDS and listen to these changes first-hand. Then I can go see my detailer too,” said Hospital Corpsman 2nd Class Arilyssa Hoyos, assigned to the aircraft carrier USS Nimitz (CVN 68).

Detailers and representatives from career development-focused commands felt they made a rewarding impact on Sailors who participated.

“Being part of CDS allowed me to talk to Sailors about education benefits including Tuition Assistance, USMAP, and NAVY COOL — improving their lives both personally and professionally,” said Chief Navy Career Counselor Kristie Freeman, education specialist in Voluntary Education, said of her experience as a representative at CDS.



MC2 Matthew Riggs

Aviation Boatswain’s Mate (Equipment) 3rd Class Julissa Lambert, right, speaks with Roseann Cook, a Navy credentialing opportunities online region advisor for the North West Region, during a MyNavyHR Career Development Symposium at Naval Base Kitsap Bremerton. The symposium aims to empower Sailors with the knowledge and tools they need to successfully manage their careers.

representative at CDS.

More than 3,000 Sailors attended the keynote speaker’s portion of CDS Navy Region Northwest, with many of those in attendance also receiving direct detailer counseling.

The next MyNavy HR CDS is scheduled for Navy Region Southeast this fall.

For videos, stories, and information about MyNavy HR CDS visit: [www.public.navy.mil/bupers-npc/career/talentmanagement/Pages/CDS.aspx](http://www.public.navy.mil/bupers-npc/career/talentmanagement/Pages/CDS.aspx)

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At the USAA Salute to Service NFL Boot Camp, military members went through a wide receiver gauntlet and four other drills. The boot camp was held August 6, 2019, at the Bon Secours Washington Redskins Training Center ahead of a team practice.

By Chapel Fowler  
iStaff writer, The Virginian-Pilot

RICHMOND

For an hour Tuesday morning, 50 military members from across Virginia hit the field for a boot camp. But this one, held at the Washington Redskins’ training camp, was different. Its five obstacles: a 40-yard dash, a three-cone shuttle, a vertical jump, a wide receiver gauntlet and a quarterback arm challenge.

With VIP tickets to a Washington home game up for grabs, the competition was stiff at the USAA’s Salute to Service NFL Boot Camp, as members of the Army, Navy, Air Force and Coast Guard split into teams of five and worked through various drills.

As he stood at midfield and watched the boot camp from under a floppy sun hat, Ronney Wright, a USAA senior military affairs representative, called it a “day of giving back.” The event has been around since 2011, and it’s the fifth year the Redskins have hosted.

“Really, it’s all about seeing them together,” he said. “As a military leader, it’s all about your people. If they’re smiling, and we’re able to give back, that’s what makes my day.”

USAA bused participants in from all over the state, includ-

ing some from Fort Eustis, Langley Air Force Base and Naval Air Station Oceana. A last-second mission kept local Marines from attending. Each member brought one guest, too.

Just before 11 a.m., Wright addressed the group, clad in matching burgundy athletic T-shirts, in the end zone. He then turned it over to Rod Huber. Huber spent three decades as a college football coach, including 17 as head coach at Division III Mount St. Joseph in Cincinnati. He’s also an Army veteran. The latter, he’ll tell you, defines him far more than the former.

“My best coaching tricks that I coached with for 30 years, I learned in the Army: the organization, the administration, the motivation,” he said. “All the things that go with being a soldier, I took right into the locker room, and that’s how I ran my team.”

Huber directed things in an energetic, Jon Gruden-esque manner, and boot camp moved quickly. At each station, organizers recorded scores on clipboards. These camps have seen their fair share of impressive moments, and Wright is quick to note that plenty of the military members on site are former high school and college athletes.

The longest throw Tuesday was 54 yards, and the fastest 40-yard dash time was 4.70 sec-

onds. That didn’t beat the best time Huber has seen, though: a 4.50 by someone at a Denver Broncos camp last year.

“It was legit,” he said. “We did it twice. That’s NFL time.”

After an hour of catches, cuts and throws in the summer heat, participants ducked into a nearby tent for a catered lunch of turkey and chicken wraps while USAA tallied the final scores. Team 9, a group of soldiers from Fort Eustis, ended up winning. Dvorak Crocker, one of the winners, said the entire day was a welcome break.

“It’s great,” the 22-year-old said. “Just like I told someone earlier, we don’t get a lot of time during the weekdays. Monday through Friday, we work all day. ... For us to be out here all day, enjoying this and USAA giving us this opportunity, it’s just awesome.”

Later in the day, the 50 boot campers watched a Redskins practice and met with a few players, including quarterback Case Keenum, tight end Vernon Davis and cornerback Josh Norman, for autographs. Wright said, in his experience, there’s a “serious bond” between NFL players and military members.

Huber agreed. He worked six USAA camps last year, and he has five more on his docket this summer. He said there’s been a



Photo courtesy of John Hancock/USAA

The vertical jump was one of five stations at the USAA Salute to Service NFL Boot Camp on August 6, 2019. The Washington Redskins hosted a camp for the fifth year at their Richmond training center.

common trend, and he echoed it in his closing remarks to the 50 service members Tuesday afternoon.

“Wherever you’re going, whatever you’re doing, here’s what you need to know,” he said. “I’m around these NFL

guys every day, all year long. They appreciate you. Any NFL player I’ve worked with, done an event with, you’re the hero.”

This article was originally published by The Virginian-Pilot, August 10, 2019.



Courtesy of Newport News Tourism Development Division

Outdoor fun: 12 things you may not know about Newport News Park

Newport News Tourism  
Press Release

NEWPORT NEWS, VA.

In 1966, the City of Newport News created a watershed around Lee Hall Reservoir to protect the quality of its water. That watershed was developed into Newport News Park. Since then, it’s been a gem in our city, providing trails, shade, a huge variety of wildlife, and much more. So much more, that you probably don’t

even know about all this amazing park has to offer. We’ve outlined the Top 12 things you need to know about Newport News Park that will get you planning your next trip there as soon as possible!

1. It’s HUGE

One of the largest municipal parks in the United States, Newport News Park is nine times larger than New York City’s Central Park! At 7,711 acres, Newport News Park is an oasis in

the middle of a large metropolitan city. The park is so large that it has its very own campground!

2. It’s a great place to camp

Campers and outdoor enthusiasts find Newport News Park’s campground the perfect retreat. Its 188 campsites are spaciouly arranged throughout the park’s natural woodlands. Camp here and you’ll be

See PARK | C2



# CalendarCommunity

For a complete list of events in Hampton Roads or to submit your own, visit [www.flagshipnews.com/calendar](http://www.flagshipnews.com/calendar)

## Norfolk Waterfront Jazz Festival

- Aug. 23 & Aug 24, 5:00 p.m. – 11:00 p.m.
- Town Point Park
- [www.festevents.org](http://www.festevents.org)

Hampton Roads' longest running outdoor Jazz Festival returns for two nights along the Downtown Norfolk Waterfront. On a warm summer evening, chill to the legendary sounds of top national Smooth Jazz and R & B recording artists. This popular festival features a variety of seating and ticket options including the New Journal and Guide VIP Club, reserved seating, designated tent areas, festival lawn seating, fine foods and beverages, plus a festival marketplace with crafts, retail items, and more.



## A Solo Acoustic Evening with Richard Marx

- Aug. 24, 8:00 p.m.
- The Sandler Center
- [www.sandlercenter.org](http://www.sandlercenter.org)

As a performer, songwriter and producer, Richard Marx's nearly three-decade-long career has had innumerable of highlights. The Chicago native has sold more than 30 million albums worldwide, starting with his self-titled debut which went to #8 and spawned four Top 5 singles, including the chart-topping "Hold on to the Nights," with "Don't Mean Nothing" earning him a Grammy nomination for Best Male Rock Vocal Performance.

## EDL Fest: A Hip-Hop Carnival

- Aug. 25, 2:00 p.m.
- Scope plaza
- [www.sevenvenues.com](http://www.sevenvenues.com)

Music: Züm The DJ, Vega, & Izzy The DJ  
Everyday Dope Life is proud to announce the 3rd annual EDL FEST: A Hip-Hop Carnival! Join the 757 community in a creative celebration as we come together and host an array of talent with creative panels, vendors, live performances, ciphers, B-Boys, carnival games, and more!  
Kids 10 and under have free entry.



## The Australian Pink Floyd Show

- Aug. 27, 7:30 p.m.
- Chrysler Hall
- [www.sevenvenues.com](http://www.sevenvenues.com)

The All That Your Love Tour will bring to the stage all the songs that mean so much to the band & Pink Floyd fans around the world. Representing music from every phase of Pink Floyd's journey, this tour will again reinforce TAPFS's dedication to the heritage of Barrett, Waters, Gilmour, Wright & Mason with a show that aspires to the legendary Pink Floyd productions. Using state of the art lighting, video, lasers, inflatables and the incredible live sound that was the benchmark of Pink Floyd shows, TAPFS promises a memorable live experience.



## Ynot Wednesdays

- Aug. 28, 5:00 p.m.
- Outdoor Performance Plaza, Town Center Virginia Beach
- [www.sandlercenter.org](http://www.sandlercenter.org)

The eleventh annual free outdoor concert series will take place 5:00 – 9:00 pm on the Sandler Center Outdoor Plaza every Wednesday from June 5 - August 28. Enjoy free music, visitors can purchase food and drinks while shopping and learning about our different vendors, some of which include Sinclair Radio Station, Renters Warehouse, Velocity FC, and many more. Title sponsor Ynot Italian will be serving up delicious pizza, sandwiches, and gelato all season long.

Party Fins is the ultimate "Party" band, bringing the Jimmy Buffett "Fins" music to life...the band is comprised of some of Coastal Virginia's most talented musicians. A wide variety of songs and shenanigans are all apart of this entertaining extravaganza. Guaranteed good time will be had by all. Free and open to the public.

## ■ Submit YOUR events, news and photos

The Flagship welcomes submissions from our readers online.

Please submit **events** here: [www.militarynews.com/users/admin/calendar/event/](http://www.militarynews.com/users/admin/calendar/event/)

Please submit **news** and **photos** here: [www.militarynews.com/norfolk-navy-flagship/submit\\_news/](http://www.militarynews.com/norfolk-navy-flagship/submit_news/)



U.S. Coast Guard photo courtesy of Petty Officer 2nd Class Victoria Eckart

Crewmembers aboard U.S. Coast Guard Cutter Forward, a 270-foot Medium Endurance Cutter homeported in Portsmouth, Virginia, tow a 67-foot disabled commercial fishing vessel that became disabled 149 miles off Cape Henry, Virginia, Aug. 8, 2019. Once the Forward towed the disabled vessel farther inland, they were met by another commercial vessel who provided them with enough oil to make it back to shore.

## Coast Guard Cutter Forward assists disabled vessel 149 miles off Cape Henry, Virginia

U.S. Coast Guard  
5th District Mid-Atlantic

### PORTSMOUTH, VA.

The Coast Guard assisted two people aboard a 67-foot commercial fishing vessel 149 miles east of Cape Henry, Thursday.

Watchstanders at Coast Guard Sector Hampton Roads received the initial call Wednesday afternoon from the vessel, who stated its engine was excessively burning oil and would not be able to make it back to shore.

The crew of Coast Guard Cutter Forward, a 270-foot Medium Endurance Cutter homeported in Portsmouth, was diverted from their patrol to respond, and an HC-130 Hercules aircrew from Coast Guard Air Station Elizabeth City, North Carolina, was also launched to locate and establish com-



U.S. Coast Guard photo courtesy of Petty Officer 2nd Class Victoria Eckart

A 67-foot disabled commercial fishing vessel gets towed inland from 149 miles off Cape Henry, Virginia, by U.S. Coast Guard Cutter Forward, a 270-foot Medium Endurance Cutter homeported in Portsmouth, Virginia, Aug. 8.

munications with the vessel.

Once on scene, the Forward took the vessel in tow, and transported it to within 15 miles of the coast of Virginia, where the vessel waited for another commercial fishing vessel to bring

them additional oil to finish their transit.

"Search and rescue is one of the many missions we conduct aboard Coast Guard Cutter Forward," said Cmdr. Michael Sharp, commanding officer of the

Forward. "It's a good thing that the mariner let us know he needed help before things got worse. We were happy to divert and help them get back to a point where their sister vessel could respond."

## PARK | Providing trails, shade, a huge variety of wildlife, and much more

Continued from C1

surrounded by many of the comforts of home, including electricity, heated showers, a laundry room, a small store for food and supplies, and 24-hour security. And, needless to say, pets are welcome, too!

### 3. It has an aero-model flying field

Did you know that Newport News Park has an aero-model flying field? What's that, you may ask? It's a place for model aviation enthusiasts to fly their radio-controlled aircraft. The busiest flying times are usually Saturday and Sunday afternoons, weather permitting. The field has a paved 400-foot runway and a spacious 30-acre fly-over area, along with bleachers for visitors and spectators.

### 4. It has miles of trails

The park also offers more than 30 miles of trails through forest, field, and marshland – with many native species to observe in their natural habitat. As you can imagine, the park is home to an incredible variety of native wildlife – deer, fox, raccoon and beaver, to name a few – all found in a thriving setting filled with lush woodlands, flowering meadows, and shimmering lakes.

### 5. It has a center to rehabilitate wildlife

The park even has a state- and federally licensed wildlife rehabilitation program, located at the Discovery Center. The staff there provides care to

hundreds of injured or orphaned animals annually, enabling the animals to return to their natural environments, healthy and self-sufficient. We like to think of the Discovery Center as a "temporary haven" for wildlife when they're most in need. The center also has numerous educational exhibits on display, which are open to the public.

### 6. You can rent a bike for \$3

If you enjoy cycling, bring your own bike or rent one from the campsite office to hit the park's popular 5.3-mile hard-packed, flat-surface multi-use trail. Newport News Park shares a long stretch of border with the Colonial National Historical Park and several of the park's biking and hiking trails cross over into this historical area.

### 7. It has ties to the Civil War

Speaking of history, did you know that Newport News Park is the site of some of the best preserved Civil War fortifications, earthworks and redoubts in Virginia? During the American Civil War, the park was the site of Battle of Dam No. 1. In the days prior to the battle, Confederate forces constructed rifle pits and other earthworks from which they held off the Union Army. Because of this, the park is a designated stop on the official Virginia Civil War Trails network.

### 8. It has numerous playgrounds and horseshoe pits

Families with small children will be happy to know that Newport News Park has FOUR playgrounds, includ-

ing one specifically made for younger children (found in Picnic Area 2). With four certified courts for horseshoes, there's no better place than Newport News Park to play horseshoes, too, especially if you want to keep your own lawn back home pristine! Just remember to bring your own horseshoes, as the park does not provide them.

### 9. It boasts archery, golf, and a Japanese Peace Garden!

Additionally, it has an archery range, two 18-hole golf courses, and an 18-hole championship disc golf course in the arboretum area. Floral gardens at the park include a Japanese Peace Garden with an authentic tea house!

### 10. It's a great place to go fishing

For water enthusiasts, fishing is permitted in two large freshwater lakes, along with canoe, paddleboat, and Jon boat rentals. And don't worry about bringing your own paddles, oars, or personal flotation devices – they're all included in the rental.

### 11. There's a team-building course

Organized groups looking for a physical and a mental challenge are invited to make a reservation to take the park's "Ropes & Initiatives Course." It features a progression of more difficult tasks, similar to an obstacle course. It can be a powerful tool for enhancing group dynamics.

### 12. There are lots of FREE programs

OK, now that we know what Newport News Park has to offer, let's talk about the many FREE programs scheduled there on a regular basis!

*See Flagshipnews.com for the full list of available programs.*



# Industrial designers and biomedical engineers team up to address unmet needs of wounded veterans

Virginia Tech  
Press Release

Getting treatment for a serious injury or ailment isn't simply a matter of taking prescribed medication or showing up for appointments on time. It's also about the little things in between – dealing with complicated billing or insurance processes, for example, or navigating the mental toll of a physical disability that affects quality of life.

Those issues are compounded for wounded veterans, many of whom incur injury under exceptional circumstances, often within battlefield environments. As a special population with unique needs, veterans often struggle to connect with health care professionals, processes, and products in ways that result in adequate care.

With a grant from the National Institutes of Health, Virginia Tech faculty are hoping to better recognize and resolve some of those unmet needs by changing the way designers and engineers are trained. In efforts led by faculty in the industrial design program and the Department of Biomedical Engineering and Mechanics, students will soon be able to enroll in a course that combines the unique skillsets of both disciplines to identify health care needs of wounded veterans in clinical settings.

Students will then design a device, application, or system to address that unmet need – and get feedback from veterans and members of their care team along the way.

“We wanted to bring industrial design and biomedical engineering students together for a project that was more than just an academic experience,” said Elham Morshedzadeh, an assistant professor in the School of Architecture + Design who will help lead instructional efforts. “It’s important for them to be in that clinical environ-



Elham Morshedzadeh, Chris Arena, and Pamela VandeVord (left to right) discuss possible fabrication methods for biomedical device prototypes, including 3D printing. Throughout the new course, students will design a device, application, or system to address an unmet health care need of wounded veterans.

Courtesy of  
Virginia Tech

ment and connect with different stakeholders involved in the health care process. Students know how to do the research in theory, but approaching patients in real-life settings and engaging with their communities is a unique experience.”

Students in the course will interact with wounded veterans along with nurses, physicians, therapists, scientists, and engineers at the Salem Veterans Affairs Medical Center (SVAMC) just outside of Roanoke. They’ll also shadow members of the military health care team at the Walter Reed National Military Medical Center in Bethesda, Maryland.

“We are excited to again partner with Virginia Tech faculty as we work together to improve the quality of life of our veterans and their caregivers,” said Jessica O’Leary, training and education coordinator for the research service at SVAMC. “By working closely with our veterans, faculty, and staff, these students will gain invaluable insights into the importance that the patient voice and experience plays in developing an optimal plan for healing.”

Chris Arena, a collegiate assistant professor of biomedical engineering who will also lead instructional rotations, sees the course’s unique benefit in the different approaches of both disciplines to needs identification.

“Biomedical engineers have a different process than industrial designers,” said Arena. “For our senior design projects, we

typically rely on physicians or other experts in the field to guide us toward important challenges that need to be solved.”

But for special populations like wounded veterans who share a distinctive set of experiences, it may be necessary to take a step back for a more holistic approach to needs assessment.

“In industrial design courses, we don’t start with a pre-identified problem,” explained Morshedzadeh. “We want our students to discover invisible or unknown problems that might exist within dynamic systems. How are these people fitting into a larger community, and where are the connections or areas of overlap between multiple needs?”

By combining this user-centric needs assessment with a strategic approach to technical product development, patients and providers – as well as aspiring engineers and designers – ultimately benefit.

“Engineers can bring value in how we turn ideas into medical devices, especially when it comes to industry standards that may be required for regulatory approvals,” said Arena. “We also provide technical knowledge about how to implement solutions across multiple areas, like electronics, mechanics, and biology.”

Students will examine both battlefield-specific injuries, like the loss of a limb, and also more common ailments, such as kidney failure, said Arena. They’ll also consider

designs that could be used by anyone on a patient’s care team to address a need or issue. Outcomes of the course might include assistive device prototypes, smartphone apps that better connect patients with providers, or virtual reality systems that enable remote therapy.

Faculty experts from a number of specialties will participate as members of the course’s instructional team, lecturing on specific topics and connecting students to their professional collaborators in health care. These grant participants include Pamela VandeVord, the project’s principal investigator and the N. Waldo Harrison Professor; research professor John Robertson; and professor of practice Andre Muelenaer, all of the Department of Biomedical Engineering and Mechanics. Brad Hendershot, a senior research biomedical engineer at Walter Reed National Military Medical Center and a Virginia Tech – Wake Forest School of Biomedical Engineering alumnus, will also serve as a collaborator.

Throughout the course, which will begin in the spring of 2020, students will also have opportunities to volunteer in clinics and spend more time with the patients they’re working with.

“This is one way we can give back to that community,” said Morshedzadeh. “That’s important, because these veterans are doing a lot to provide this learning opportunity for our students and our team.”

\*\*\* TONIGHT \*\*\*

**CHRIS YOUNG**  
RAISED ON COUNTRY  
TOUR 2019

WITH SPECIAL GUESTS  
**CHRIS JANSON**  
AND **JIMMIE ALLEN**

**AUGUST 22**

SUMMER TOUR 2019

**FLOGGING MOLLY AND SOCIAL DISTORTION**  
WITH SPECIAL GUESTS **THE DEVIL MAKES THREE** AND **LE BUTCHERETTES**

**FRIDAY  
AUGUST 23**

**LUKE BRYAN**  
SUNSET Repeat tour

COLE SWINDELL  
JON LANGSTON  
DJ ROCK

**SEPTEMBER 8**

2019 SUMMER  
**Outlaw MUSIC FESTIVAL**

**WILLIE NELSON FAMILY  
BONNIE RAITT  
THE AVETT BROTHERS  
ALISON KRAUSS  
LUKAS NELSON &  
PROMISE OF THE REAL**

**SATURDAY  
SEPTEMBER 14**

Legendary Nights

**MILL — FUTURE  
MUSTARD  
MEGAN THEE STALLION**

**SEPTEMBER 20**

**Z104 SHAGG FEST 19**

**CHRIS STAPLETON**

**ALL AMERICAN ROAD SHOW**  
WITH **BROTHERS OSBORNE & KENDELL MARVEL**

**FRIDAY  
OCTOBER 18**

**VETERANS UNITED HOME LOANS.**  
**AMPHITHEATER**  
AT VIRGINIA BEACH

**LIVE NATION**  
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Samuel Flint

**Yiorgo**

Our Hampton Roads Region is rich in diverse, cultural communities and the Virginia Stage Company (VSC), the region’s leading professional theatre company has masterfully crafted the perfect union of these communities with its Public Works initiative to help impact the lives of hundreds of families through their community outreach programs.

The Wells Theatre will be the location the weekend of August 30th, August 31st, and September 1st as more than 50 Hampton Roads artists will present VSC’s production of William Shakespeare’s *The Tempest* adapted by Patrick Mullins with music by Jake Hull.

We are fortunate to have with us Patrick Mullins, the Director of Public Works with VSC. Patrick also produces the education in community engagement programs. He is originally from Georgia, and first came here about 12 years ago as the Associate Artistic Director for the VSC.

**Yiorgo: What is Public Works Virginia?**

**Patrick Mullins:** It is VSC’s wide initiative to make theatre accessible to all people. We offer classes in conjunction with community partners across Hampton Roads. For example Access Virginia helps us reach people with vision limitations and hard of hearing. Our partnership with Chesapeake Parks, Recreation and Tourism allows us to reach a dynamic group of senior citizens in their 55

and over club. We worked with Armed Services in Virginia Beach. They are a group of veterans. We work with partner organizations such as the Norfolk State University Theatre Company who is a producing partner.

**Y: Tell us about this summer’s production of William Shakespeare’s *The Tempest*.**

**PM:** The *Tempest* highlights all of our Hampton Roads communities and gives people the opportunity to be a part of a full major stage show with musicians and professional sets. We have over 50 people in the show plus we have several cameo groups with organizations that we have smaller partnerships with such as: Teens With a Purpose, Atumpan Edutainment and Philippine Cultural Center School of Creative and Performing Arts. They have their own performance outlines already and so we have added them as part of the performance. So when you come to see *The Tempest*, you will see: professional actors from our producing partner Norfolk State University, folks from the general community who auditioned for the show, as well as Jake Hull who wrote music for the *Tempest* when we did it in the park six years ago. We have revisited that score for this production.

We have brought in puppetry from Paperhand Puppet Intervention from North Carolina, people who speak sign language and happen to be deaf, a couple of blind, vision people, so we have all sorts of beautiful humans working on the show. It’s been a blast and I have



Courtesy of The Wells Theatre  
Patrick Mullins, the Director of Public Works with the Virginia Stage Company.

learned so much from them. We are all learning from each other, sharing our cultures and heritages and pouring it all into this huge melting pot on stage. After all that’s what the themes in *The Tempest* are all about. Prospero brings all people together. There is reconciliation, forgiveness and sharing what we have with each other. I’m really excited about how it’s really coming together.

**Y: You have cast a female in the role of Prospero.**

**PM:** Yes indeed, our lead role of Prospera, is played by Kimberly Ambrose, the drama teacher at Booker T. High School in Norfolk, Virginia. She blew us all away at the auditions and to have a theatre leader in our community leading the show has been super fun too.

**Y: How does one go about choosing to become a director?**

**PM:** Directing chose me I think. My MFA is actually in acting and I rolled into directing, but what that

acting training did is gave me a tool box. I was really lucky to have been mentored by really wonderful humans around the Alliance Theater in Atlanta, at the graduate school and other places. Even when I first got here at Virginia Stage, with Chris Hanna and all the other wonderful directors that came through town that I got to assist. I learned a lot through their mentorship and exposure.

For me directing is a heart and a point of view. I was in education and taught High School for seven years. I was also a part-time Methodist Youth Pastor at a church. We took a bunch of kids to a Franklin Covey Leadership conference and they had us compose a mission statement for our life and the mission statement I came up with even though I was a completely different human then I am now was that I wanted to give people experiences that help them see the world differently and that’s kinda what I still do. So whether I am directing the *Odd Couple* or the *Tempest* with this beautiful cast, it’s about how do we get the people out of their shells, how do we give them an experience that let’s them see the world from a slightly different place, more empathetic, more open and if nothing else take a deep breath and have a good laugh. My mom always thought that I would be a pastor and I told her a long time ago, ‘Mom I am a Pastor, I just have a different pulpit.’ I’m really lucky and blessed to get to do what I do. To me directing is a craft and I’ve been lucky to learn great tools and skills from other wonderful artists

but at the end of the day it’s leading a meaningful journey to create an experience for others.

**Y: How about a wow moment?**

**PM:** I’ve been lucky to direct in a lot of diverse places around here and there is this moment when all the people have added their stuff either late in tech or early in pre-views and everything is firing on all cylinders, and this huge machine that’s way bigger than I could have done by myself is hitting the ground and it’s working, that’s what super exciting to me, it’s that moment every time.

**Y: Why was *Tempest* chosen as the play to do this summer?**

**PM:** It’s a play I know well and I have worked on, most of my life. It has all the complex, problematic themes and a beautiful, generous human, in Prospero/Prospera.

**Y: Why should people see this show?**

**PM:** Because to me, it’s all the best things about theatre. It’s about, heart, and community in its purest form. It’s a lot of fun and a lot of spectacle. There is a lot of joy on stage and a lot of beautiful, big puppetry on stage that you don’t get a chance to see in Hampton Roads very often.

*In keeping with the goal of making theatre accessible to all people, tickets are free and available on a first come, first serve basis at [www.vastage.org](http://www.vastage.org)*

*Yiorgo is a Hampton Roads arts, entertainment and sports writer. A stage, TV and movie actor, he is also an educator, motivational speaker, writer, storyteller and columnist.*

# Masu the red panda gives birth to triplets!

Virginia Zoo  
Press Release

**NORFOLK**

The Virginia Zoo welcomes three red panda cubs to mom, three-year-old Masu and dad, four-year-old Timur. The cubs, two males and one female, were born off-exhibit at the Zoo’s Animal Wellness Campus on June 18, 2019. Red panda cubs weigh approximately five ounces at birth, but now weigh in at 500-600 grams, or just over a pound.

“Having red panda triplets is a unique situation,” said Dr. Colleen Clabbers, the Zoo’s Veterinarian. “It’s a lot of work for mom to care for three newborns, but Masu is doing a great job caring for the triplets and all three have been thriving.”

Masu gave birth in an indoor, climate-controlled den where she has been nursing and bonding with her cubs in a quiet environment. The den is off view to the public and is monitored by Zoo Keepers and Animal Care Staff. Masu and the cubs will make their way to the original Red panda exhibit off the main pathway later this fall when Keepers feel they can confidently navigate the trees and other

exhibit features.

“Our Animal Care team had a great strategy last year in moving Masu to the Animal Wellness Campus while she was still pregnant, providing privacy for her first birth experience. She took great care of her cubs last year, which is why we opted to do the same thing again this time around,” said Greg Bockheim, Executive Director of the Virginia Zoo. “We’re excited to introduce Masu and the triplets to the public this fall!”

The Virginia Zoo is auctioning naming rights of the cubs in support of red panda conservation. The public can place bids on each of the cubs’ names through August 30. To place yours, visit <https://one.bidpal.net/redpandas/welcome>.

**About Red pandas**

Red pandas are tree-dwelling animals native to the eastern Himalayas, in suitable habitat in Myanmar, Nepal, India, Bhutan, Tibet and China. While they share the same name as giant pandas, the two species are not closely related. Red pandas are the only living member of their taxonomic family. Slightly larger than a domestic cat and with markings



Virginia Zoo

similar to a raccoon, Red pandas have soft, dense reddish-brown and white fur. They feed mainly on bamboo, but also various plant shoots, leaves, fruit and insects. Red pandas are shy and solitary except when mating or raising offspring.

**About the Virginia Zoo**

The Virginia Zoo, located in Norfolk, Virginia, is home to more than 700 exceptional animals representing over 100 fascinating species. Founded in 1901 and residing on 53 beautifully landscaped acres, the Virginia Zoo has demonstrated

a commitment to saving and protecting the world’s wildlife by inspiring a passion for nature and taking conservation action at home and around the world. The Virginia Zoo is an accredited member of the Association of Zoos and Aquariums and is recognized as a global leader in education, recreation, science, wildlife conservation, and animal care and welfare. For more than a century, the Zoo has connected adults, families and school children with the natural world and its wildlife. To learn more, visit [www.virginiazoo.org](http://www.virginiazoo.org).





# coming to theaters

## ANGEL HAS FALLEN [R]

When there is an assassination attempt on U.S. President Allan Trumbull (Morgan Freeman), his trusted confidant, Secret Service Agent Mike Banning (Gerard Butler), is wrongfully accused and taken into custody. After escaping from capture, he becomes a man on the run and must evade his own agency and outsmart the FBI in order to find the real threat to the President. Desperate to uncover the truth, Banning turns to unlikely allies to help clear his name, keep his family from harm and save the country from imminent danger.

## BURN [R]

Burn follows a lonely, unstable gas station attendant Melinda (Tilda Cobham-Hervey), tired of being overshadowed by her more confident, outgoing co-worker Sheila (Suki Waterhouse). When the gas station is held at gunpoint by Billy (Josh Hutcherson), a desperate man in need of quick cash, Melinda finds an opportunity to make a connection with the robber, regardless of who gets hurt.

## OVERCOMER [PG]

Filled with a powerful mix of faith, a twist of humor, and a ton of heart, Overcome follows the Kendricks' previous features Facing the Giants, Fireproof, Courageous, and the #1 box-office hit, War Room. Life changes overnight for basketball coach John Harrison and the high school where he and his

wife teach when they learn the largest manufacturing plant in town is shutting down. Uncertainty swirls as hundreds of families depart, leaving John fearful for the future of his family and his team. Forced to coach a sport he doesn't even like, John is inspired by an unexpected friendship, and an unlikely athlete pushing her limits on a journey toward discovery. With newfound resolve and the support of the community, Hannah and her coach challenge the impossible in the biggest race of her life.

## SAHO [R]

The Story is about a power battle which is taking place in the higher echelons of power unrelated and unconnected episodes occurring in different parts of the globe, Intertwine in an unforeseen manner to revelation of mind games.

## VITA & VIRGINIA

Set amidst the bohemian high society of 1920s England, Vita & Virginia tells the scintillating true story of a literary love affair that fueled the imagination of one of the 20th century's most celebrated writers. Vita Sackville-West (Gemma Arterton) is the brash, aristocratic wife of a diplomat who refuses to be constrained by her marriage, defiantly courting scandal through her affairs with women. When she meets the brilliant but troubled Virginia Woolf (Elizabeth Debicki), she is immediately attracted to the famed novelist's eccentric genius and enigmatic allure. So begins an intense, passionate relationship marked by all-consuming desire, intellectual gamesmanship, and destructive jealousy that will leave both women profoundly transformed and inspire the writing of one of Woolf's greatest works.

# base theaters \$3 Movies

## JEB Little Creek, Gator Theater – 462-7534

### Friday | Aug. 23

7:00 p.m. Once Upon A Time In Hollywood [R]

### Saturday | Aug. 24

1:00 p.m. The Lion King (2019) (3-D) [PG]

4:00 p.m. Once Upon A Time In Hollywood [R]

7:00 p.m. Stuber [R]

### Sunday | Aug. 25

1:00 p.m. Spider-Man: Far From Home [PG13]

4:00 p.m. The Lion King (2019) [PG]

7:00 p.m. Once Upon A Time In Hollywood [R]

## NAS Oceana, Aero Theater – 433-2495

### Thursday | Aug. 22

7:00 p.m. Stuber [R]

### Friday | Aug. 23

6:00 p.m. Once Upon A Time In Hollywood [R]

9:00 p.m. Crawl (2019) [R]

### Saturday | Aug. 24

12:00 p.m. The Lion King (2019) [PG]

3:00 p.m. Spider-Man: Far From Home [PG13]

6:00 p.m. The Lion King (2019) (3-D) [PG]

### Sunday | Aug. 25

12:00 p.m. The Lion King (2019) [PG]

3:00 p.m. Stuber [R]

6:00 p.m. Once Upon A Time In Hollywood [R]

**Schedule is subject to change.** For your weekly movie showtimes and more, check out the navy Mid-Atlantic Region MWR website at [discovermwr.com](https://discovermwr.com).



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**CRAFT FAIR**  
Oct. 5, 2019, 9 to 4, St John Lutheran Church, 8918 Tidewater Dr. Norfolk VA, 23503. A few spaces left for vendors. Call 588-7381

**FREE HOME BUYER CLASS & WINE TASTING IN VA BEACH!**  
Hampton Roads home buyers learn the steps to buy a house & enjoy great tasting wines as well! Sept 3, 2019 / 4-6pm Register: <http://Liz.FreeHome-BuyerClass.us>



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**AVALON WOODS ESTATE SALE**  
624 Baden Ave., VB. Thurs-Sun 8/22-25 9am-3pm. Crazy collection of unique antique & vintage furniture & collectibles, military, asian decor, books & albums. For pics and more info go to [ThisNThatCompany.com](http://ThisNThatCompany.com)

**VIRGINIA BEACH**  
Fri. Aug. 23rd 10am-3pm  
Sat. Aug. 24th 10am-3pm  
Sun. Aug. 25th 10am-3pm  
716 Brinson Arch. Zip: 23455  
(Ask us about the property auction on the following Tuesday 8/27)  
Doors: 10am Cash/Check Only. Contents of military home must go! Antique/Ethan Allen/Mod. Furniture, Clothes, tools, depression glass, etc. **RANDY'S AUCTION GALLERY LTD.**  
Call: 757-626-1919 / 757-286-1976  
[www.randysauctiongallery.com](http://www.randysauctiongallery.com)  
Visit website for pics & more info on sale & auction. VAAR 963 Firm #340



## Misc. Merchandise For Sale

**4 CEMETERY PLOTS**  
Chesapeake Memorial Gardens, in Monument section. Family lot #304 adjacent plots 1-4. \$20k. 757-876-1019

**CROSSBOW**  
Farker, hammer, 325. 1 yr old. New \$450. Asking \$225. 757-237-4298.

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American/ English Golden Puppies. AKC, GRCA, OFA, Cert. Vaccinated. 8wks. Males and Females Available. Health guarantee. Microchipped. Nu-Vet. [gapviewkennel.com](http://gapviewkennel.com)

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**HARLEY 2018 FATBOY EDITION**  
114 cu in engine, 4500 mis., still under factory warranty. Stage 1 Breather, Vance & Hines pipes, ABS security, detachable saddle bags, detachable wind screen, bike cover, showroom new, \$16,900. Call for details 675-0288. Va. Dir.

## Autos for Sale

**BMW 2015 320**  
Very clean with new tires and inspection. Won't last! 757-788-0408 \$16,700

### BUICK 2004 LESABRE



Mint condition - LOW MILES! Auto, air, loaded, inspected, look & drives perfect! \$3990 757-439 8017 Va Dir. 757-481-7777 Process Fee \$375

### CADILLAC 2005 DEVILLE

1 owner, red, good condition, 123,000 miles, \$4,500. 757-434-8687

### CHEVROLET 2002 CORVETTE



LIKE NEW METALLIC RED CONVERTIBLE. Automatic, 27K miles, \$20,500 Call/Text 260-409-2391 (LOCAL)

**CHEVROLET 2007 CORVETTE**  
SILVER 69K MILES GARAGE KEPT ALL SERVICE RECORDS EXCELLENT CONDITION 23K CALL7574490845 OR TEXT FOR PHOTOS

### CHEVROLET 2013 CAMARO



RS, leather, roof, alloy, fully loaded - must see! \$16,900 VA Dir. Process fee \$395 757-717-1715/757-963-2299

### CHEVROLET 2016 CRUZE



LT 1 owner, new bdy, 26k mi., 560 warr. LIKE NEW! \$12,900 757-880-3045

### CHRYSLER 2008 SEBRING



Looks & runs GREAT! New inspection, auto, air, loaded \$3990 757-439 8017 Va Dir. 757-481-7777 Process Fee \$375

### CHRYSLER 2008 TOWN & COUNTRY



Excellent condition! Slow away, pwr sliders, insp, loaded \$4990 757-4398017 Va Dir 757-481-7777 Process Fee \$375

### DODGE 2015 CHARGER



SXT Plus leather, roof, alloy - super nice! \$19,450 VA Dir. Process fee \$395 757-717-1715/757-963-2299

### FORD 1941 SUPER DELUXE

2 DR Sedan; 51,952 orig miles. Orig Flat Head V8; Needs Total Restoration; \$5000. 080. 757-583-1464

### FORD 2018 FOCUS



SE auto, ac, great miles! \$13,850 VA Dir. Process fee \$395 757-717-1715/757-963-2299

## Autos for Sale

### FORD 2003 MUSTANG



Convertible, LOW MILES-GREAT CONDITION! Auto, air, loaded, inspected \$3990 757-439 8017 Va Dir. 757-481-7777 Process Fee \$375

### HONDA 1998 CIVIC

5 speed, ready to go. \$1800 OBO Call 813-580-2083

### HONDA 2003 CR-V

Runs Great, Just Detailed, Smoke-Free New Brakes, Rotors, Belt, & Battery. Roof Racks \$4,200 757 636 6251

### HYUNDAI 2014 EQUUS

1 owner, garaged, 37k mi, extended warr records shwmr 757-340-1023 \$22,500 You'll want this car!

### INFINITI 2005 G35

Ready to go. \$4,500 OBO Call 813-580-2083

### LINCOLN 2013 MKZ

Showroom garnet chrome pkg 39k all opts \$17650 9193244391

### MAZDA 2015 MAZDA6



Touring Leather, alloy, must see! New inspection. \$13,950 VA Dir. Process fee \$395 757-717-1715/757-963-2299

### MERCUY 2004 GRAND MARQUIS

3300 757-615-7283

### NISSAN 2011 ALTIMA



SL package leather seats Bose Sound system Pearl White Taupes Interior 78K miles Excellent condition original owner \$8950. Call: 757-619-7049

### PONTIAC 2008 G6



Mint condition! Auto, air, loaded, inspected \$3990. 757-439 8017 Va Dir. 757-481-7777 Process Fee \$375

### SUBARU 2012 FORESTER

50K original miles, 4 wheel drive, alloy, auto, runs & look great, new inspection, \$12,700. Call for details 675-0288. Va. Dir.

### TOYOTA 2007 SIENNA



LE LOW MILES looks/drives perfect! Slow away seats, pwr sliders, loaded, new insp. \$5990 757-439 8017 Va Dir. 757-481-7777 Process Fee \$375

### TOYOTA 2014 CAMRY



SE auto, ac, alloy, spoiler. \$14,450 VA Dir. Process fee \$395 757-717-1715/757-963-2299

### TOYOTA 2016 CAMRY

LE, 40K mis., LE package, backup camera, CD, new tires, just serviced & state inspected. \$15,900. Call for details 675-0288. Va. Dir.

### VOLKSWAGEN 2015 JETTA

1 owner, 44K orig. mis., auto, air, new inspection, warranty, runs & looks great. \$9900. Call for details 675-0288. Va. Dir.

## Autos for Sale

**VOLKSWAGEN 2016 JETTA**  
SEL: Auto; A/C, Leather, Navigation, Full Power Incl Sunroof, Cruise, Excellent Condition, 31k miles. VW Warranty. \$14,000. Call: 443-235-0304

### Classic, Antique Cars

**FORD 1997 THUNDERBIRD**  
LT - Limited edition, new tires, new paint job, new inspection, 1 owner, excellent condition. \$4000 obo. 757-567-6764

### OLDSMOBILE 1974 CUTLASS SUPREME

5000 or best price 1974 olds cutlass supreme Orig miles 73000 with orig parts. Phone number 443-676-4338. Good condition. No visible damage

### Trucks and SUVs

### CHEVROLET 2012 COLORADO



LT, ext. cab. auto, ac, alloy, \$10,875 VA Dir. Process fee \$395 757-717-1715/757-963-2299

### CHEVROLET 2016 TRAVERSE



LS auto, 7 passenger, great condition - must see! \$17,450 VA Dir. Process fee \$395 757-717-1715/757-963-2299

### CHRYSLER 2004 TOWN & COUNTRY



Wheelchair Vans. Others to choose from starting at \$7000. Call Ken 757-769-8636. Va. Dir.

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**FORD 2010 F150**  
Super Cab V8, 124K, Silver, Sprayed Bed Liner, Satellite Radio, 1 owner, Dealer Maintenance w/Records, Super Clean \$11,500 757-513-9193

### FORD 2011 ESCAPE



XLS. Excellent condition! Auto, air, loaded, inspected. \$3990 757-439 8017 Va Dir. 757-481-7777 Process Fee \$375

### FORD 2013 F-150



4x4 Supercrew Platinum EXCELLENT cond. 79K mi. 5.0L V8. Leather. Powertrain warranty thru 100K or 8/20. Leveled front, 33X128 1/2 inch Toyo tires 20 in aluminum rims. Maint. records kept. \$28,500 757-705-2912

### GMC 2004 SIERRA 1500



Extended Cab 4 dr. LOW MILES-MINT CONDITION! Auto, air, inspected, loaded \$6990 757-439 8017 Va Dir. 757-481-7777 Process Fee \$375

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**HONDA 2016 CR-V**  
AWD, Auto, A/C, Cruise, Power Windows & Locks, Back Up Camera, Honda Warranty, Exc Cond. CarFax, 26k miles, \$16,950. Call: 757-351-5611

**HONDA 2017 CR-V**  
8000 miles, garaged, excellent cond. \$25,000 or best offer. 757-943-7979

**JEEP 1996 CHEROKEE**  
18,500 actual miles, 4wd, interior spotless, runs and drives great, was to ask \$8,500, needs A/C compressor, offered at \$7,500. Call 757-630-3067 leave message if miss your call

**JEEP 2017 RENEGADE**  
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Trucks and SUVs



**JEEP 2011 WRANGLER**  
Unlimited. Fully loaded, good miles - must see! Lots of extras! \$19,950 VA Dir. Process fee \$395 757-717-1715/757-963-2299

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135k miles, loaded, AWD, excellent condition \$4,150. 757-739-8946

**MERCEDES-BENZ 2014 GLE 400**  
GL450. 36K orig. mis., gar kept, all serviced, 4-Matic, 3 sunroofs, fully loaded, runs & looks great. 4X4. \$32,800. Details 675-0288. Va. Dir.

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Trucks and SUVs



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**NISSAN 2003 PATHFINDER**  
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**NISSAN 2004 MURANO**  
AWD, beautiful condition! Auto, air, loaded, inspected \$3990. 757-439 8017 Va Dir. 757-481-7777 Process Fee \$375

Trucks and SUVs



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## Fun and Games

### Super Crossword

#### TRACK STARS

#### ACROSS

1 1995-96 CIA director John  
7 Seat of Johnson County, Kansas  
13 Dah's counterpart in Morse code  
16 Ungar of poker  
19 African antelope  
20 Mink's relative  
21 Actress Jennifer  
23 Nebraska-based insurance company [1935]  
25 Panther  
26 "I've Got a Crush —"  
27 Bean high in protein  
28 "Wide — Sea" (Jean Rhys novel)  
29 Desires  
31 Summons for speeding, say [1948]  
35 Foofoo  
36 Like granola  
37 Up to the time when  
38 Chicago-to-Tampa dir.

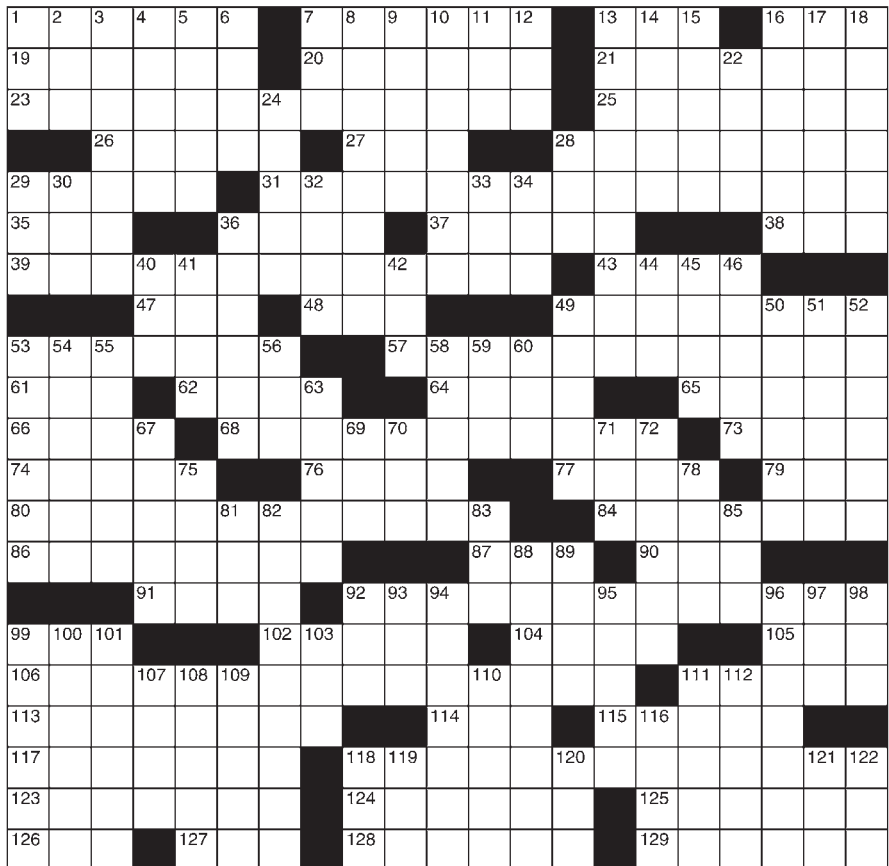
39 Sharp items with eyes [1956]  
43 Bond part  
47 Day, in Chile  
48 "Seats sold out" sign  
49 Mood of an environment  
53 Cloud layer code  
57 Being attacked [1946]  
61 Funny Margaret  
62 Water, in Chile  
64 "— you one"  
65 Ventriloquist Bergen  
66 Egg layers in coops  
68 Refittings of cars' motors [1955]  
73 Fluids with antibodies  
74 Writer Asimov  
76 Comical Idle  
77 Water pit  
79 Racer Jarrett  
80 Having recognized the value of one's own conscious being [1978]  
84 Artist's mixing board  
86 Amber wines  
87 "You betcha"

90 "Angie" actor Stephen  
91 Ollie's buddy  
92 Executive arm headed by Antônio Guterres, for short [1973]  
99 Acer or Asus products  
102 Touch base on a fly  
104 Easy throws  
105 Gp. backing arms  
106 "Just Shoot Me!" actress [2005]  
111 Protest type  
113 Tree expert  
114 Christmas party quaff  
115 Chicago air hub  
117 Machine on a skating rink  
118 Event won by the horses at the ends of eight answers in this puzzle  
123 Up for debate  
124 Lipton drink, informally  
125 Actress Driver  
126 Booming jet of old, briefly

127 Suffix with 25-Across  
128 Quagmire  
129 Actor Liam  
**DOWN**  
1 Lose luster  
2 Tall bird  
3 Thus far  
4 Razz  
5 Pottery materials  
6 Slightly glow  
7 A bit amiss  
8 "When I Need You" singer  
9 Long — the law  
10 Cookie batch, often  
11 Snarky laugh  
12 Socrates' H  
13 Buddhist leader  
14 Like neon  
15 New York county  
16 Equilibrium  
17 Trunks  
18 Not finished  
22 Petty fight  
24 Eke — existence  
28 Phys., e.g.  
29 Existed  
30 Sweet drink  
32 Map nos.  
33 Opal ending  
34 Dol. divisions  
36 Model railroad size

40 Lupino of old Hollywood  
41 Naldi of old Hollywood  
42 "How — Want It" (#1 hit for 2Pac)  
44 "The Detour" channel  
45 French river  
46 Honey drinks  
49 Realms  
50 Guitarist Ted  
51 Table wine  
52 Big online investing site  
53 Deep divide  
54 "La Mer," translated  
55 President after Jimmy  
56 Part of SPF  
58 Sibling of a nephew  
59 Two, in Chile  
60 "That's icky!"  
63 "— just a number"  
67 Bank boxes  
69 Like the verb "lie": Abbr.  
70 Game with matchsticks  
71 Baby wolf  
72 Stings  
75 "I Am —" (Jenner's reality show)  
78 Supplication  
81 Clerical title  
82 Dreams  
83 Tincture

85 Incus' organ  
88 Pastoral poems  
89 Grads' event  
92 Sheepskin boot brand  
93 "Rapa —" (1994 film)  
94 Wrench, to a Brit  
95 Kindle download  
96 ER trainees  
97 Moviedom's Meyers  
98 Bronzy  
99 Some statue sites  
100 Gem measures  
101 Yield (to)  
103 Home pest  
107 Rips off  
108 Sprang forth  
109 Congested cavity, often  
110 Terra — (tile material)  
111 The Beatles' "Sexy —"  
112 "Fame" star Cara  
116 Choir melody  
118 Basinger of "Batman"  
119 — -friendly  
120 — in "crossword"  
121 Yearbook bit  
122 Deep longing



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### last week's answers

BLOWUP CORRAL ABSORBIS  
LUPINO AROUSE DIPLOMA  
OTELLO VEGGIE HOEDOWN  
TELLALLOUOURFRIENDS  
ACHY SEA CRI LOA  
DAD EASE THERE CHEERS  
OKIE LOTSA EAT ANAIS  
BIGYELLOWTAXI ENGORGED  
BRIEN NEON DATE SNIT  
SATIATE ANAS THAW ENS  
ANCESTRALHOMELAND  
ILLTATATALYON REREADS  
NAPA SEGA SACS TIBIA  
CRISPER LITTLEBOYLOST  
OSAKA ADD SEVEN LUCY  
MONSTERMASH EDER TOR  
ENO LEI UPS IBET  
PRIMETIMEEMMYAWARD  
JAMAICA URBANE OMENII  
ADENOID BALLOT NEEDLE  
NANETTE SNEERS ERNIES

|   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|
| 4 | 6 | 3 | 8 | 1 | 7 | 2 | 9 | 5 |
| 1 | 2 | 7 | 3 | 9 | 5 | 4 | 6 | 8 |
| 9 | 8 | 5 | 6 | 4 | 2 | 1 | 7 | 3 |
| 5 | 4 | 9 | 1 | 7 | 8 | 3 | 2 | 6 |
| 8 | 3 | 2 | 4 | 5 | 6 | 7 | 1 | 9 |
| 6 | 7 | 1 | 2 | 3 | 9 | 5 | 8 | 4 |
| 2 | 5 | 6 | 7 | 8 | 4 | 9 | 3 | 1 |
| 3 | 9 | 8 | 5 | 2 | 1 | 6 | 4 | 7 |
| 7 | 1 | 4 | 9 | 6 | 3 | 8 | 5 | 2 |

## Sudoku

|   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|
| 1 |   |   |   |   | 3 | 8 |   |   |
|   | 9 |   |   |   | 8 |   | 6 |   |
|   |   | 2 | 9 |   | 4 |   |   | 5 |
|   |   | 5 |   | 2 |   |   | 7 | 1 |
| 2 |   |   | 3 |   |   | 4 |   |   |
|   | 4 |   |   |   | 6 |   |   | 8 |
|   | 7 |   |   |   | 2 |   | 1 |   |
| 4 |   |   | 7 |   |   |   |   | 3 |
|   | 8 | 6 |   |   | 3 |   | 2 |   |

## CryptoQuip

This is a simple substitution cipher in which each letter used stands for another. If you think that X equals O, it will equal O throughout the puzzle. Solution is accomplished by trial and error.

Clue: **X** equals **P**

ZH XLRXCL GRKL CZKZFB ZF

OEZDZTI WXWEDSLFDT, Z

BALTT DIWD TIRACQ OL

DLESLQ "ZFHCDWDZRF."

### Last week's CryptoQuip answer

When faced with cooking on a gas stove, I think an aviator would prefer using the pilot light.

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