

## Technology brings history to life today in Pearl Harbor

Story and photos by  
MC3 Johans Chavarro

Navy Public Affairs  
Support Element West,  
Detachment Hawaii

Every year, millions of people walk through the gates of the World War II Valor in the Pacific National Monument in Pearl Harbor, Hawaii to look back on Dec. 7, 1941—the day that has lived in infamy. The USS Arizona Memorial draws more than 1.8 million visitors each year to its site.

Above the water's surface, the protruding remnants of Arizona's rusted hull provide visitors with the chance to remember those who gave the ultimate sacrifice in protecting their brothers and country—a chance to honor those who may be sometimes forgotten.

On Oct. 21, divers under the surface were working to bring history back to life.

Just a few feet under the surface, Shaan Hurley, a technologist in the office of the chief technology officer at Autodesk, a software company, carefully maneuvered through the silty waters surrounding the Arizona, navigating his way



Mass Communication Specialist 1st Class Brett Cote, assigned to Combat Camera San Diego, prepares his underwater photography equipment at the USS Arizona Memorial at Joint Base Pearl Harbor-Hickam as (above right) Sailors and divers from the National Park Service (NPS) participate in a data-collection evolution

to key structures and components mapped out on a waterproof map of the ship.

Hurley's objective in photographing these important structures was so that eventual 3D models and printouts can be made to study, a technique referred

to as photogrammetry.

Today, the corroded and twisted passageways and bulkheads of the Arizona are, to the surprise of some, teeming with marine life. Such an occurrence should, in reality, not even be happening given the harbor's

harsh environment, but nature has found a way and, in doing so, may have potentially put the ship's structural integrity in danger, according to Scott Pawlowski, chief of cultural and natural resources at the WWII Valor

in the Pacific National Monument.

"In the first surveys done in the early '80s, coral did not exist on the ship, and one of the models that we have created to help us measure the longevity determined that coral was

not a significant contributor to the model's accuracy," said Pawlowski.

"All growth happens in a logarithmic scale and what we're trying to do is find out where along the growth scale we are, so we can double check our work from the past and be ready for questions about whether we should or should not manage it in the future," he said.

Since then, the National Park Service (NPS) has begun an extensive surveying project to develop high-resolution surveying data and models through the use of state-of-the-art technology, like photogrammetry, underwater acoustic mapping and light detection and ranging (LiDAR). This is being done in an effort to better understand how the sunken remains of the Arizona and Utah, as well as various historic sites throughout Pearl Harbor, are changing with time.

"What's driving this project, at its core, is our desire to have high-fidelity measurements of the ship that we can then repeat over time and determine if things have shifted, changed or settled," said Pawlowski.

See USS ARIZONA, A-4

## Energy conservation saves money, ensures mission success at JBPHH

Staff Sgt.  
Alexander Martinez

15th Wing Public Affairs

As October comes to an end, so does Energy Action Month, but efforts to conserve energy and implement energy efficient initiatives is a year-round mission at Joint Base Pearl Harbor-Hickam.

Here the energy program is executed by the Naval Facilities Engineering Command (NAVFAC). Under the NAVFAC umbrella, JBPHH has a team of 11 energy engineers that provide support for the Navy Region Hawaii Energy Program. Their roles include energy and water conservation project development and management, energy awareness and training, and energy data management.

"Our role is to try and reduce energy and water consumption here at [JBPHH]," said Kathleen Ramirez, a JBPHH energy manager. "We do this by performing facility audits, upgrading facilities to use less energy, and developing projects to replace old equipment with newer, energy-efficient equipment."

The Navy Region Hawaii Energy Program is made up of three mission pillars: energy conservation, energy awareness and energy security.



"Energy conservation includes making physical upgrades to make our buildings more energy efficient," Ramirez explained.

"Our goal with energy awareness is to make our people more energy efficient in their everyday lives, and energy security is making sure we have the energy we need when we need it," she said.

The program is driven by public laws and presidential executive orders requiring federal agencies to reduce consumption of energy, fossil fuels and water.

In a recent commentary regarding Energy Action Month, Rear Adm. Rick Williams, commander of Navy Region Hawaii and Naval Surface Group Middle Pacific, said, "Hawaii is a perfect location to consider energy and the environment. Not only are we stationed in the most beautiful place in the world, but also, because of geography, we are in one

of the most energy dependent places on Earth. Therefore, we want more resilience and independence while preserving the environment."

The program's investment of \$17 million on energy conservation projects in 2014 highlight Williams' emphasis on the importance of energy conservation in Hawaii. Some of those projects include upgrades to base facility lighting systems, replacing or repairing air conditioning systems, and construction of a new low-pressure air compressor plant in the shipyard (compressed air is a high energy consuming utility commodity supplied by NAVFAC).

"These projects are estimated to save the region more than \$3 million in energy costs every year," Ramirez said.

The energy awareness piece of the program is intended to educate the public on energy issues and behavioral changes they can make to conserve energy. Forest City and Hickam Community housing support these efforts in their programs geared toward military families.

Additionally, the building energy monitor program ensures every base facility has a designated building energy monitor to ensure their building operates with the least

See ENERGY, A-6



U.S. Navy photo by MC2 Eric Lockwood  
Vice Adm. Dixon Smith (right) salutes Chief of Naval Operations (CNO) Adm. Jonathan Greenert (left) after Smith became Commander, Navy Installations Command (CNIC).

## Vice Adm. Dixon Smith is new CNIC

Sandra Niedzwiecki  
Navy Installations Command Public Affairs

(Editor's note: Vice Adm. Dixon R. Smith, the new commander of Commander, Navy Installations Command, was also previously the commander of Navy Region Hawaii and Naval Surface Group Middle Pacific.)

WASHINGTON (NNS) -- More than 500 military and civilian personnel attended the change of command ceremony for Commander, Navy Installations Command (CNIC) on Oct. 24 at Admiral Leutze Park at the Washington Navy Yard.

Vice Adm. Dixon R. Smith relieved Vice Adm. William D. French as the fifth commander since the command's

inception in 2003.

The ceremony included full gun salutes, musical performances by the Navy's Ceremonial Band, march on of the troops and parading of the colors by the Navy's Ceremonial Guard, and an a cappella rendition of the national anthem sung by Naomi Howell, one of CNIC's civilian employees.

A special contribution to the ceremony was the participation of side boys by former submarine Sailors with whom French served during his first command, USS Spadefish.

"From these men, I've learned the trade of going to sea in submarines," French said. "Gentlemen, thank you for finding your full dress blues, putting them all together, and be-

ing here today."

Guest speaker for the ceremony was Chief of Naval Operations, Adm. Jonathan Greenert.

"I'm honored to be here to take some time to speak about a person who has had a long and distinguished career, who has dedicated the last two and half years to CNIC, and who is an extraordinary leader," said Greenert.

"Bill French has sustained the fleet, enabled the fighter, and supported the family. He has revolutionized the Navy shore enterprise."

Responsible for 52,000 military and civilian personnel, 11 regions and 69 installations worldwide, French received the Defense Distin-

See CNIC, A-4



Hickam's top chef headed to national joint culinary competition  
See page A-2



Taking energy action: Innovate, incentivize, invest  
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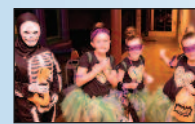
Free Veterans Day barbecue to be held Nov. 11  
See page B-3



Come to makahiki  
See page A-2



Zombie run scares up some fun at JBPHH  
See page B-1



JBPHH Pumpkin Patrol helps keiki stay safe  
See page B-6

# Hickam's top chef headed to national joint culinary competition

Story and photo by  
Tech. Sgt. Terri Paden

15th Wing Public Affairs

A Team Hickam Airman was recently chosen to represent the Air Force on the Joint Culinary Arts Team Hawaii.

As part of the team, Staff Sgt. Sheryl Stewart, 647th Force Support Squadron (FSS), will join 15 Soldiers, Sailors and Marines from around the island to face off in the annual Military Culinary Arts Competitive Training Event (MCACTE) in Fort Lee, Va. next year.

The MCACTE is one of the largest culinary competitions in North America. The competition is sanctioned by the American Culinary Federation and showcases the talents of military chefs from around the globe in all branches of the U.S. Armed Forces.

To secure her spot on the team, Stewart competed against military chefs on the island to prove she has what it takes to go on to the national competition, but she didn't stop there.

"I had the most experience on the team. I've been in the longest and I have the most technical knowledge, so they wanted me to be the team's



Staff Sgt. Sheryl Stewart, a 647th Force Support Squadron Airman assigned to the Joint Culinary Arts Team Hawaii, demonstrates how to brulee a poached pear crême brulee dessert in the training kitchen at Schofield Barracks Oct. 22.

captain. But they didn't give it to me. I had to prove to the team I deserved the position," Stewart said.

Stewart said her culinary skills were put to the test in front of the whole team. She was given 30 minutes to prepare a meal from the ingredients in a mystery basket while being critiqued by leadership and her fellow team members before being officially named the team's leader.

Though Stewart's position on the team was hard-earned, Master Sgt. Margo

Ham, 647th FSS Joint Base Lodging section chief and Stewart's supervisor, said she never had any doubt Stewart would excel.

"Knowing Stewart's passion for culinary arts, there was no question. I needed to do whatever possible as her supervisor to ensure she had the opportunity to try out for the team," Ham said. "This opportunity comes around once a year and her DEROS [date eligible for return from overseas] is next August, so I'm so glad she worked hard to prove she was worthy to

capture the only Air Force slot this year.

"Her passion, leadership abilities and dedication to success will take her to the next level and hopefully win some gold medals at the competition. Words can't properly express how proud I am of her," Ham said.

Now with preparations for the competition in full swing, Stewart has temporarily relocated to Schofield Barracks to spend each day until the competition training with her team members. The coming

months will be spent perfecting their competition menus and working on technical skills.

As team captain, it's Stewart's job to make sure the team has everything they need to be successful.

Though she has never participated in a cooking competition of this magnitude, Stewart said she will draw upon her years of experience to coach the team along.

"I've been cooking since I was 13 years old," she said. "My mother taught me to cook early, and I would make dinner for my whole family two or three times a week.

"I love to cook; it's in me. It's like my sanctuary. I feel at ease when I'm cooking and I can be 100 percent creative. I can't draw very well but I can cook great," Stewart said.

In addition to cooking for her family, Stewart has attended culinary arts school and also credits catering and an internship at a restaurant in Germany as helping her hone her craft.

"I didn't always like cooking but the older I get, the more I enjoy it," she said. "I'm always working on my craft.

"Cooking is something you

need to constantly practice or you will lose it. I used to cook in the dorm kitchens when I was a young Airman working in the dining facility. I'm constantly cooking outside of work. I go home and cook dinner for my family now. I practice my techniques at home," she explained.

Stewart said practice is especially important leading up to the national competition because though every team member was hand selected, the experience level on the team varies. In addition to being judged on taste, they will also be judged on appearance, presentation, technique and technical skill.

"This is not like cooking at home," she said. "The competition is about technical skills. You have to be very precise. We're talking fine-dining type of plating skills so we have to work at that."

Stewart said all the months of hard work will be worth it when they bring home the win.

"Our goal is to win, of course," she said. "We're going to take home first place. With the amount of enthusiasm and excitement everyone has, there's no doubt in my mind we can't win."

## Ulu maika game at makahiki



U.S. Navy photo

A girl prepares to roll a stone in the traditional *ulu maika* game during a previous *makahiki* festival. *Ulu maika* is a traditional form of Hawaiian bowling to test a person's accuracy by rolling a stone between two pegs. The annual *makahiki* festival will be held beginning at 9 a.m. Nov. 8 at Hickam Harbor beach in front of Sam Choy's Seafood Grille. Competition is open to those with base access

## USS Michael Murphy arrives in 7th Fleet AOR

Commander, Task Force  
70 Public Affairs

USS MICHAEL MURPHY, At Sea (NNS)—Guided-missile destroyer USS Michael Murphy (DDG 112) arrived Oct. 23 in the U.S. 7th Fleet area of responsibility (AOR).

Commanded by Cmdr. Todd Hutchinson, the ship and its crew of more than 300 Sailors, assigned to Destroyer Squadron (DESRON) 31, are scheduled to conduct goodwill activities with partner nations along with various presence operations such as Oceania Maritime Security Initiative (OMSI) during the ship's first operational forward deployment.

"Team Murphy is excited to be on our maiden deployment and looking forward to conducting a wide range of exercises while in the AOR," said Hutchinson.

"We are dedicated to ensuring that every day we are contributing to strengthening maritime partnerships, promoting stability, and showing our commitment to the region."

The 7th Fleet AOR covers



U.S. Navy file photo

The guided-missile destroyer USS Michael Murphy (DDG 112) was one of 42 ships at Rim of the Pacific (RIMPAC) 2014.

more than 48 million square miles and spans from west of the international dateline to the western coast of India.

Vice Adm. Robert Thomas Jr., commander, U.S. 7th Fleet, is responsible for more than 45,000 Sailors, 100 ships and submarines, and more than 200 aircraft in the largest naval AOR.

Michael Murphy is named

for Navy SEAL Lt. Michael P. Murphy, a New York native who was posthumously awarded the Medal of Honor for his heroic actions during Operation Red Wings in Afghanistan in 2005. Murphy was the first person to be awarded the medal for actions in Afghanistan, and the first member of the U.S. Navy to receive the award

since the Vietnam War.

Homeported at Joint Base Pearl Harbor-Hickam, Hawaii, Michael Murphy is a multi-mission ship with anti-air warfare, anti-submarine warfare and anti-surface warfare surface combatants capabilities; designed to operate independently or with an associated strike group.

Commentary

# Taking energy action: Innovate, incentivize, invest

**Rear Adm. Rick Williams**  
*Commander, Navy Region Hawaii and Naval Surface Group Middle Pacific*



Rear Adm. Rick Williams

This is the last of several energy-themed commentaries for Energy Action Month in October. As promised, the theme this week is, “innovate, incentivize and invest.”

Our energy mission is part of a greater Navy-wide movement committed to creating improved readiness and generating a positive social and environmental impact.

We are seeing the growth of a new breed of warriors, products, services and relationships. What used to be a niche interest is now a forward-leaning, all-hands action that is gaining momentum.

Energy action is global and it's local.

New inventions, such as chemical conversion bat-

teries, carbon nanotubes and PV windows, are transforming the speed and efficiency of solar power.

Innovations in wind turbine power and synthetic algae-generated fuels are taking the world closer to grid-parity—a time in the near future when the cost of generating power from renewables is the same (or less)

than using dirty non-renewable fossil fuels.

Future innovative weapons systems, like the electromagnetic railgun or directed energy weapon for the Navy, will use energy from fuel tanks, rather than explosives or kinetic projectiles. That means that the “gas in your tank becomes your ammunition.”

New techniques in conservation and efficiency are helping us achieve energy independence, too.

The Navy Shore Geospatial Energy Module was demonstrated in Washington, D.C. this week. This is a new way to see all of an installation's buildings as if they were wired into a dashboard that lights up to show a full spectrum of energy use. The idea: If there is accurate, credible data available, people can make good decisions about energy consumption.

A new Navy Region, Navy Facilities Pacific and industry energy executive committee is forming an offensive team strategy designed to bring in industry, Navy and the secretary of the Navy's team to innovate new opportunities through creative partnerships, new processes and emerging technologies.

Locally, the facilities-based energy conservation board and residential advocates from the “Know Loads” are our defensive team with the goal to reduce consumption and conserve.

Last week the Ho'okele published another update from the “Know Load” team with tips and advice about incentivizing energy conservation.

The “Know Loads” help residents:

- Know how much electricity you're using and how to save energy and money.

- Know about innovative equipment/techniques and how to take action.

- Know where you can go to get advice and assistance that puts the power to control energy use in your hands.

Last week's Ho'okele article by Todd Thom is now available online: <http://go.usa.gov/GeZk>. The “Know Load” representatives, working with Forest City partners, are available to help at 474-1812. Call them to help arrange an in-home demo to show you how to conserve electricity yet be comfortable.

For our residents, reducing electricity consumption under the Resident Energy Conservation Program can put more money into the pockets—or more importantly, in the savings accounts—of service members and families. In other words: it's an investment.

Just two or three bucks

a day can be \$80-90 per month, and that comes out to nearly \$1,000 in a year. Those savings can be put into Thrift Savings Plan funds where they can add, multiply and provide security. It's surprising how savings can add up to the cost of a new car or a college education over time.

Experts say that just five dollars a day invested over a military career can be worth a million dollars in retirement savings.

So, innovate, incentivize and invest—some of the reasons for all of us to take “energy action” seriously.

Our campaign plan, here and throughout the Navy, is engineered to improve our readiness and our lives.

Learn more at our Navy Region Hawaii Energy Outreach page: <http://go.usa.gov/GeWh> – or get a copy of our energy goals at <http://go.usa.gov/GeZ4>.

## Diverse Views



What is your favorite scary movie?



**FC3 Elizabeth Edwards**  
*USS John Paul Jones (DDG 53)*

“Thirteen Ghosts.’ It's an original. I watched it when I was 10. It was the first one I ever watched.”

**Airman 1st Class Christopher Hazzard**  
*56th Air and Space Communications Squadron*



“Attack of the Killer Tomatoes.’ I used to watch it every Oct. 31 growing up. It never stops amazing me how ridiculous that movie is.”



**LSSN Daniel Walpole**  
*Joint Base Pearl Harbor-Hickam*

“None. I am scared of them all.”

**Senior Airman Francisco Vega Vazquez**  
*324th Intelligence Squadron*



“The Exorcist,’ because it's a classic.”



**YN2 Joseph Cotrofeld**  
*COMSUBPAC*

“I just recently watched ‘V/H/S.’ The reason I thought it was scary was the whole movie is from the perspective of a video camera.”

**Maj. Jeff Webb**  
*613th Air Operations Center*



“The Wizard of Oz.’ I find it easy to relate to the scarecrow.”



**EMC Sherre Andrade**  
*Pearl Harbor Naval Shipyard*

“The Conjuring.’ It keeps you on the edge of your seat throughout the whole movie from beginning to end.”

**Capt. Amanda Rasmussen**  
*15th Wing*



“Seven.’ The plot twists and turns, and the crime investigation officers use all of their knowledge to catch the crook. They often walk into buildings and crazy things pop up from nowhere.”



**Spencer King**  
*Air Force Office of Special Investigations*

“The Grudge.’ The plot and theme keeps you on the edge.”

Provided by Lt. j.g. Eric Galassi and David D. Underwood Jr.

Want to see your command featured in Diverse Views? Got opinions to share?

Drop us a line at [editor@hookelenews.com](mailto:editor@hookelenews.com) or [karen.spangler@navy.mil](mailto:karen.spangler@navy.mil)

Commentary

## Making Navy better for those we serve

**Vice Adm. Dixon Smith**

*Commander, Navy Installations Command*

Team CNIC,

Please know how honored and humbled I am to serve as the fifth commander of Navy Installations Command.

On Friday morning at



Vice Adm. Dixon Smith

the change of command, I noted that we will continue the great work CNIC has been doing, with a renewed emphasis on service through action. Ours is a unique and important responsibility in the Navy, and I can think of no better team of men and women to serve alongside.

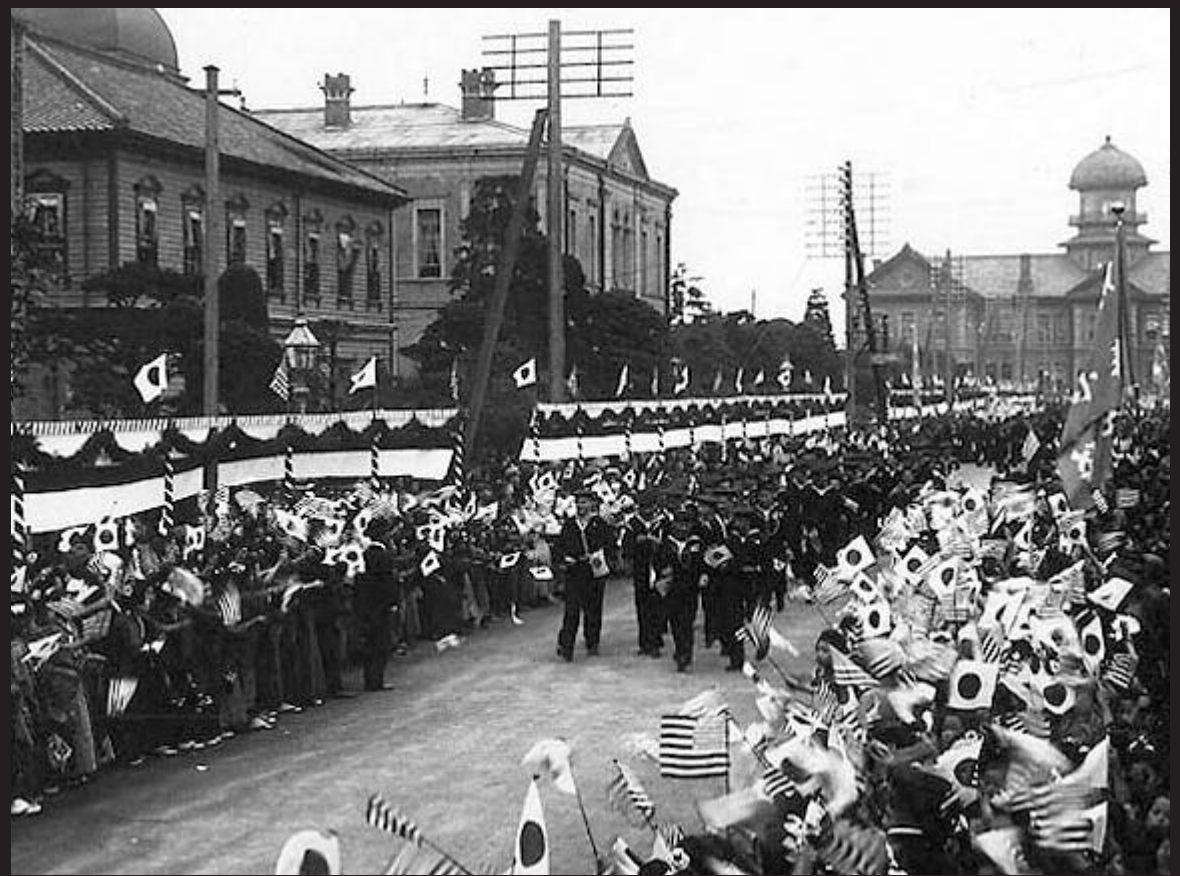
I look forward to hear-

ing from you and getting to know you—visiting regions, installations and workspaces and learning how, together, we can make CNIC and the Navy better for the fleet, fighter and family we serve.

Thank you for all you do, day in, and day out!

Sincerely,  
 Dixon Smith

## World cruise of the ‘Great White Fleet’



U.S. Naval History and Heritage Command photograph

The landing of the first liberty party from the “Great White Fleet” is shown during its visit to Yokohama, Japan circa mid-October 1908, 106 years ago this month. Note the well-decorated parade route, and small Japanese and U.S. flags carried by Sailors and spectators. The Great White Fleet sent around the world by President Theodore Roosevelt from 1907 to 1909 consisted of 16 new battleships of the Atlantic Fleet. The battleships were painted white except for gilded scrollwork on their bows. The 14-month-long voyage was a pageant of American sea power.

## HO'OKELE

Ho'okele is a free unofficial paper published every Friday by The Honolulu Star Advertiser 500 Ala Moana Boulevard Suite 7-500 Honolulu Hawaii 96813, a private firm in no way connected with DoD, the U. S. Navy, Air Force or Marine Corps, under exclusive contract with Commander, Navy Region Hawaii. All editorial content is prepared, edited, provided and approved by the staff of the Commander, Navy Region Hawaii Public Affairs Office: 850 Ticonderoga, Suite 110, Pearl Harbor, Hawaii, 96860-4884. Telephone: (808) 473-2888; fax (808) 473-2876; e-mail address: [editor@hookelenews.com](mailto:editor@hookelenews.com) World Wide Web address: <https://www.cnic.navy.mil/Hawaii/> or [www.hookelenews.com](http://www.hookelenews.com).

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U.S. Navy photo by MC2 Jonathan A. Colon

Capt. Robert A. Hall, commanding officer of amphibious assault ship USS America (LHA 6), hands USS Arizona survivor Lauren F. Bruner, a command coin Oct. 23 after an all-hands call in the ship's hangar bay.

## American hero visits USS America

**USS America (LHA 6)  
Public Affairs**

SAN DIEGO (NNS) -- Sailors and Marines aboard the newest amphibious assault ship USS America (LHA 6) held an all-hands call in the ship's hangar bay during a visit on Oct. 23 from Pearl Harbor survivor, Lauren Bruner, 93.

Bruner was serving on naval battleship USS Arizona when Pearl Harbor was attacked on Dec. 7, 1941. As Bruner shared his stories of being a young 21-year-old fire control rangefinder on Arizona, and earning a Purple Heart for his heroism, America's crew listened in awe.

His body was 70 percent burned from the flames he encountered during his escape that day. According to many of Bruner's doctors, it is a miracle that he is still alive and able to share his remarkable story.

"It's a real pleasure to come and see what the Navy is doing now as opposed to when I was in 70 years ago," said Bruner. "Good to see you young fellas doing it right, especially seeing [women] on board. We didn't have that when I was in."

Surviving an event like the bombing of Pearl Harbor gives

Bruner more initiative to share his story with Sailors currently serving in today's Navy.

"It was a privilege hearing from him," said Airman Allen Freeman. "His story made me realize just how much our veterans sacrificed for us and how special the camaraderie is between our shipmates."

Bruner is only one of 10 known Arizona survivors left, which made his visit to America that much more significant.

During the ceremony, Capt. Robert A. Hall Jr., commanding officer of America, thanked Bruner for his service to the country and for the opportunity to hear his personal account about the infamous day in our country's history.

Following the all-hands call, Bruner signed photos and took pictures with members of the crew and toured the ship's flight deck.

"Hearing his stories about what he did and what he accomplished is truly special," said Electronics Technician 3rd Class Cameron Weisenberger.

"You can read books or watch movies about what happened, but to have someone who was there tell you about it really puts it into perspective. You can feel what they went through," he said.

## USS Arizona surveying yields new data

**Continued from A-1**

"But along with that, ours and the [National] Park Service's mission is also to help people develop a connection with the ship and explain why it's important, what's down there, and what the crew who were aboard the ship on Dec. 7 must have gone through. [The] 3D models and data, presented well to the public, allow that connection to be made at a level that 2D or black and white can't," Pawlowski explained.

To accomplish this goal, the NPS has teamed up with a number of professionals and subject matter experts located throughout the country in its latest week-long effort, with each team bringing its own expertise and skill set, at no cost to the Navy or NPS.

"This project is very special in that it's a partnership with a number of different companies and partners, as well as other government agencies, that have all come together and donated their time and energy, free of charge, to do this work," said Pawlowski.

"These are companies that believe in the importance of preserving cultural heritage and maintaining national monuments, like the USS Arizona."

According to Navy Diver 1st Class Ryan Crider, assigned to Mobile Diving Salvage Unit One, who was present during the surveying dives, poor visibility, razor sharp edges and structurally vulnerable overhangs maintain a clear and present danger to those who dive too close or unknowingly,

"One of the biggest concerns when guys are diving around the memorial is the visibility," said Crider. "The visibility can get so bad out here that the chance of them getting lost is greatly increased.

"Another thing is the deterioration of the ship. Guys can get cut a lot easier or something can break off and fall on them. Also, with the oil leaking out the way it does, it takes a toll on the equip-

ment and shortens its lifespan greatly," Crider said.

As Hurley carefully found his way along the ship's exterior, technicians from R2Sonic, an underwater equipment manufacturing company, trolled a 17-foot dinghy above the surface and a safe distance away from the dive site.

The advanced technologies being used by R2Sonic today are a far cry from the real-time surveys of the past, which consisted of NPS rangers strapping on their dive gear, and working with only a pencil and pad.

"The advances in technology allow us to not do what they used to in the past, where divers used to have to go down with pads and in-depth measurements to map out a few points on a ship," said Jens Streenstrup, president of R2Sonic.

"Now, we, in a single day, can generate millions of points with super high precision within an inch."

But aside from the poor visibility, the piercing metal and dangerous overhanging structures, surveying the Arizona still comes with additional challenges.

"Because the memorial goes over the ship, it has a low ceiling," said A.J. Cecchetti, sales manager at Deep Ocean Engineering. "The depth of the water above the USS Arizona is very shallow, so you can't get in there with a boat and run multi-beam survey."

And that's where the unmanned surface vessel (USV), USV H-1750, came into play.

At only approximately two feet tall in the water, the H-1750 provided a method of collecting multi-beam survey data where its much larger, manned, brethren (the 17-foot dinghy) couldn't. Wirelessly controlled, the H-1750 fits into the nooks and crannies of the exposed wreckage, traversing underneath the USS Arizona Memorial with ease.

On land, John Tocci, director of virtual design and construction for Gilbane Building Company, set up LIDAR equipment to scan the terrestrial portion of the

memorial.

According to Tocci, the technologies being used at Pearl Harbor provide the opportunity to experience the wreckages and historic sites in dramatically new ways.

"Growing up and reading about (WWII) in fifth grade, the only thing you got was a black and white photo of Pearl Harbor and the current state of the memorial," said Tocci.

"But the fact that we can take this data and turn it into a three-dimensional walk-through and show [the current generation] both the above and below water components of the Arizona and the Utah, I think is going to be really exciting. It's going to take history, and it's going to make it come to life for a new generation," Tocci said.

However, in the end, beyond the science, beyond the computer modeling and algorithms, remains the sentiment—the human connection.

"I think the thing that has surprised us the most about this project so far is the visceral personal experience that working on such a place has on every member of the team," said Pete Kelsey, Autodesk strategic projects executive.

"Whether it's putting a [reconstructed] artifact in the hands of a 92-year old survivor who was here on Dec. 7, 1941, or showing it to kids in grade schools, [we're] basically using this three-dimensional data to ensure that what happened here, that story, this history, will not end."

According to Pawloski, the ongoing project is estimated at a value of more than \$400,000, with the NPS contributing approximately \$10,000 of its own money toward acquiring the goods and services of those involved.

In addition to the computer 3D models being developed, a 3D model printout of the Arizona in its current condition is also expected to be produced and displayed at this year's Dec. 7 commemoration.

## New CNIC focuses on CNO's tenets, maintaining course

**Continued from A-1**

guished Service Medal for his accomplishments, including the attainment of the Homeport Ashore initiative, the development of governance and oversight for the Overseas Drinking Water program, and efforts to align CNIC to support fleet requirements.

The ceremony also recognized French's retirement after more than three decades of exemplary service to the Navy.

"Today I want to thank many people," said French. "One of the many thankful parts of this job is you get the opportunity to

work with so many different people—both inside the Navy, fellow services and support organizations—that take care of our Sailor and families outside the Navy."

French thanked his family, fellow shipmates and mentors throughout his career, and welcomed Smith to CNIC, recognizing the talent and commitment of Smith's new staff.

Prior to the ceremony, Smith was promoted to vice admiral to serve as Commander, Navy Installations Command. He is the first former installation commanding officer to lead CNIC.

Smith shared his enthusiasm about taking on greater responsibility to lead the Navy's shore enterprise.

"CNO, thank you for your kind words," he said. "I'm honored and deeply humbled by your faith and confidence for this opportunity for continued service to our Navy and our nation."

A native of Connecticut, Smith was commissioned through the Naval Academy in 1983. He was designated as a surface warfare officer in 1985 and then went on to serve aboard five surface combatants and held five shore assignments.

Later in Smith's career, he led shore installations as the commander for three regions, including Naval Surface Group Middle Pacific and Navy Region Hawaii, Navy Region Southwest, and most recently, Region Mid Atlantic prior to arriving in Washington, D.C.

Smith thanked French for a smooth transition and emphasized his commitment to service through action.

"I'm happy to report that as I assume this watch, that thanks to Vice Adm. Bill French, CNIC is on course, focused on fully supporting CNOs tenets of warfighting

first, operating forward, and being ready," said Smith. "CNIC will maintain that course."

Smith offered that he is excited to join the CNIC family.

"I consider it a privilege to lead and serve you," he said. "To those who serve, the only reason we at CNIC exist is to support you. You have my promise and commitment to do just that."

Leading a world-class enterprise, CNIC is responsible for managing shore installation support for the Navy's fleet, fighter and family under the Chief of Naval Operations.

(See commentary on page A-3.)

# Pearl Harbor-Hickam *Highlights*



Shaan Hurley, a subject matter expert at Autodesk, takes photographs of the USS Utah Memorial during a data-collection evolution in Pearl Harbor Oct. 23. The underwater photos will be input into software that will create 3D data models of the photographed areas.

U.S. Navy photo by MCI Gary Keen

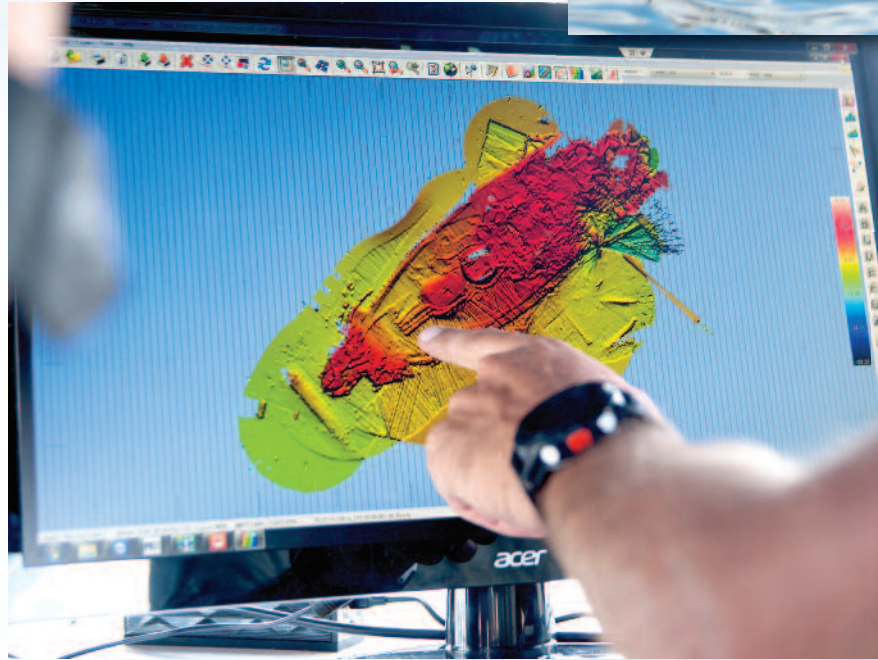
(Right) An unmanned surface vessel from Deep Ocean Engineering conducts multi-beam sonar surveying Oct. 23 at the USS Utah Memorial.

U.S. Navy photo by MC3 Johans Chavarro



(Below) Technicians analyze multi-beam sonar surveying data collected Oct. 23 at the USS Arizona Memorial at Joint Base Pearl Harbor-Hickam.

U.S. Navy photo by MC3 Johans Chavarro



(Right) Staff Sgt. Sheryl Stewart, a 647th Force Support Squadron Airman assigned to the Joint Culinary Arts Team Hawaii, demonstrates how to properly cut and clean a pear in the training kitchen at Schofield Barracks Oct. 22.

U.S. Air Force photo by Tech. Sgt. Terri Paden



Capt. Robert A. Hall, commanding officer of amphibious assault ship USS America (LHA 6), introduces guest speaker and USS Arizona survivor Lauren F. Bruner during an all-hands call held Oct. 23 in the ship's hangar bay, San Diego, Calif.

U.S. Navy photo by MCI Lewis Hunsake

# USS Columbus welcomes Air Force civic leaders

## Submarine Force Pacific Fleet Public Affairs

The crew of the Los Angeles-class, fast attack submarine USS Columbus (SSN 762) recently welcomed members of the Air Force Civic Leader Program as they toured the submarine Oct. 16 at Joint Base Pearl Harbor-Hickam.

The group of approximately 30 civilian community leaders from across the United States, serves as a volunteer advisory panel to the Chief of Staff of the Air Force, Gen. Mark Welsh III. The group's purpose in Hawaii is to learn more about the Pacific rebalance, experiencing a firsthand look at multiple service operations in the Pacific.

The group was escorted by the vice commander of Pacific Air Forces, Maj. Gen. Paul McGillicuddy and Brig. Gen. Kathleen Cook, director of Air Force Public Affairs.

"Today is a wonderful day to showcase USS Columbus," said Cmdr. Albert Alarcon, Columbus' commanding officer, upon greeting the advisory group.

"It's essential for leaders to gain perspective of what the submarine force is capable of accomplishing and, most importantly, to showcase the talent and capability of the young men that proudly comprise Columbus' crew. My intentions are to showcase that very



U.S. Navy photo by MCI Jason Swink

Machinist's Mate 2nd Class Jacob Bierman explains the torpedo room operations aboard the Los Angeles-class, fast attack submarine USS Columbus (SSN 762) to members of the Air Force Civic Leader Program.

talent as you tour the ship today," Alarcon said.

During the tour, Sailors talked about their spaces, their responsibilities, and duties aboard the submarine. The guests had the opportunity to see and hear about daily operations on the submarine, including the control room, the torpedo room and galley.

For Caleb Chandler, a civic leader from New Mexico, this was his first chance to meet with Sailors on an active submarine.

"It's been great, very informative," said Chandler. "We've learned some things you wouldn't really think about until you hear

Sailors say, 'This is how we do this.' We really appreciate this visit."

Machinist's Mate 2nd Class Jacob Bierman from Columbus' weapons department was enthusiastic in explaining his role on board to the guests.

"The crowd seemed genuinely interested in the information that I presented to them," said Bierman from Grand Haven, Mich. "It's cool to see their reactions to what kind of information that we were telling them, and they were very appreciative."

The senior uniformed Air Force officials were equally impressed.

"It is an amazing tour," said Maj. Gen. McGillicuddy. "Seeing the Sailors and what they do, and how proud they are of what they are doing, it's just amazing how across all the services we have great Americans signing up to do these jobs."

"It is great Americans doing great things for the country. I couldn't be more proud of what we are seeing here today," he said.

The strategic impact that submarines and their crews play to the security of the nation was also noted by Cook.

"In this area of responsibility, it is extremely important that you are great at what you do, and it is clear to me after this visit that every one of those Sailors is impressive," said Cook.

"It is very comforting to know that with a significant mission like this, you have Sailors out there that absolutely know what they are doing."

Cook said she is amazed at how young many Sailors are, entrusted with one of the nation's greatest assets.

"These Sailors are younger than my children," added Cook. "But their professionalism and the manner in which they explain their equipment, it all comes across in what they do."

Kay Yeager, a civic leader from Wichita Falls, Texas, said she ap-

preciated getting to see other military branches and the chance to get a glimpse of what submariners do.

"This gives me a great sense of admiration for the men and women who do this," said Yeager. "They have the stamina to stay under the water as long as they do without seeing daylight."

After taking some final questions from the tour group, Alarcon concluded with remarks about the life blood of the ship.

"Columbus has a strong reputation for operational success, and it comes down to the great effort that our crew exerts every day," said Alarcon. "The lasting impression that I want to leave with you leaders today is how great my crew is, the men that I am so proud of every day."

USS Columbus is the 51st Los Angeles-class submarine and the 12th improved version of this class, which includes a vertical launch system for Tomahawk cruise missiles and an improved hull design for under-ice operations.

The ship completed a post-shipyard maintenance availability period in June 1994 in Groton, Conn. after initial construction and shakedown operations. In September 1994, Columbus conducted an inter-fleet transfer to Pearl Harbor, Hawaii and joined the U.S. Pacific Fleet Submarine Force.

# Energy saving tips offered to encourage conservation

## Continued from A-1

energy consumption possible.

"We can make a building as energy efficient as we want, but if people continue to leave lights and equipment on, or use energy without considering conservation, we miss out on a huge opportunity," Ramirez said.

"Our building energy monitors are key in this effort. This year they've helped us deploy hundreds of appliance timers and smart power strips across the base. These small efforts in each building add up to real savings across the entire base," she said.

The last pillar, energy security, refers to the program's efforts to modernize the electrical distribution grid to be more flexible and resilient.

"These improvements will allow us to integrate renewable energy sources and ensure we supply mission critical energy requirements at all times," Ramirez said.

An example of an energy security project is a recent contract to install 15.5 megawatts of solar photovoltaics on JBPHH. This project alone will provide about 6.5 percent of the installation's energy. Ramirez said that although renewable energy is

huge in resource conservation, it is more important for the general public to do their part to reduce energy use at home and work.

"We always want to concentrate on conservation first because it's relatively cheap," she said. "Then we put in place our renewable energy sources. We want to conserve and use the least amount of energy first, then rely on the renewables to accomplish our goal."

The NAVFAC Energy team has provided several facts and tips people can use to ensure they are doing their part to conserve energy:

- The largest energy consumers in a home or office are air conditioners, water heaters, lights, major appliances and plug loads.
- To reduce air conditioning loads, open a window, turn on a fan, and leave the air conditioning off.
- To reduce water heating loads, go solar. Or take shorter showers and make sure to wash full loads of clothes and dishes. Use a seven-day timer to turn the water heater off automatically during the times you are usually not home.
- Replace the bulbs you use the most often to light-emitting

diode (LED) lights. This can reduce your lighting demand by 80 percent or more.

- Make sure the rubber seal on your refrigerator isn't leaking cold air. Hang dry clothes instead of using a dryer. Unplug items such as coffee pots, microwave ovens, toasters, etc., when not in use.

- Use programmable smart power strips or timers to turn off electronics during the times you are usually not at work or home (even if they are turned off, electronics still use a trickle of electricity to stay in "ready" mode).

For more energy-saving facts and tips, visit <http://ow.ly/DxQxl>.