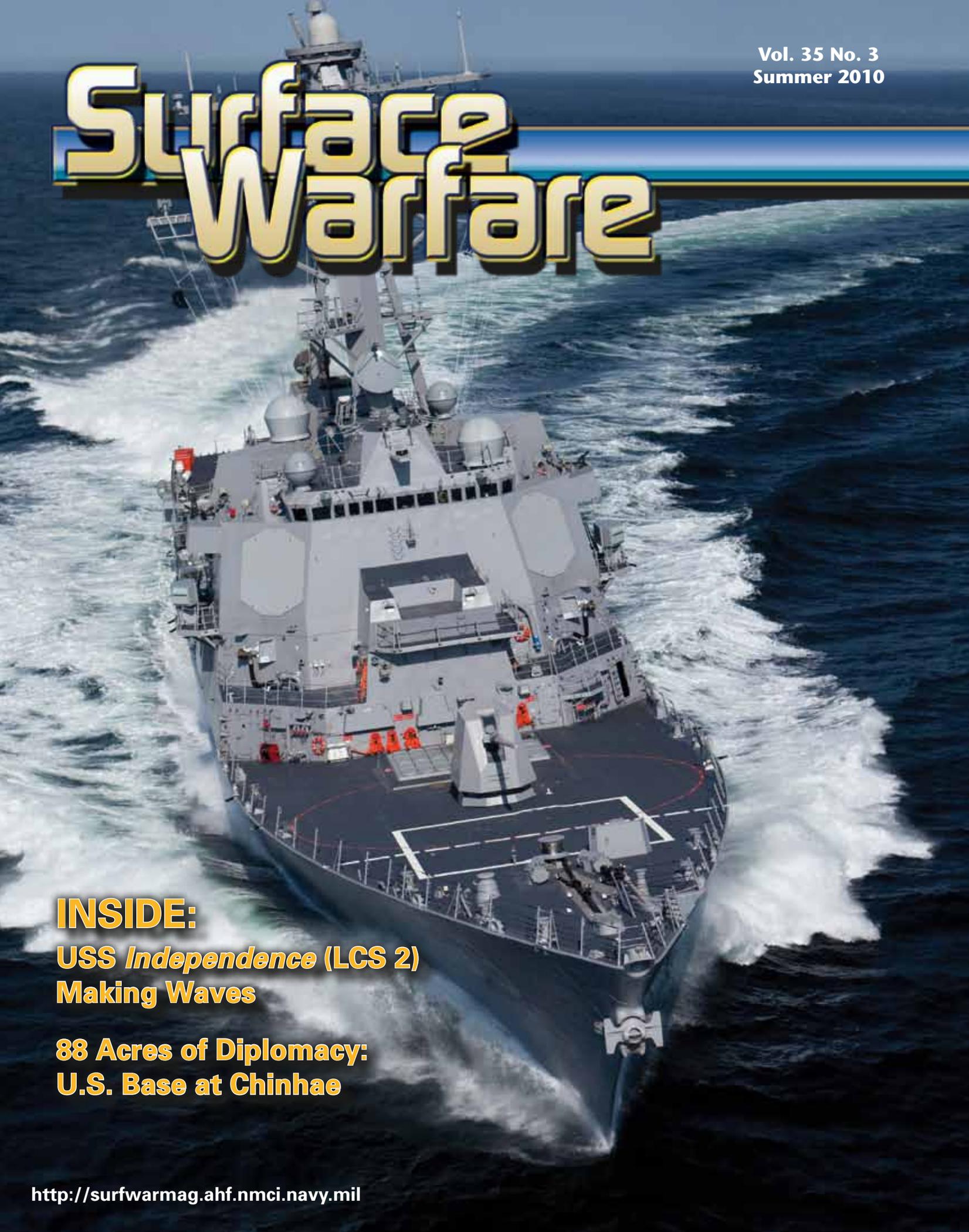


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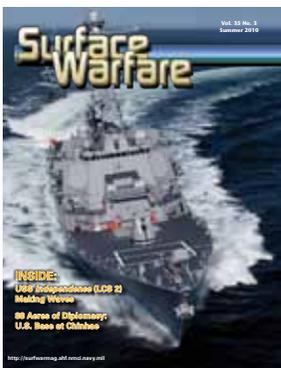
Surface Warfare

An aerial photograph of the USS Independence (LCS 2) sailing on the ocean. The ship is viewed from a high angle, showing its deck, superstructure, and the wake it leaves behind. The water is dark blue with white foam from the ship's wake. The ship's hull number '2' is visible on the bow.

INSIDE:

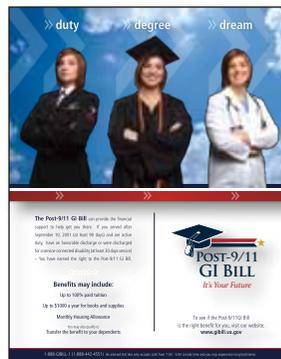
**USS *Independence* (LCS 2)
Making Waves**

**88 Acres of Diplomacy:
U.S. Base at Chinhae**



On the Cover:

The pre-commissioning unit (PCU) *Jason Dunham* (DDG 109) conducts sea trials in the Atlantic Ocean this past May. The trials were the last significant milestone before delivery of the ship to the Navy this summer. The ship will be commissioned in November. (Photo courtesy of General Dynamics Bath Iron Works)



On the Back:

The Department of Veterans Affairs administers a variety of education benefit programs, and many active duty Sailors and veterans can qualify for more than one education benefits program. For the most current information, go to <http://www.gibill.va.gov>.

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◀ The guided-missile destroyer USS **McFaul** (DDG 74) conducts a rescue operation for 30 Somali men, women and children aboard a drifting skiff that had suffered engine failure in both outboard motors. (STG3 Cory Phelps/USN)

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FORCE COMMANDER'S CORNER



As we move into a summer highlighted by exercises, deployments and humanitarian and partnership cruises, great work continues throughout the surface force. Our ships remain on point, supporting ballistic missile defense missions, successfully conducting anti-piracy and counter illicit trafficking operations, and expertly enhancing theatre security cooperation worldwide. We must continue to stress family readiness as a key component of operational readiness to ensure we are capable of carrying out our mission when and wherever called upon.

I am extremely proud and encouraged with the progress of the Littoral Combat Ship (LCS) program. USS *Freedom's* (LCS 1) arrival in San Diego after a successful maiden deployment was a significant milestone for the Navy and the future of surface warfare. USS *Independence* (LCS 2) recently completed a successful maiden voyage and sail-around from Mobile, Ala. to Norfolk, Va., and is making a very productive start to her test and evaluation. As both ships continue to engage in a wide variety of operations,

we will apply the lessons learned to future LCS concepts of operations, as well as the larger surface force.

In support of the waterfront, the Surface Warfare Enterprise (SWE) continues to look for ways to improve current and future readiness. Of note, we hosted a successful SWE "Face to Face" meeting in April where senior community leaders discussed the challenges and opportunities that lie ahead in the current operational and fiscal environment. I was again impressed by the degree of collaboration and candor. The SWE remains focused on greater partnership and solution-seeking endeavors with the ultimate goal being increased readiness and warfighting capability.

This past April we also hosted a conference in San Diego for 50 retired surface flag officers. Our guest list varied from those retired only a few months or years, to some who have been retired for several decades. We provided the "Greybeards" with a current community view and discussed the growing requirements and complexities of today's surface force. Additionally, they had the opportunity

to meet with a number of waterfront Sailors, each remarking how impressed they were with today's surface warriors. They are some of our greatest supporters, and I was especially proud that we could connect legacy lessons with current operations.

Congratulations to Rear Adm. Kevin Quinn for a job well done while serving as Commander, Naval Surface Force Atlantic; Deputy Commander, Naval Surface Forces; and SWE Chief Readiness Officer. Rear Adm. Quinn served with dedication, professionalism, and foresight. He promoted groundbreaking initiatives which dramatically improved our ability to provide warships ready for tasking.

Welcome to his relief, Rear Adm. David Thomas, Jr. The consummate surface warrior, he joins the team seasoned with a wealth of professional knowledge and career experience.

Finally, part of this edition includes a comprehensive update of the latest training initiatives that are being introduced force-wide. We have heard your feedback and are making needed "Fleet-inspired" changes and adjustments to improve your ability to carry out combatant commander tasking. To further explain my strong emphasis on training, I recently sent out an "All Ahead Full" training serial. I encourage you to look for it in message traffic, on the "Surface Warriors" Facebook page, or posted on the Naval Surface Force Pacific Fleet website.

Thank you for all that you do to make ours the greatest surface force that history has ever known.

Keep charging ... All Ahead full!

D.C. Curtis
Vice Admiral, U.S. Navy
Commander, Naval Surface Forces

Surface Warfare

Director's Corner



Greetings Surface Warriors!

Expanding cooperative relationships with partner nations is a key aspect of the Maritime Strategy. As our Sailors train and operate with navies and coast guards around the world, we encounter a wide range of customs. Nevertheless, there is one tradition common to all successful navies: an emphasis on vigorous – and rigorous – training as the bedrock of operational success. Only through timely, focused, and well-delivered training will Sailors learn their duties and responsibilities as mariners and warfighters.

In this issue of *Surface Warfare*, we look at training challenges from several perspectives. Headquartered in Umm Qasr, Iraq, Rear Adm. Scott Jones spearheads the critical mission

of partnering with the Iraqi Navy to develop a maritime force capable of defending Iraqi territorial waters, including two large off-shore oil terminals that are vital to that nation's future. This is no easy task, yet our Sailors have taken it to heart as they work with the Coalition Naval Advisory Transition Team to help the Iraqis hone their professional skills.

In the Far East, Sailors of Fleet Activities Chinhae are very engaged with their host nation counterparts as well. Lt. John Fitzpatrick's "English Camp" is a sterling example of training at a more personal level, illustrating the energy and versatility that our young leaders exemplify wherever they are stationed.

Closer to home, our ability to operate effectively is built on a solid foundation of individual and unit-level training. In his article, Capt. Kurush Morris, the Naval Surface Forces Training and Readiness Officer, outlines changes taking place in Surface Navy training. These include a recent update to our continuous certification process and the addition of new training courses. An insightful interview with Capt. Dave Matawitz, Commander, Afloat Training Group Pacific, builds on this theme by highlighting changes in fleet training that have met with success.

PCU *Gravelly* provides another training success story featured in this issue. Partnering with

Norfolk Naval Shipyard, more than 160 *Gravelly* Sailors have attended an innovative program designed to improve their in-rate knowledge. This training sharpens skills our Sailors initially gain from "A" and "C" Schools. Creative ideas like this are always welcome!

A final thought on safety. The "Critical Days of Summer" are once again upon us. By now, you have been urged to keep safety in mind during your summer activities. Please take a few minutes to think about the responsibility you have for your own safety, as well as that of your shipmates and family. You've had the training – now put it to good use. Have a safe and enjoyable summer!

Frank Pandolfe
Rear Admiral, U.S. Navy
Director, Surface Warfare

It's my professional habit to start making a "to do" list a few months out from transferring to a new command. So it's no surprise that I've caught myself making a new "to do" list that has nothing to do with *Surface Warfare*, and everything to do with my next duty station. Dig out the "Rules of the Road" book, check. Start reading message traffic again, check. Start planning for deployment, check.

For nearly three years I've had the opportunity to experience the Navy in a way that every Surface Warfare Officer (SWO) should. Out of my element, I've been running in both the public affairs and resource sponsor worlds, looking for ways to connect what we do here in Washington, D.C. to what you are all doing out there in the Fleet.

My goal as editor was to bring *Surface Warfare* back to the Fleet and turn it into a publication that was informative, easy to read, and gave our Sailors and SWOs reasons to be proud of the surface community. This was tough given the kind of diverse readership we have; we publish more than 30,000 copies every quarter and they go everywhere from a minesweeper in Bahrain, to the University of Oklahoma, to a congressman's office in Washington, D.C.

I think we've achieved the initial stages of that goal, and I think that there are even more opportunities for success ahead for my relief, Lt. Scott Cheney-Peters. Lt. Cheney-Peters is coming to *Surface Warfare* from his second division officer tour on board USS *Oak Hill* (LSD 51). Welcome aboard, Scott!



▲ The *Oliver Hazard Perry*-class frigate USS **Rentz** (FFG 46). **Rentz** is homeported in San Diego. (MC3 Michael Tialemasunu/USN)

There would be no success to speak of without the participation of both our readers and story contributors.

Surface Warfare is a contributor-based publication; without the Fleet's direct input, we would be a boring publication indeed. THANK YOU to all of the numbered fleet public affairs offices that made our "Focus on the Fleet" series a huge success; every ship's Public Affairs Officer (especially you first-tour ensigns being driven by your Executive Officers to get the word out!) who shared their stories with us; the various support organizations that routinely contribute (Navy and Marine Corps Public Health Center, Naval Surface Forces, Surface Forces Atlantic, PERS 41); and the ships that hosted our own journalists on board and treated them like they were their own.

Additionally, feedback from our readers – both good and bad, and

trust me, I've had my fair share of both – is equally valuable. Thank you for reading, for feeling compelled to comment, for pointing out our errors, and for dishing out some greatly appreciated praise. There's no better feeling than reading an email from a proud Navy mom or dad requesting copies of an issue in which their Sailor was featured.

Finally, I would be remiss if I didn't thank my staff here at the magazine: MCCS(SW) David Rea, MC1(AW) Scott Vanderwyst, and YN2(SCW) Kevin Capelety. Thank you all for your efforts to make *Surface Warfare* better with every new issue.

See you in the Fleet!

Correction: In our Spring 2010 issue we incorrectly captioned the Surface Navy Association's first place photo for the Capt. Komorowski award. The photo was of USS *Lassen* (DDG 82) launching an SM-2 as taken from USS *Curtis Wilbur* (DDG 54).



*Tell us how we're doing and what changes YOU want to see -
Participate in our online Readership Survey at:
<http://www.surveymonkey.com/s/2RT6WCK>*

USS *McFaul* (DDG 74) Continues Counter-Piracy Efforts

By Ensign Colleen Flynn, Public Affairs Officer, USS *McFaul* (DDG 74)

The U.S. Navy continuously patrols key waterways in an effort to promote maritime security around the world. Piracy around the Horn of Africa has recently become a focus of combined international task forces. Combined Task Force (CTF) 151 – a multi-national task force – was established in January 2009 to conduct counter piracy operations in the Gulf of Aden and the east coast of Somalia.

USS *McFaul* (DDG 74) has been attached to CTF 151 for much of her projected seven-month deployment. Thus far *McFaul* has actively employed her pre-deployment training and preparations to rescue 30 Somali mariners, save eight Indian sailors, and capture ten suspected pirates.

While patrolling the Gulf of Aden in support of maritime security operations this past March, *McFaul* spotted a small skiff about 100 miles north of Somalia. Onboard the skiff were 30 men, women and children who had been stranded with no food and very little water for nearly four days since departing the Somali coast. The skiff had suffered engine failure in both outboard motors. The safety of the people onboard the skiff and caring for their basic needs rapidly became *McFaul's* priorities.

"Once we recognized there was no threat, noticeable engine failure, and a lack of food and water, it was evident they desperately needed our help," said Lt. j.g. Kevin Lamping, Visit, Board, Search and Seizure (VBSS) team boarding officer.

McFaul immediately brought the Somalis on board to return them to their homeland. The crew provided them with a place to sleep, blankets,

and food and water during the two and a half day journey back to Somalia. CS1 Glendon Turner said that having the opportunity to help them was a rewarding experience for many Sailors. "Our Culinary Specialists felt motivated knowing that they took part in providing for those who needed the food more than we did."

And they certainly did need food. One of the elders in the group, Abdulrahman Ali Barhaaye, said that the group had given up hope, until they saw *McFaul*. "We are alive, hopeful, and glad to be here," he said.

"This was a rewarding experience," said VBSS team member FC3 Douglas Wright. "They appreciated our efforts and were very thankful."

On the morning of March 27, *McFaul* safely sent the 30 Somalis ashore, along with their repaired skiff, to the small fishing village of Ceelaaya on Somalia's northern coast.

Countering piracy around the Horn of Africa often requires quick responses and cooperation with warships from many nations. On April 5, MV *Rising Sun* broadcasted a distress call on her bridge-to-bridge radio. *McFaul* and Omani warship *Al Sharquiyah* (B11) responded and quickly coordinated their efforts to assist the crew.

Rising Sun reported pirate skiffs had attacked their vessel using gun fire and rocket propelled grenades (RPGs). In transit to aid *Rising Sun*,



▲ Protected by crew-manned machine guns, USS *McFaul's* (DDG 74) boarding team boards *Faize Osamani* near the stern. (OS2 Jason Sherman/USN)



▲ One of USS *McFaul's* (DDG 74) Visit, Board, Search and Seizure (VBSS) teams helps tow a stranded Somali skiff back to their homeland of Ceelaya, Somalia after conducting an at-sea rescue. (ISC Leon Byrd/USN)

McFaul advised the vessel to use evasive maneuvering and fire hoses to thwart further attacks by the suspected pirates. Despite suffering RPG damage, *Rising Sun* prevented the pirates from securing ladders onto their deck. The pirate skiffs broke off their attack and returned to their “mother” ship, a pirated dhow, later identified as the *Faize Osamani*.

McFaul's Officer of the Deck (OOD) coordinated with the Omanis to shadow the pirated dhow and wait for assistance. The OOD on watch at the time of the distress call, Ensign Dusty Bartlett, commented on the ship’s response to the distress call. “The motor vessel in distress was reporting multiple small skiffs chasing her and also being fired upon with an RPG; we knew the situation wasn’t a false alarm and that we needed to respond as quickly as possible,” he explained. “We immediately notified the captain and brought *McFaul* to full power to close her position.”

While tracking the pirated dhow, the Omanis witnessed the suspected pirates throwing numerous weapons

overboard in anticipation of being apprehended.

As the partner nation warship approached *Faize Osamani*, nine people jumped off the dhow and into the water. *Al Sharquiyah's* crew immediately rendered assistance to the nine Indian crewmembers who had decided to cast their fate to the sea rather than remain aboard the captured dhow with the suspected pirates.

Unfortunately, one of the Indian crewmembers died before he could be rescued by *Al Sharquiyah's* team. Upon arriving at the scene, *McFaul* attempted to contact the *Faize Osamani*, knowing that the suspected pirates were still onboard. *McFaul* deployed her VBSS team to board the dhow and take custody of the suspected pirates.

Using bridge-to-bridge communications, *McFaul* directed the suspected pirates to move to the forward end of the dhow and raise their hands. The boarding team used two rigid hull inflatable boats (RHIB) to approach and board *Faize Osamani*.

Under cover from crew-manned machine guns, the boarding team

used their hooked ladder and boarded the dhow near the stern. The team secured the pilot house and quickly took control of the suspected pirates. The suspected pirates were thoroughly searched and placed in handcuffs, and then the boarding team collected evidence and fingerprinted the suspected pirates.

McFaul received direction from higher headquarters to take the suspected pirates on board and detain them. Shortly thereafter, they were transferred to the USS *Carney* (DDG 64) in anticipation of their delivery to a state willing to accept the suspected pirates for prosecution.

The VBSS team was well prepared for the task at hand. Their pre-deployment training replicated a good amount of what they encountered during the actual piracy. “Our boarding team training was sufficient. The situation presented to us resembled much of the onboard training conducted throughout deployment,” said Ensign Paul Sturdivant, one of *McFaul's* two boarding officers.  

“It’s all about relationships”

Coalition Prepares Iraqi Navy for the Future

By Capt. Edward Lundquist, USN (Retired)

“The lifeblood of every nation is maritime commerce,” said Rear Adm. Scott Jones, who leads the Coalition Naval Advisory Transition Team, which operates out of a small compound within the Iraqi Navy base at Umm Qasr, Iraq. “The mission here is to develop a maritime force capable of defending Iraqi territorial waters and provide a safe operating environment for its commercial traffic.”

“There are a lot of Iraqis whose livelihood is made on the water, both in trade and in fishing, so it is important for the Iraqi Navy to provide for their safety and protection,” he added.

Coalition forces include Royal Navy and Royal Marines, U.S. Marines, U.S. Coast Guard (USCG) and U.S. Navy, all helping the Iraqis with training and support to make them self-sufficient. There is even a U.S. Army soldier

assigned and contractors who provide security and food service support.

Part of the mission involves the protection of two very large oil terminals in the Northern Arabian Gulf, where Iraqi oil is loaded on supertankers. “When you consider the volume of the nation’s economy that comes through those oil platforms, it is astounding. They have to be protected,” Rear Adm. Jones explained.

It’s all About Relationships

“We want to earn their trust and confidence so they will accept that we are not only an advocate for them, but also a mentor and an advisor to assist them in planning and preparing for the future,” Rear Adm. Jones said.

Royal Navy Capt. Andy Aspden serves as the Commanding Officer of the Iraq Training and Advisory Mission-Navy (ITAM(N)). “We’re



▲ Aerial view of the Al-Basrah Oil Terminal (ABOT) terminal that supplies 85% of Iraq’s gross domestic product (GDP). (USN)

very much about the mentoring and advising. It’s not just training,” he explained.

His Executive Officer, Cmdr. Chip Wrye, agreed. “This mission started out as ‘how to drive a boat.’ Now we get involved in everything. It stretches us intellectually to think about how we do things, from personnel management to engineering repairs to logistics sustainment and planning ahead, because we have to explain it to them.”

“We spend a lot of time building relationships,” he added.

“The Iraqis want to run on their own,” Capt. Aspden said. “But they want to know the coalition has their back.”

Army Spec. Hatm Mohammed is assigned to ITAM as the manager of 19 local national interpreters. He was born in Iraq, and has a degree in electrical engineering from Baghdad University of Technology. He now serves in the U.S. Army as a linguist.

“Our mission is to train,” Army Spec. Mohammed said. “The officers and professionals, like engineers and doctors, speak English, but the Sailors and Marines are not as well educated. The interpreters are very useful to us.”



▲ Coalition Naval Advisory Transition Team aboard Iraqi patrol ship 702 *Fatah* with Iraqi crew. (IT2 Francis Bartoszak/USN)

Seamanship trainer BM3 Andrew Rosenberger said he has seen progress since arriving. "They're doing the drills smoother, faster and safer. Now when we do a line handling or anchoring drill, I step back and watch. But we still remind them to consider all the things that can go wrong. We teach them the 'what ifs.'"

He's come to appreciate his counterparts. Iraqis are hospitable, BM3 Rosenberger explained, and will invite the trainers for tea or lunch. "They're Sailors, just like us. When I leave, I'll be able to look back and say 'I did my job so you could do yours.'"

HT1 Ricky McCray found that the Iraqis are eager to learn, but do not always have the needed tools or logistics support. "Their system doesn't make it easy to draw parts or check out the right tools," he said. "For example, when we teach welding, there are problems getting the proper metal to practice with, but together, we are getting there."

EN3 Charles Cooper trains the Iraqi Sailors to conduct maintenance on their patrol boat's outboard engines. "The local gas has lower octane, and causes the spark plugs to work harder, so the engines need more maintenance," he said.

EN3 Cooper added that even though the Iraqis have new tools and proper oil, they still sometimes revert back to their old ways of using second hand oil or makeshift tools because they had to do that for so many years.

"The Iraqis do things their way," said Royal Navy Lt. Cmdr. Rob Bullock, the Operations Officer. "But," he added, "They know what they are doing."

The ITAM(N) officers visit the Iraqi Navy's operations center – referred to as Alfa Mike – several times a day, and sometimes more often, but they emphasize that the Iraqis are in charge.

"The Iraqis are committed to achieving their idea of success," said Lt. j.g. Joe Lakey, one of the ITAM



▲ Lt. Lars Lone briefs Iraqi Sailors about an upcoming evolution to promote safety while conducting shipboard drills. (IT2 Francis Bartoszak/USN)

operations officers. "They decide what training they need for their Sailors, and we get out on the water with them, and help them assess and train."

The Iraqi Navy has four new patrol boats purchased from Italy, as well as several boats from China and three made in Iraq. The U.S. is also manufacturing new boats for them.

"The only thing holding the Iraqis back is manpower," explained USCG Lt. Mike Gulla. Gulla is in charge of the Visit, Board, Search and Seizure (VBSS) training, along with members of the USCG Maritime Safety and Security Team (MSST). "We're emphasizing the need for continuous training to avoid 'skill fade.'"

LS2 Karena Walker said she volunteered to come to Iraq for the opportunity to do something different. She knows her job is important. "If we don't get the food and parts from Basra, then I didn't do my job," she said.

LS2 Walker helps the Iraqis manage their warehouses, and catalog and inventory parts and stores. As for the coalition's supply needs, she said it's challenging to use the Army

supply system, and to understand the difference between British and U.S. supply procedures. "The ordering process is different," she explained.

But as different as supply procedures can be, LS2 Walker said that she enjoys the family atmosphere. "It's like a family here with our coalition forces," she said. "It's the blending of all the different groups here that provides for the richness of the atmosphere."

And all of them are helping build a new navy.

"Iraqis have great pride in their country, and are committed to their nation's development. They want to see it succeed," Rear Adm. Jones said.

"Our continued training, mentoring and coordinating mission has and will serve as a key driver in Iraq's ability to achieve long-term stability, security and sovereignty," Rear Adm. Jones added. "Our role will move more towards being a representative, a training and advisor to the Iraqi Navy, as we move forward. This country has been through some significant challenges, and it's our mission to help them succeed." 

Patrol: Khawr Abd Allah Waterway

By Capt. Edward Lundquist, USN (Retired)

Lt. Jamail Zamil served as an Iraqi Marine Platoon Commander, helping provide security on Iraqi oil platforms. Currently he leads Iraqi Marines and Sailors on a pair of Iraqi Navy Defender-class boats that patrol the Khawr Abd Allah waterway.

The Khawr Abd Allah waterway is about 40 miles long, and runs between Iraqi and Kuwait. As part of the demilitarized zone between Iraq and Kuwait – established after the first Gulf War – both nations have the responsibility to observe, detect, and intercept hostile actions.

ME1 Enoch Metcalf is one of three trainers from the U.S. Coast Guard's deployed operations group. Team members wear full combat gear, are armed, and operate and train just as they do when operating back home in the United States.

"I'm new," ME1 Metcalf said, who recently came to Umm Qasr from his unit in Boston. "There are some things

we would do differently. But they're very good," he said about his Iraqi counterparts.

Hosin Abudsahib is the coxswain aboard the Iraqi patrol boat. He likes driving the new Defender fast patrol boats. Abudsahib said he likes the speed and the global positioning system technology.

"This one is faster than the other boats," he said with a smile.

The patrol comes upon a pair of fishermen with their nets set across the shipping channel, which is illegal. Lt. Zamil determines that they must be Iraqi. "Kuwaitis are rich people. They don't fish," he explained.

Lt. Zamil and his crew tell the fishermen to haul in their nets and leave, warning them that they'll go to jail if they try fishing here again.

The boat then moves down the river and comes alongside the Chinese merchant ship *Andbaojiang*, which is being detained while they

make payment for damage the ship did to Iraqi ships and piers when *Andbaojiang* lost control during a docking evolution. Iraqi Marines are on board to make sure the *Andbaojiang* stays put until the transaction is complete.

The patrol takes a closer look at several wrecks that sit along the Iraqi side just out of the main channel, with much of their superstructures still above water. They are grim reminders of Iraq's recent wars.

The Khawr Abd Allah waterway continues to be important for Iraq because its other major access to the Arabian Gulf is the Shatt al Arab waterway, which has Iraqi territory on one side and Iranian territory on the other, and thus too dangerous for important traffic to transit.

Even though Saddam Hussein and his regime, which invaded Kuwait in 1990, was overthrown, there is still an uneasy relationship between Iraq and Kuwait. The international boundary runs down the middle of the waterway, and the Iraqi patrol is careful to stay on its side, even though there are no Kuwaitis around to watch them.

Just below Umm Qasr on the Kuwaiti side of the border are large white structures with huge black letters that say "UN." After Operation *Desert Storm*, the United Nations Iraq-Kuwait Observer Mission (UNIKOM) was deployed to monitor the demilitarized zone along the Iraq-Kuwait border, report hostile activities and deter border violations, as well as support humanitarian efforts.

Upon returning, the seawall construction comes into view. The reclamation project will be the site of much of the Umm Qasr Navy Base's new facilities. 



▲ Lt. J.G. Tom Wieland mentors and instructs an Iraqi Sailor while patrolling the Khawr Abd Allah waterway. (Lt. Mike Gulla/USCG)

Iraqi Navy Taking Shape... in Louisiana

By Capt. Edward Lundquist, USN (Retired)



▲ The first of the Swiftships-built Iraqi patrol boats achieved a speed of 34+ knots during the first trial run in March, exceeding the contract speed requirement of 30 knots. (Photo courtesy of Swiftships)

Iraq is literally building a new navy. A new class of patrol boats for the Iraqi Navy is taking shape at Swiftships, an international shipbuilding company located in Morgan City, La. The 115-foot aluminum patrol craft are diesel powered, have three screws, and are capable of making 30 knots.

Each boat will have a 25-member crew, a 30mm gun weapon system as well as .50 caliber and 7.62mm machine guns. And because of their experience with their war with Iran, the Iraqis are cognizant of battle damage, so the boats will be armored.

"We have U.S. Navy warships patrolling near the oil platforms in the Northern Arabian Gulf," said Jeff Perin, Swiftships Director of Military Programs. "We're building these patrol boats for Iraq so our ships and Sailors can come home."

The Iraqi Navy selected Swiftships to build the patrol boats after conducting a world-wide solicitation. Swiftships quickly modified an existing hull to meet Iraqi specifications, and that hull will serve as the lead craft for the planned total of 15 boats.

Morgan City shipbuilders have a history of building vessels for combat. Swiftships' predecessor company, Sewart Seacraft, built more than 200 "Swift" patrol boats for the Navy during the Vietnam conflict.

"What we do here contributes directly to bringing Americans home," emphasized Mike Barton, the Navy's case manager for the Iraqi patrol boats.

"These are not unsophisticated boats," Perin said. "They are fully capable and sustainable, with a 1,500 nautical-mile range. The boats have

multi-function displays on the bridge, a combat information center and main control."

"We're not only building the boats," said Swiftships President Calvin Leleux, "we're going to play a supporting role, too. We will provide training, maintenance and warranty support for the patrol boats."

The first of the Swiftships-built Iraqi patrol boats started its main engines for the first time on March 15, 2010, and achieved a speed of 34+ knots during the first trial run two weeks later, exceeding the contract speed requirement of 30 knots. "These are major milestones in the birth of a new combatant boat," Leleux said.

A self-contained training village built next to the shipyard will house and train 50 Iraqis at a time to operate the new patrol boats. Parts have been assembled in large containers and will be used for familiarization and training, then shipped to Iraq. Arabic-speaking liaison officers and instructors certified by the U.S. Navy will help Iraqi sailors get hands-on training with their new boats.

The facility features classrooms as well as simulators with the identical equipment the Iraqi sailors will find onboard their boats. When the last of the crews are trained and the boats delivered, the training village will be dismantled, shipped to Iraq and reassembled at Umm Qasr Naval Base on the Khawr Abd Allah waterway.

"We have the total package," Barton said. "Not just the boat, but training, parts, and documentation."

The future of the Iraqi Navy is taking shape here on the bayous of Louisiana. Swiftships boats "will become the heart of the Iraqi Navy," Perin said. 

Get Strong to Stay Navy

By FLTCM(SW/AW) Tom Howard,
Fleet Master Chief, U.S. Fleet Forces Command

Take a minute and think back to the day you first walked into the recruiter's office and said, "I'm thinking about joining the Navy." What made you visit the recruiter's office on that particular day? Why did you raise your hand and take the oath to serve our nation?

For many, life in the service isn't what they expected, but rarely is life itself. It's a five card hand from a deck of 52. Our hand changes continually, and we make the best of it for each new card we're dealt.

For those who don't, or can't, make the transition to life in the service, we see a continual string of behavioral issues, such as assaults, drug use, alcohol-related incidents, or patterns of misconduct, which most often result in the termination of a Sailor's active or reserve duty.

During the past several years, Navy leaders have focused on the basics to ensure we are leading our Sailors to achieve more than they think they're capable of. Through mentorship, sponsorship and other professional development tools, we must ensure that we are living up to the concept of "shipmate" throughout the Fleet.

Now shipmates, I turn it over to you. As many of you know, Navy retention numbers are very high as Sailors are choosing to stay in record numbers. We are now in a highly-competitive workforce, and one where it's very important to keep focus to remain competitive.

With Perform to Serve (PTS) in place across nearly all retention zones, Sailors are now realizing that they must stand out and be the best in order to continue serving. So, you must ask yourself: How do I push myself to the top and

become the best? How do I ensure I stand out in a crowd of my peers?

The first place to start is in front of the mirror. Ask the question, "Am I doing all that is asked of me?" The three most basic tenets of success are:

- Be to work on time
- Be in the proper uniform
- Do the work that you're required to do

These three tenets will always set the initial tone. Are you within standards? Is the Physical Fitness Assessment (PFA) more than just a twice-a-year event for you, and the Sailors you lead? If you weren't promoted as a result of the last test cycle, did you at least pass the exam? Did you study?

Last, but certainly not least, what are you doing to make a difference at your command and among your shipmates?

Once you complete your self-assessment, you are one step closer to staying Navy. Next stop, make a plan. Write down the goals you need to achieve to be the best Sailor you can be.

Being a squared-away Sailor is just the beginning. Truly successful Sailors get involved. Being the best means making sure your Shipmates are also striving to be their best!

Whatever your reasons are for joining the Navy and for staying Navy, it pays to give it all you've got while you're here. Building and following your plan is up to you, and each of you has a wealth of experience standing beside you that will help. Take responsibility for yourself and your career, and you will set a career course that will be a model for all to follow. 🏆 🇺🇸



▲ SK2 Armida Sandoval, right, takes notes from Fleet Master Chief Tom Howard on how to succeed as a Sailor during his visit aboard USS *Blue Ridge* (LCC 19). (MC3 Daniel Viramontes/USN)

SEA POWER THROUGH ENGINEERING

THE ENGINEERING DUTY COMMUNITY

By Cmdr. John Lowery, Executive Officer, Engineering Duty Officer School

Today's Navy is more complex than at any point in history, but meeting the challenges of pacing threats, developing capabilities, resourcing efforts and maintaining the Fleet remain critical to our success. Even in 1794, when the Barbary pirates posed one of our first naval threats, identifying resources, convincing Congress and delivering capability were challenges.

Initially, Congress thought it would be cheaper to pay the pirates off or hire foreign navies to protect American shipping rather than invest in building our own fleet. Luckily, after much deliberating with Congress, then-President George Washington convinced them to fund the construction of six frigates.

"It follows then as certain as that night succeeds the day, that without a decisive naval force we can do nothing definitive, and with it, everything honorable and glorious," President Washington said in a letter to Marquis de Lafayette.



The Navy quickly established six shipyards and appointed Navy captains as superintendents, with naval architects (constructors) to oversee the construction effort. Joshua Humphreys was designated as the initial chief constructor of the Navy, marking the beginning of the Engineering Duty (ED) community.

Since those first six frigates, the surface Navy and ED community have worked together to translate

warfighter requirements into deployable capabilities. Shipbuilding defined the beginning, but over time, EDs have expanded into acquisition program management, fleet maintenance, and systems engineering in an effort to provide sustained engineering expertise throughout a ship's life cycle.

EDs are the only naval officers whose primary job is to design, engineer, buy, build, maintain, modernize, and dispose of ships and ship systems. Simply stated, EDs develop, build and maintain our surface fleet.

How do EDs do it?

"The devil is in the details and everything we do in the military is a detail," said the late Adm. Hyman Rickover, one of the Navy's most well-known EDs.

The management of risk and identification of challenges early in the process define the "detail" work EDs face every day. To become proficient in this type of work environment, it takes many years of operational experience and a higher level of education in technical, business and engineering disciplines to develop the appropriate skill set to effectively support the warfighter.

Engineers are not Born, they are Grown

EDs establish their foundation operationally by completing a surface or submarine warfare qualification prior to earning a technical masters degree in the areas of physics, computer science, mechanical, nuclear, electrical/electronic and systems engineering or naval architecture.

Throughout their career, professional training focuses on



▲ USS **Constitution** is towed from her mooring at Boston National Historical Park and turned around in Boston Harbor during a major three-year restoration. **Constitution** is the oldest commissioned warship afloat in the world and America's Ship of State. (ABHAN Mark Alexander/USN)

ACQUISITION PROCESS



key acquisition areas such as program management, maintenance and modernization, and systems engineering to further develop business acumen and expertise in delivering capability to the warfighter. The acquisition process provides the engineering roadmap to define warfighting requirements, develop capability, build systems and maintain those systems for their lifetime and the lifetime of the ship.

Where do EDs do it?

Acquisition program offices mark the entry point of the acquisition process. EDs fill the roles of project leaders, technical directors, deputy program managers and ultimately major program managers for ships and ship systems. They are the technical, engineering and business leadership that guides the process while balancing warfighter needs with constraints on time and budget.

The late Rear Adm. Wayne E. Meyer, the "Father of Aegis," believed strongly in systems engineering, and often said, "Build a little, test a little, learn a lot!" This approach is at the core of how EDs approach engineering challenges and is applied in all aspects of shipbuilding and technology development.

In addition to program office roles, EDs fill key waterfront roles as shipyard commanders, supervisors of shipbuilding and regional maintenance commanders. All aspects of developing, building and maintaining capability for the warfighter are managed and led by EDs.

How to Become an ED

The Engineering Duty Option is the primary way to becoming an ED.

The ED option makes up 80 percent of the community, and is available as a choice during service selection through commissioning programs at Naval Reserve Officer Training Corps (NROTC) Units, United States Naval Academy, Seaman-to-Admiral, Officer Candidate School (OCS), and maritime academy Merchant Marine Reserve (MMR) units.

Surface ED option officers will automatically be re-designated as an engineer in training (1460) upon completion of their Surface Warfare Officer (SWO) qualification, two division officer tours and a record review conducted by Naval Sea Systems Command.

Lateral transfers make up the remaining 20 percent of EDOs. An ideal candidate is already SWO qualified, has observed performance above their peers, and is academically qualified to pursue a technical masters degree at the Naval Postgraduate School (NPS) or the Massachusetts Institute of Technology (MIT). The lateral transfer board meets twice a year, usually in June and November, and packages are due to the Bureau of Naval Personnel about 60 days prior to the board convening date.

After a lateral transfer or ED option execution, new EDs enter the Engineering Duty Officer Qualification Program (EDQP). This requires obtaining a technical masters degree (NPS or MIT); an initial qualification tour at a shipyard, a regional maintenance center, a supervisor of shipbuilding, a warfare center, or an engineering field activity; and successful completion of an oral board. After qualification, an ED is

considered fully qualified and the designator changes to 1440.

Today's Navy

Emerging threats, the development of new capabilities and the maintenance and sustainment of the existing surface fleet define the challenges we face as engineers and warfighters today. The Navy is in the process of modernizing the Aegis Fleet with new technologies in the areas of ballistic missile defense (BMD), anti-submarine warfare and air warfare in addition to updating computing systems and displays.

At the same time we are modernizing and maintaining the Fleet; new construction is beginning on DDG 1000, CVN 21, and we are restarting construction of the DDG 51 class. Now more than ever, teamwork between the engineers and warfighters is essential to the success of the surface fleet.

Long gone are the days of sailing ships, and the new era of over the horizon targeting and computing technologies promises an exciting future. It will take a coordinated effort between warfighters, engineers and leadership to ensure the lessons of the past are applied for the success of the future. The Engineering Duty community is leading the way!

For further information on how to apply to become an ED, contact the ED detailer at edoinfo@navy.mil or go to <http://www.npc.navy.mil/Officer/EngineeringDuty/EDAccessions/>, <http://www.npc.navy.mil/Boards/Administrative/ActiveDutyTransferRedesignation/>.



NAVY'S SECOND LITTORAL COMBAT SHIP CUTS A MEMORABLE SILHOUETTE

By Lt. Zachary Harrell, Navy Public Affairs Support Element West

Many of the local fishermen who had their lines cast into the ocean put down their rods and picked up their cameras as a very unique-looking vessel made its approach to the Key West, Fla., harbor.

On-lookers gathered on the weather decks of cruise ships and along the shoreline slowly began waving once they recognized the ship as a U.S. Navy vessel.

This is the reception that the Navy's newest littoral combat ship, USS *Independence* (LCS 2), has become accustomed to.

"Indy does have a certain 'wow' effect on folks," said Cmdr. Ken Coleman, Commanding Officer of *Independence's* Blue Crew. "She piques the curiosity of just about everyone who sees her, from lifetime mariners to people who have never seen a Navy ship before."

Independence has a trimaran hull modeled after a commercial high-

speed ferry. The design of the ship gives it the appearance of having port and starboard wings that curve down into the water on both sides of a centrally-located monohull. This unique design lends the ship added stability as it cruises at high speeds.

The sharp angles of the ship's body and superstructure are designed to reduce the probability that the ship can be detected by enemy radar. Even the ship's color tone is different from the traditional "haze gray" paint scheme most Navy ships display. This is because there is no paint scheme on *Independence* – the ship exhibits the natural color of the aluminum used in its construction, which, according to Cmdr. Coleman, conserves both weight and cost.

The ship's interior features a large mission bay, designed to carry the containerized equipment that makes up mission packages. Mission packages are capability-specific

modules that include both equipment and attached Sailors to enable specific mission sets. Sailors will be able to quickly install or change these packages, helping provide combatant commanders with a unique degree of flexibility.

Packages currently in testing and development include:

- Surface warfare, designed to counter the threat posed by small enemy surface craft.
- Anti-submarine warfare, designed to counter the threat of modern enemy diesel-electric submarines.
- Mine countermeasures, featuring unmanned surface and semi-submersible vehicles designed to locate and neutralize enemy mines while keeping Sailors out of minefields.

Each mission package also includes a composite aviation detachment composed of MH-60 helicopters and MQ-8B Fire Scout vertical takeoff unmanned aerial vehicles (VTUAV).



▲ USS *Independence* (LCS 2) arrives at Mole Pier at Naval Air Station Key West, Fla. (AC2 Nicholas Kontodiakos/USN)

“Our ability to rapidly swap out mission packages allows us to move readily from one warfare area to the next,” explained Lt. Philip Garrow, who serves as the ship’s Main Propulsion Assistant. “We can also operate without a mission package, which increases our storage space and allows us to respond to environmental emergencies or personnel transport requirements.”

Independence is driven through the water by two diesel and two gas turbine engines that provide power to four water jets. Since the diesels are more fuel efficient, they serve as the primary source of power at cruising speeds. The gas turbines are brought on-line when higher speeds are necessary, and with all four engines on-line, *Independence* easily exceeds 40 knots.

The ship also models some of the most advanced naval technology in the Fleet today. The entire ship is linked through a network infrastructure that allows all of the ship’s functions to operate on a Windows-like operating system. On the consoles that run the engineering plant, a Sailor can use a mouse to access the option to start the ship’s engines. Once this option is selected, one can hear the humming of the engines as they immediately come on-line.

Independence’s internal network also allows any computer or laptop to serve as a console and display and control any of ship’s operational systems by simply plugging into any local area network (LAN) access points throughout the ship.

“The network architecture of the ship is quite impressive,” said Cmdr. Curt Renshaw, former Commanding Officer of *Independence’s* Blue Crew. “It places us in a more modern operating environment where information can be communicated throughout the ship and with our commanders and allies nearly instantaneously.”

Summer 2010



▲ OSC Anthony Morales helps Sailors contain a fire during a damage control training drill aboard USS *Independence* (LCS 2). (MC2 Justan Williams/USN)



▲ QMC(SW) Tyler Smith points to a surface contact from the bridge of USS *Independence* (LCS 2) as the ship sails to Mayport, Fla. (MC2 Justan Williams/USN)

The space aboard the ship where advanced technology is most evident is the bridge. The ship’s control console consists of a series of LCD screens that surround three soft leather chairs for the ship controllers.

Ship controllers can simplify their job by using autopilot, which uses the course and speed information entered into the Voyage Management System (VMS) to drive the ship along its charted course.

When autopilot is not engaged, ship controllers can steer *Independence* by using the joystick control attached to the control chair's arm rest. They can also use individual direction and throttle levers to control each of her four water jets individually, or select a setting that controls all four jets with just one lever.

"It took me a little while to warm up to it, but now I prefer it," said Weapons Officer Lt. j.g. Justin Guernsey, speaking of the ship's joystick controller.

And while charting the ship's course, there is no chart table on the bridge to use, since all navigational courses are plotted on electronic charts stored in the VMS database.

The combat systems suite includes the new Sea Rolling Airframe Missile (SeaRAM) weapon system, which uses the Phalanx air defense radar and the Block 1B electro-optical system in conjunction with an 11-cell rolling airframe missile launcher to target, track and eliminate airborne threats to the ship. *Independence* is the first vessel in the Fleet to be fitted with this system.

Along with the sophisticated controls and the immense space of the ship's mission bay, there are many cosmetic features within *Independence* that reflect its high-speed ferry roots. One of the first things Sailors notice is that ladder wells are in short supply. Instead, conventional stairs and handrails allow access to the different levels of the ship.

Also, the usual berthing arrangements Sailors are used to have been replaced with a series of staterooms for both officers and enlisted, each with an attached head. The largest of these staterooms typically house no more than five Sailors.

"Every Sailor who tours our ship comments on the private heads and shower," Lt. Garrow said. "Living spaces are definitely one of the best aspects of LCS service."



▲ Sailors and civilian personnel aboard the USS *Independence* (LCS 2) hoist a training round into the Sea Rolling Air Frame Missile (SeaRAM) launcher. *Independence* is the first vessel in the U.S. Fleet to carry the SeaRAM weapon system. (MC2 Justan Williams/USN)

Just like other ships in the Fleet, *Independence* Sailors eat in one of three dining areas: a Wardroom, a Chiefs' Mess, and a slightly larger enclosed dining area for junior Sailors. Each dining area includes a 50-inch LCD monitor used to display operational briefs or movies.

While Sailors enjoy the creature comforts of the ship, the life of an *Independence* Sailor balances reward with a considerable load of responsibility. As on USS *Freedom* (LCS 1), *Independence* is manned by two rotational core crews of 40 men and women. During operational

tasking, additional personnel are brought aboard to man and operate the mission module embarked for that specific assignment.

"All of our Sailors have warfare qualifications," said Blue Crew Command Master Chief Melissa Black. "The ship is impressive, but it is the knowledge and leadership experience of the crew that makes *Independence* extraordinary."

With the crew consisting of about 150 fewer Sailors than ships of similar size, the level of leadership and responsibility placed on each Sailor is significantly increased. For this

reason, both junior Sailors and officers are a rare breed aboard *Independence*. The ship's most junior crewmember, and the only second class petty officer, is BM2(SW) Katrina Williams.

"It's definitely different to work with so many senior individuals," BM2 Williams said. "But one of the best things about LCS is how willing the entire crew is to learn new skills from subject matter experts." She said that senior Sailors are quick to follow her suggestions when conducting line handling, "and I've learned a ton about medical response and force protection during my time aboard."

To ensure manpower is used effectively without being used exhaustively, *Independence* uses a system of underway watch sections in conjunction with two flex teams. When operating at sea, a portion of the crew is divided into four watch sections responsible for the operation of the navigation systems, combat systems and engineering plant.

The remainder of the crew is divided into the two flex teams, Alpha and Bravo, whose responsibilities range from daily maintenance and cleaning of equipment and spaces to immediate response to fire, flooding or medical emergencies, to facilitating the launch and recovery of aircraft

and small boats. The flex teams rotate through 12-hour shifts.

"The flex team concept is the result of a manpower study done specifically for this ship by a group from the Johns Hopkins Applied Physics Lab," Cmdr. Renshaw explained. "It allows the crew to focus their work efforts in fewer areas while combating the effects of fatigue by maximizing the opportunity for rest."

The 40-person crew size also makes it necessary to use technology to supplement duties and optimize efficiency. For example, there are no "roving" watches responsible for patrolling the ship's interior to identify and respond to safety and security hazards throughout the ship. The crew is able to monitor these spaces using the digital video cameras that are stationed in all of the ship's working spaces and engineering main spaces.

Similarly, the watch team on the bridge gets the job done with a standard team of two Sailors, in part through the use of an automated voice recorder in the ship's control console. The voice recorder eliminates the typical task of manually recording orders from the officer of the deck and conning officer into a deck log, reducing the number of personnel required to stand watch on the bridge.

"Having a small watch team on the bridge creates a focused environment with fewer distractions," Lt. Garrow said. "All of the information that you need is either displayed electronically or communicated to you by another watchstander."

Perhaps the most significant aspect of life aboard *Independence* is the manner in which all varieties of work are distributed and shared among the crew. All hands come together to accomplish the daily tasks of cleaning, maintaining security and taking care of Sailors. The independent duty corpsman has two other Sailors who are trained to assist with various medical responsibilities including triage and administering vaccinations. The burden and responsibility of sweeping the passageways and cleaning the bulkheads falls upon everyone from the most junior Sailor to the Commanding Officer.

Of course, technology plays a role here as well, since several Roomba robot vacuums assist with maintaining the cleanliness of the ship's carpeted bridge and staterooms.

"The crew really seems to like them," Cmdr. Coleman said. "Plus, it allows them to spend more time doing the jobs the Navy has trained them to do."

Independence sailed away from Mobile, Ala. for her maiden voyage to Norfolk, Va. in March. The ship made port visits in Key West and Mayport, Fla., conducted weapons training and prepared for final flight deck certification. Other operations at sea included continued testing of the ship's capabilities and limitations, deployment and recovery of its rigid-hull inflatable boat, and anchoring at sea for the first time outside of the shipyard.

Independence is currently in Norfolk for continued testing and maintenance.



▲ LSC Thadeous Nograles mans the boat deck aboard USS *Independence* (LCS 2) during routine operations at sea. (Lt. Zachary Harrell/USN)

VBSS Training:

Critical to the Maritime Strategy

By Ed Barker, Naval Education and Training Command Public Affairs

Whether it's searching a dhow in the Arabian Gulf for hidden weapons, or boarding and inspecting a suspected pirate mother ship off the coast of Somalia, Visit, Board, Search and Seizure (VBSS) teams play an important role in the Navy's maritime strategy.

Managed by the Center for Security Forces (CENSECFOR) in Norfolk, Va., formal VBSS training was created in 1990 following the first Gulf War as a way to standardize and continue the Maritime Interdiction Operations introduced there as a result of United Nations resolutions.

"The course was designed to standardize what was previously done through on-the-job training and passdown," said Kurt Martin, anti-terrorism program manager for CENSECFOR. "We introduced the curriculum in 1998 and updated it in 2005 to reflect what the teams would be facing in the Fleet."

CENSECFOR conducts initial VBSS training at four locations: Chesapeake, Va.; Mayport, Fla.; San Diego; and Pearl Harbor, Hawaii. The initial training continuum includes three courses lasting a total of eight weeks, with some team members receiving additional follow-on training. Skills taught in the VBSS courses include tactical movement and shooting, defensive tactics, repelling, searching and other team skills.

The center's training covers both VBSS Level I, which focuses on ships that comply with the instructions of the inspection team, and Level II, which addresses the tactics used to board vessels that are non-compliant. Level II ships have freeboard (the



▲ ENFN Stephens Orrin, serving aboard USS *Gunston Hall* (LSD 44), climbs a cargo net as part of a Visit, Board, Search and Seizure (VBSS) training exercise aboard the Nigeria navy buoy tender MNS *Nwamba* (A 503). (MCT Martine Cuaron/USN)

distance between the waterline and the main deck of the ship) of 25 feet or less above the water.

Non-compliant vessels that have greater than 25 feet of freeboard, or that are actively opposing the boarding, are handled by teams of Special Operations Forces (SOF) or U.S. Marine Corps elements.

Although anti-piracy operations get the lion's share of current news coverage, Martin noted that VBSS teams are not specifically trained for an anti-piracy mission.

"You won't find the term 'anti-piracy' in any of the CENSECFOR

VBSS training curriculum," Martin explained. "The fact that the ships depend on the VBSS teams is a by-product of the cohesive unit that forms, and their ability to deliver the team via rigid hull inflatable boats (RHIB), board vessels and, if necessary, defend themselves should the situation arise. VBSS teams are on Navy ships throughout the world 24/7, keeping the bad guys from smuggling everything from guns to cocaine."

Cmdr. William Daly, Commanding Officer of USS *Farragut* (DDG 99), is currently operating as part of Combined Task Force (CTF) 151, a multi-national task force conducting counter-piracy operations in the Gulf of Aden.

"*Farragut* has been the CTF 151 flagship since January 2010 and has conducted major piracy disruptions," Cmdr. Daly said. "None of our counter-piracy operations would have been possible without the outstanding VBSS training provided by the Center for Security Forces. From the start of a boarding to the completion of the operation, CENSECFOR prepared our crew nicely for their missions."

On April 15, *Farragut* intercepted suspected pirates that were threatening to hijack the Thailand-flagged bulk carrier MV *Thor Traveller*. During the attack, pirates fired rifles and rocket-propelled grenades at *Thor Traveller* for ten minutes in an attempt to force her to stop. The master of the vessel radioed *Farragut* for assistance, and using her helicopter and VBSS team, they thwarted the attack and sent the pirates back to the Somali coast after



▲ Members of a Visit, Board, Search and Seizure (VBSS) team from the USS *Gettysburg* (CG 64) and U.S. Coast Guard Tactical Law Enforcement Team South Detachment 409 capture suspected pirates after responding to a merchant vessel distress signal while part of Combined Task Force (CTF) 151. (MCT Eric Beauregard/USN)

boarding their vessel and confiscating their weapons.

“When a VBSS team launches from the ship to conduct a mission, the team leadership assumes an on-scene commander role since the ship’s Commanding Officer remains on the ship,” Cmdr. Daly added. “CENSECFOR has been superb at training these team members properly for the intense responsibilities they assume. Viewed from a broader perspective, the tactical training CENSECFOR gives our VBSS teams translates into operational and strategic successes in disrupting piracy, promoting safe navigation of international waters, and enabling the growth of the international economy.”

“The attack on the MV *Thor Traveller* took place at 3 a.m. on a moonless night. It simply shows that the pirates do not take a day off and they are always looking out for opportunities to attack,” said Republic of Singapore Navy Rear Adm. Bernard Miranda, commander of CTF 151 during the attack. “The quick response from *Farragut* is testament

to the operational readiness of the combined maritime force.”

One of the highest-profile anti-piracy operations undertaken by a CTF 151 ship was that of the USS *Bainbridge* (DDG 96), and the rescue of MV *Maersk Alabama*, which Somali pirates had seized and taken the ship’s master, Capt. Richard Phillips, hostage in April 2009.

During that deployment, *Bainbridge* also escorted the American vessel *Liberty Sun*, protecting it from a pirate attack, and prevented attacks on merchant vessels in the Gulf of Aden, when they intercepted two suspect pirate vessels. Lt. j.g. Robert Lilly serves as the VBSS liaison officer for *Bainbridge*, and as part of the VBSS training team, helps maintain the skills of three six-man boarding teams.

“The VBSS team training was excellent, some of the best training I’ve experienced in the Navy,” Lt. j.g. Lilly said. “The unit level training picks up where CENSECFOR finishes by running through different certifications and scenarios during our Composite Unit Training Exercise (COMPTUEX) before

deployment, including compliant and non-compliant boardings and oil platform defense.”

“We conduct onboard VBSS training several times a week while underway, in addition to running specific scenarios,” he continued. “While on station, we work to arrange training with other ships and conduct simulated boardings in order to keep our proficiency at the highest level.”

“VBSS teams are an all-volunteer force, and generally consist of young, athletic Sailors that are gung-ho,” explained BMCS(SW) Michael Edwards, training and readiness action officer for Commander, Naval Surface Force Atlantic. “It’s an intense program that is challenging to complete, but the experience and results are worth it. The missions are interesting and varied; as a VBSS team member afloat, life is never dull.”

For more information on the Center for Security Forces VBSS training, visit: <https://www.netc.navy.mil/centers/csf>.

For more information on the Naval Education and Training Command, visit: <https://www.netc.navy.mil>.



“88 Acres of Diplomacy”

Chinhae: A Tight-Knit Navy Community

By Capt. Edward Lundquist, USN (Retired)

The U.S. base at Chinhae, Republic of Korea (ROK), is “88 acres of diplomacy,” said Cmdr. Steve Miller, the Chief Staff Officer for Commander, Fleet Activities Chinhae (CFAC). “We live and work within a hundred feet of each other. Our sole mission is to support the Fleet.”

The small naval base on the southwestern tip of the Korean peninsula serves all U.S. Navy ships that call at Korean ports, about 50 each year. It also supports big military exercises like *Ulchi Freedom Guardian* and *Key Resolve/Foal Eagle*, and, if needed, mobilization for contingencies.

The host nation provides a great deal of support for the logistics and construction of the U.S. compound. CFAC itself has no waterfront or piers and is surrounded on three sides by the principal Korean naval (ROKN) base.

Shifting Roles

“We are working diligently toward transitioning wartime operational control to the Republic of Korea,” said Army Gen. Walter Sharp, Commander, U.S. Forces Korea. “This represents the next step forward in the maturation of the ROK-U.S. alliance, when the outstanding ROK military assumes the lead role in their nation’s defense with the U.S. at its side in a supporting role.”

While Korea will take charge in 2012, the U.S. naval presence will continue. “They don’t want us to leave,” Cmdr. Miller said, “and we don’t want to leave.”

There are about 28,500 American service members in Korea, but only a small percentage are Navy.



▲ A Republic of Korea (ROK) Navy sailor waves the American flag and ROK flag as the USS *John S. McCain* (DDG 56) pulls into Donghae. (MCT Bobbie Attaway/USN)

“We are the Navy representation on the peninsula,” explained Rear Adm. Pete Gumataotao, Commander, U.S. Naval Forces Korea (CNFK). “Our overall footprint is about 400 Sailors. We are not the warfighters.”

In a contingency situation, naval forces would be deployed to the area from elsewhere in the Pacific Command.

“We do a lot of things, but at the end of the day, our focus of effort is supporting the warfighter, and to foster this great relationship that we have with the South Koreans,” Rear Adm. Gumataotao said.

To some, Chinhae is a well-kept secret. “I was here in Korea for five tours with the Army,” said Brian Brunner, now a civilian serving as the emergency management officer. “I

didn’t know there was a navy base here.”

Under the Yongsan Relocation Plan (YRP), most American troops stationed in and around the capital city of Seoul will move to the U.S. Army Garrison (USAG) at Camp Humphreys, located near the city of Pyeongtaek about 40 miles south of Seoul.

But as the U.S. forces move out of Seoul, the CNFK headquarters will relocate to Chinhae, with a presence also at the ROKN headquarters in Busan.

“We have established such a great relationship with the Commander-in-Chief of the ROKN Fleet, and his team,” Rear Adm. Gumataotao said. “They are providing us with space to build a CNFK building at the ROK naval base in Busan, and



▲ Seabees assigned to Naval Mobile Construction Battalion (NMCB) 1 level land in August 2009 in preparation for building a sports complex. The completed facility includes volleyball and tennis courts and is used by more than 100 Sailors and their families stationed at Commander, Fleet Activities Chinhae (CFAC). (MC1 Bobbie Attaway/USN)

that's phenomenal. It multiplies our opportunities to work with their leadership."

One family

Chinhae is a port city of 163,000 people located just under an hour from Busan, and five hours from Seoul. Korea is a nation of 50 million people living in an area the size of Indiana.

Chinhae is ROKN's largest homeport, and is home to the ROK Naval Academy. The academy is very similar to Annapolis, and offers nine majors in literature, engineering and sciences. Like U.S. midshipmen, there is a summer cruise which takes the ROK midshipmen to ports in Mexico, Canada and the United States, while exposing them to the career opportunities in the ROKN.

For such a small base, Chinhae has a high quality of life. It has won consecutive awards for having one of the best housing facilities in the Navy. High school students must travel to the Department of Defense

(DoD) high school in Deagu, but the on-base elementary school and child development center has room to grow.

The base offers college classes complemented by distance-learning so someone coming to Chinhae can earn anything from a Graduate Equivalency Degree (GED) to a post-master's degree, and free Korean classes are offered. The medical clinic is well staffed and equipped, and the doctor makes house calls.

"I asked to come here," said Lt. Shawn Spooner, Officer in Charge of the Branch Medical Clinic. "It's a great place for a young family. It's like small town USA. Everybody knows everybody. We're one family. It's a great community."

English Camp

Lt. John Fitzpatrick is the Administrative Officer at Chinhae. He started an "English Camp," where selected career-oriented Korean Sailors come together to practice and improve their English in interactive classes

taught by U.S. Sailors. The first camp was so successful that the ROKN budgeted for it and made it a regular training event.

"This is our fifth English Camp," Lt. Fitzpatrick said. "They'll listen to one of our Sailors talk for an hour about something that he or she is familiar with, like their jobs. Then they come back for a second hour to discuss the subject and ask questions."

Participating in English Camp is very popular with U.S. Sailors. "We always have volunteers," Cmdr. Miller said. "They always have something to talk about. We're all in the Navy, and we're all serving our respective countries, so we have a lot in common."

"Most have English language skills already," said IS2 Jabari Young, one of the volunteers. "This is reinforcement for them."

While many ROKN enlisted personnel are conscripts serving their two years of compulsory service, there are those who volunteer to continue their naval service.

"These students are selected from across the Korean Navy. They are all volunteers with at least four-and-a-half years of service, up to 26 years of service," Lt. Fitzpatrick explained.

Special bond

During the three-year Korean conflict, from 1950 to 1953, more than 33,000 U.S. service members were killed in action, more than 92,000 wounded, and 8,000 who remain unaccounted for. ROK troops had more than 220,000 combat fatalities and nearly 700,000 wounded. As many as two million Korean civilians were killed.

Rear Adm. Gumataotao said the American and Korean people have a special bond. "The Korean people will never forget the American Soldiers, Sailors, Airmen, and Marines who died on their soil to protect them."



USS *San Jacinto* (CG 56)

Conducting Coalition Operations in Two Theaters

By Lt. j.g. Kyra Lassiter, Public Affairs Officer, USS *San Jacinto* (CG 56)
and MC2 Joe Aldrich, USS *Enterprise* (CVN 65) Public Affairs

USS *San Jacinto* (CG 56), commissioned in 1988 and named after the decisive battle in the war for Texas independence, has a long history of front-line operations.

The *Ticonderoga*-class cruiser, which fired the first shots during Operation *Desert Storm* by launching two BGM-109 Tomahawk cruise missiles in August 1990, is continuing to make an impact today by recently leading the multi-national exercise *Caya Green*.

San Jacinto stepped up to the plate to fill in for USS *Nassau* (LHA 4) in leading the exercise when *Nassau* was called to assist in Haitian relief operations. The successful completion of the exercise is merely the latest in a long list of "San Jac" accomplishments.

San Jacinto engaged in several dynamic training scenarios with the Israeli Navy during *Caya Green*. The purpose was to exchange information and gain valuable, international training experiences. Sailors and officers took advantage of the training environment to hone their skills and learn from their experiences with the Israeli Navy.

"*Caya Green* was an excellent exercise where our Sailors had the opportunity to do real-world, at-sea ASW (anti-submarine warfare) training with some very professional maritime partners, the Israeli Navy," said Capt. John Cordle, *San Jacinto's* Commanding Officer. "From a fantastic port visit in Haifa, where more than half the crew visited the historic city of Jerusalem, to high seas adventures with submarines, aircraft and small boats, this was a once in a lifetime experience."



▲ Visit, board, search and seizure (VBSS) team members embarked aboard the guided-missile cruiser USS *San Jacinto* (CG 56) return to the ship after investigating a suspicious dhow. (MC2 Ja'lon Rhinehart/USN)

Both countries' Sailors had opportunities to learn from the knowledge of their counterparts. Several Israeli Sailors spent the better part of the exercise aboard *San Jacinto*, and observed the similarities and differences between the two navies.

"It has been really interesting," said Israeli Navy Lt. Itai Gefen. "I have been able to see how similarly we both operate. The personal interactions have been very important. It is good to know some people and have contacts with other navies."

A major training exercise conducted during *Caya Green* was the "small craft attack" scenario. The exercise allowed *San Jacinto's* Small Craft Attack Team (SCAT) to test their reaction time, communication and coordination. The drill began with Sailors identifying inbound small craft, which provided the Israeli escort warships the opportunity to train on a variety of blocking maneuvers and defensive measures.

The training evolved into scenarios where the inbound small craft penetrated beyond the defense ships. The SCAT quickly communicated their intentions and executed mock firings at the intrusive ships. These experiences were near real-life scenarios for all Sailors, and provided a unique training environment.

"It was a good chance to see what it would be like in a real situation," explained GM2 Wesley Finch, who operates the SCAT's M-240B machine gun.

San Jacinto's weapons team conducted live-fire training with several of their weapons systems including the .50-caliber machine guns, the M-240B and the close-in weapon system (CIWS). The participants enjoyed the opportunity to execute live-fire training at sea.

The Visit, Board, Search, and Seizure (VBSS) teams conducted important training drills during the exercise. Both Israeli and U.S. Navy VBSS teams



▲ A USS *San Jacinto* (CG 56) Visit, Board, Search and Seizure (VBSS) team member provides first aid and bandaging to a civilian sailor near the Gulf of Oman. (MC2 Joe Aldrich/USN)



▲ USS *San Jacinto* (CG 56) Visit, Board, Search and Seizure (VBSS) team members board a dhow near the Gulf of Oman. (MC2 Joe Aldrich/USN)

took turns boarding and conducting searches on each others' ships.

Caya Green wrapped up with a reception aboard *San Jacinto* where leadership from participating ships shared insights and ensured the maximum benefits of the exercise were gained.

San Jacinto Sailors also participated in a community relief project during their Haifa port visit, helping make extensive repairs to a local retirement home.

With the exercise in her rear view mirror, *San Jacinto* continued her deployment by transiting the Suez Canal into U.S. Fifth Fleet.

While in Fifth Fleet, *San Jacinto* conducted Maritime Intercept Operations (MIO) as part of a team of nations. MIO's mission is to enforce maritime law and put pressure on

potential smugglers, pirates and violent extremists.

Each day at sea brings new interaction and lessons about how other navies conduct maritime operations. "In this operation we incorporate teams from more than one country in a truly international effort to make our coalition presence known," Capt. Cordle emphasized.

San Jacinto, homeported in Norfolk, Va., is a member of Carrier Strike Group 12. In 2009, the crew was honored with awards for Maritime Excellence; Command, Control and Communications; Health and Wellness; Logistics Excellence; and Retention Excellence. These awards demonstrate the crew's commitment to warfighting excellence, and a command environment where Sailors want to "Stay Navy"!  

AFLOAT TRAINING GROUP IS “Full

There’s a new proactive approach and positive attitude for training on the waterfront today; a more holistic and continuous commitment to keep crews trained and ships ready.

“A lot has changed in training,” explained Capt. Dave Matawitz, commander, Afloat Training Group (ATG) Pacific. “The pre-deployment training cycle used to kick off with an assessment – essentially a big inspection – which usually resulted in the ship being told how bad they were regardless of their actual performance.”

He said that approach started the entire process off on an adversarial basis, and one which “Arleigh Burke himself wouldn’t have passed,” Capt. Matawitz admitted.

“Today, we train first. Ships can ask for help in areas where they think they need it. The ships do better on their initial assessment, and are closer to becoming certified. We expect ships to do well instead of the other way around. We train, assess, train, and certify. And, throughout the process, we are building a relationship with that ship.”

The result has been astounding. Because ATG trainers are no longer perceived as inspectors, ships request their services. The number of ship visits, called “limited team training” (LTT) events, has more than doubled, from 610 in 2008 to 1,380 in 2009.

ATG also trains the crews of carriers and Coast Guard cutters. “We have a Coast Guard officer on our staff, and we train and certify Navy and Coast Guard ships to the same standard, and that ensures interoperability,” Capt. Matawitz explained. “We work very closely with ATG Atlantic, and we share metrics.”

The Surface Force Training Manual (SFTM) specifies the four pillars of the continuous certification requirements



(CCR) – personnel, proficiency, material and management. Ships are required to perform CCRs at varying periodicities.

“It is not East Coast training and West Coast training anymore,” said Vice Adm. D. C. Curtis, commander, Naval Surface Forces. “Because of what we do as Naval Surface Forces, we ensure that the training groups are aligned, and that our policies and procedures are aligned.”

Unit Level Training Readiness Assessment

Unit Level Training Readiness Assessment-Certification (ULTRA-C) is designed to demonstrate that ships meet certification requirements across all applicable mission areas and be recommended for certification as an independent unit ready for tasking (IURFT).

“An ULTRA-C shows a ship’s competency in fire fighting, anchoring, small boat attack and various other items evaluated by assessors from ATG,” Capt. Matawitz said. “The result is measurable, trendable, and actionable.”

The Training and Operational Readiness Information Services (TORIS) is ATG’s assessment utility which collects and analyzes data.

Using TORIS, training and assessments are measurable and are expressed in a Training Figure of Merit (TFOM).

“We’re not just training for training’s sake,” said Barry Walsh, training requirements department head. “TFOM makes it quantifiable.”

ULTRA-C also validates the strengths and weaknesses of the ship’s training team organization, assesses watch team performance, validates the ship’s ability to self-assess, and identifies areas that require follow-on remediation for the ship to achieve certification and IURFT status. Crews must demonstrate proficiency in areas such as repair locker fire fighting, loss of steering drills, harbor navigation, combat systems scenarios, and medical drills.

The process allows for continuous improvement to keep knowledge and skills sharp. The Unit Level Training Assessment-Sustainment (ULTRA-S) is an assessment to ensure ships are conducting continuous training.

To help keep their TFOM up, Walsh said ATG trains personnel to continue the training. “We want to have people on the ships be as good at training and inspecting as we are so they can keep up the standard while they are deployed.”

“Afloat Training Groups are committed to providing dynamic, quality afloat training to Sailors and Guardsman to ensure a combat ready force capable of performing a broad spectrum of maritime missions,” Capt. Matawitz said. “We will continue to adapt to new challenges in order to better prepare the fleet for any and all future operations.”

Training Continuum

Training begins with the individual Sailor. A student completes a school and gains knowledge and skills, but doesn’t use them in a practical sense as a team member until reporting aboard ship.

Once aboard, training continues for a division or a watch station, and then that team must perform as part of the ship, and that ship then must be trained to work as part of a strike group.

In the past, ships would receive concentrated training after overhaul or before deployment, but training the ship must be a "continuous process, not a spike," Capt. Matawitz emphasized.

ATG is aligned with basic training and the schools that provide individual training, as well as the intermediate, advanced and theater training. "This is the Surface Warfare Enterprise approach, bringing all the parts of the training community together," Matawitz said.

Lt. Rob Hastings serves as a training liaison officer (TLO), one of about a dozen ATG Pacific officers who are each assigned to several ships. "We get underway with our ships, and we train with the crews," he said.

Lt. Hastings is the TLO for both USS *Freedom* (LCS 1) and USS *Independence* (LCS 2), and said both ships are especially challenging. "They have minimal manning, and can't afford to spend time or devote people to training when the crews are aboard; and both ships have unique systems not found on any other platforms," he said.

Capt. Matawitz said the TLO provides the commanding officer (CO)

with an honest assessment. "I tell every CO that their TLO is somebody they need to listen to."

Fleet Synthetic Training

OSC Charles Smith manages synthetic training, which offers commands the ability to do realistic training in scenarios that are impractical or expensive to do in a live situation. With synthetic training, multiple ships and aircraft participate in offensive and defensive virtual combat scenarios. Open ocean air, surface and subsurface threats can be introduced without anyone having to make a transit.

ATG develops Fleet synthetic training unit level exercises (FST-U) scenarios. The drills are executed with the Battle Force Tactical Trainer (BFTT), which links Tactical Training Group Pacific (TTGP) to the BFTT onboard the ships.

The ship's combat systems teams are evaluated on how they react to the scenario, which are measured using collective data points (CDP) and then evaluated by ATG experts from each warfare area.

Synthetic training is conducted on a unit level with a single ship, as well as multiple units during warfare commanders' training.

The Way Ahead

This new approach to training the Navy's surface force will certainly pay great dividends. All Sailors and surface warfare officers will begin their training in a well-supported proactive approach, rather than a reactive one, which will give each of them a greater sense of ownership.

"We work 365 days a year," Capt. Matawitz said. "We're full 'go' on training." 



▲ DC1(SW/AW) Elias Robles, a member of Afloat Training Group San Diego, guides Sailors assigned to the aircraft carrier USS *Carl Vinson* (CVN 70) Repair Locker 3 hose team into a space to engage a simulated class A fire during a general quarters drill. (MC2 Stephen Rowe/USN)

Maritime Civil Affairs and Security Force Assistance Teams: Essential Tools in Haiti and Africa Partnership Station 2010

By Maritime Civil Affairs and Security Training Command Public Affairs

Capt. Cynthia Thebaud, Commodore, Destroyer Squadron 60, the crew of USS *Gunston Hall* (LSD 44) and thousands of Sailors and Marines from more than 20 countries prepared to get underway Jan. 11, in support of *Africa Partnership Station 2010* (APS) operations along Africa's west coast.

The next day's catastrophic events in Haiti changed all that. *Gunston Hall* received orders to get underway and "turn a hard right" toward the Haitian city of Port-au-Prince, and provide Humanitarian Assistance and Disaster Response (HADR) in conjunction with Joint Task Force 14.

MCAT: A Vital Asset when Operating in Dynamic Maritime Areas

It seemed almost pre-ordained that the APS flagship and her staff would be selected to help the survivors of

the catastrophe. Among the crew were 12 French-speaking interpreters and Maritime Civil Affairs Team (MCAT) 203 from Maritime Civil Affairs Security and Training (MCAST) Command.

MCAST is part of Navy Expeditionary Combat Command (NECC), which provides a diverse range of capabilities for full spectrum operations.

"Luckily for us we had some of the best trained professionals we could have hoped for to assist us with this tragedy," Capt. Thebaud said.

In addition to their normal maritime civil affairs security and stability missions, MCAT 203 is trained to provide assistance during these types of contingency operations and HADR.

"When you deal with a disaster of this scale, you have an immediate and long-term need, plus the equal dilemma of sorting out all the

support and supplies pouring in from dozens of military and humanitarian assistance groups," explained Royal Navy Cmdr. David Salisbury, APS Director of Staff. "If you can't quickly assess the situation and then figure out who and what goes to the most immediate needs, then thousands will suffer and possibly die."

MCAT 203 quickly canvassed the ravaged areas in the city and along the coastline. "As some of the first responders, we had to work quickly with the locals, the U.S. Embassy staff, numerous units and international aid agencies to get assistance to places and people," said Lt. j.g. Dan Day, MCAT 203 Officer in Charge. "This was a situation where hours mattered."

At times MCAT 203's five members were the only responders operating in a specific area. "There simply were not enough people there at first to cover



▲ Security Force Assistance Sailors assigned to Maritime Civil Affairs and Security Training Command (MCAST), onboard USS *Gunston Hall* (LSD 44), instruct Africa Partnership Station Sailors from various countries on port security and vehicle inspections. (MC2 Mathew Diendorf/USN)

all of the beaches and neighborhoods,” said BUC(EXW/SCW) Jody Binette.

MCAT 203 and the APS staff made huge contributions to the efforts in Haiti during the following month. They worked with many groups and ensured that tons of relief supplies were distributed and skills were used to the maximum extent possible.

“If you want impact and lasting results, call MCAST,” said MCAST Commanding Officer, Capt. Claudia Risner.

Their high operational tempo did not end with Haiti relief efforts. After turning over the HADR work to MCAT 207, MCAT 203 set sail for Ghana and then Senegal, in support of APS. As before, MCAT 203 did not waste any time and immediately started laying the groundwork for dozens of civil affairs and community-based projects.

An MCAT 203 team set out in advance of the ship to coordinate with host nation officials, community leaders, U.S. Embassy officials and United States Agency for International Development (USAID) staff. Their focus was to pave the way for the main body and enable the APS Commodore to execute many of her community relations and medical assistance projects.

“These teams provide excellent know-how and organizational skills,” said Joshua Karnes, a USAID health representative.

In Senegal, MCAT 203 assisted U.S. Embassy and USAID staff in developing and facilitating several projects to improve schools and health facilities in Dakar, the town of Thies and the district of Tivaoune. The projects were a collaborative effort between the MCAT, Naval Mobile Construction Battalion Seven (NMCB 7), *Gunston Hall*, and medical staff from U.S. Naval Forces Europe.

“Our projects are centered on local participation at the lowest possible level, and everyone working together as a team,” said HM1(EXW/FMF) Robert Lemon.



▲ Cmdr. Antonio Rodriguez, senior medical officer for Africa Partnership Station, administers a local anesthetic in an open wound on the foot of a Senegalese man before stitching the injury. (MC2 Mathew Diendorf/USN)

“We have worked for a long time with the U.S. Embassy staff, the U.S. Navy and the community on this project,” explained Sam Ntaire, Bouna Albouri’s Deputy Mayor. “We all recognized the importance of us working together like a family. We also know that we must make this an on-going effort with the school and others in our community by picking up where the Sailors left off.”

This collaborative approach is a founding principle for MCAST. “The objective of MCAST Sailors is to facilitate projects that are sustainable and increase a community’s overall capabilities,” Capt. Risner said. “This in turn helps to build lasting relationships with our partner nations.”

SFA MTT: Building Military Capacity and Capability with our Strategic Partners

Training and security force assistance is a major element of APS 2010. The staff also included an MCAST Security Force Assistance

Mobile Training Team (SFA MTT) which helped train 93 African students from eight partner nation navies. MCAST was at the forefront of this partner training and provided a variety of topics such as port security and assessments, train-the-trainer, and junior leadership.

“These highly-skilled Sailors come from all type of ratings and backgrounds,” Capt. Risner said. “Their mission is not only to train, but also to build and cultivate lasting relationships with partner nations.”

The SFA MTT was also hand-picked to meet the needs of the coursework, the culture and the students. For example, OS2 Christine Byll, a Togo native fluent in English and French, was selected for the mission because of her cultural and language skills.

“I can relate to the students on a deeper level, and they loved the fact that I could both translate materials and relate the training specifically to their culture,” OS2 Byll said. “They saw me more like a sister than a translator.”

The SFA MTT strives to incorporate as much hands-on and practical experience as possible. “We like to go beyond the classroom and encourage a two-way dialogue with the students,” explained MAC Robert Mosley. “We also find that they have a great deal to teach us about their navies and their way of doing things.”

This style of instruction proved to be both popular and effective. Many of this year’s APS students trained with SFA MTTs in the past, and were excited to work with them again this year.

The training made a profound impact with all involved.

“One navy cannot do it alone,” said Spanish Navy Lt. Cmdr. Mariano Romero, Commanding Officer of Spanish Navy patrol ship *Centinela* (P 72). “In a time like this when maritime safety and security is so vital, it is important that we work together to support other navies. Collaborative

training is paramount in order to integrate all navies and receive a good picture of what is happening at sea.”

“The APS mission is an excellent mission,” said Sierra Leone Navy Lt. S. A. Kamara. “I plan to take back all the training I received here and apply it to my navy. Maritime safety and security is not just important to our navy but to the whole world, and APS is a tool that helps with that.”

Why Should the Surface Warfare Community Care?

As Chairman of the Joint Chiefs of Staff Adm. Mike Mullen recently stated, “Defense and diplomacy are simply no longer discrete choices, one to be applied when the other one fails, but must, in fact, complement one another throughout the messy process of international relations.”

This relies in part on what he calls “soft power,” which involves effective sustainable relationships with partners on many military and civilian levels.

MCASTs, SFA MTTs, and MCATs offer commanders the key tools for operating successfully within this dynamic environment.

“Essentially, MCAST offers the commander a ‘reach-back’ network that gives them a ready source of maritime specific information and skills that keep their training and outreach focused on the maritime environment,” Capt. Risner stated.

MCAST missions directly support two core capabilities of *A Cooperative Strategy for 21st Century Sea Power: maritime security and HADR*.

“Although the focus of APS is on enhancing maritime safety and security, MCAT brings the expertise to

help us focus our limited community outreach endeavors in the right areas,” Capt. Thebaud said. “Whether it’s coordinating with local authorities and our Seabees for structural work projects at schools or medical clinics, they’re the people who make it all happen. They demonstrate daily through personal interaction our intention to be true partners for progress and stability in the region.”



MCAST Deploys Two Types of Teams:

- **Maritime Civil Affairs Teams (MCAT)** to facilitate civilian-to-military operations. They work with partner nations on the national and local level, U.S. Embassies and non-governmental organizations (NGO).
- **Security Force Assistance – Mobile Training Teams (SFA MTT)** to conduct military-to-military training. They support exercises and training with partner nations to build their military competency, capacity and capability.

MCATs and SFA MTTs draw from a variety of designators and ratings, including many of the surface warfare fields. MCAST also employs Sailors with specific language and cultural backgrounds that enhance diverse missions.

About 40 percent of MCAST is composed of Navy Reservists.



▲ Security Force Assistance Sailors assigned to Maritime Civil Affairs and Security Training Command (MCAST), onboard USS *Gunston Hall* (LSD 44), instruct Africa Partnership Station Sailors from various countries on port security and vehicle inspections. (MC2 Mathew Diendorf/USN)

LSD/LPDRON LAUNCHES ENGINEERING READINESS PILOT PROGRAM

By Commodore Jon Padfield, Commander, LSD/LPD CLASSRON



◀ The amphibious dock landing ship USS *Comstock* (LSD 45). (MC2 Jon Rasmussen/USN)

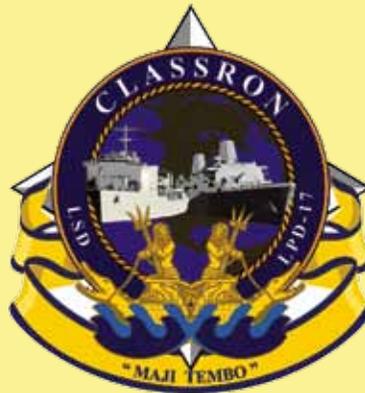
Improving the warfighting readiness of ships and Sailors is the chief objective of the Class Squadron (CLASSRON). In January, the Dock Landing Ship Class Squadron (LSD/LPDRON) launched a pilot project onboard five LSDs in an effort to improve the readiness of the marine diesel engines used by the class.

The project is centered on the adaptation of marine diesel maintenance and readiness practices used by the Military Sealift Command (MSC).

MSC ships typically support Navy operations at sea more than 180 days per year. In fact, many MSC ships remain on station for 210 days or more, showing the remarkable sustainability and flexibility of their marine diesel engine propulsion and auxiliary systems.

Over the course of the past year, CLASSRON and LSD shipboard engineering experts have worked with MSC engineers to identify areas for improvement onboard LSDs that can be brought about by adopting selected MSC practices.

Some of these practices include improved operations and watchstanding processes as well as watchstander core knowledge development.



Mr. Ray Blanchet, the port chief engineer at the Military Sealift Fleet Support Command, believes MSC's success can be traced back to the command's acquisition of its first fleet oilers back in the mid-1980s. He said the new, complex vessels required shipboard engineers to reduce their dependency on external support and increase their self sufficiency in order to remain an effective part of the Navy.

"Since then, MSC has developed a high level of self sufficiency that allows the vessels to handle routine maintenance and repairs as a normal course of business and to tackle emergent repairs that are only limited by available shipboard assets," Blanchet said.

In an effort to assess the feasibility of adopting several successful MSC

practices, Commander, U.S. Fleet Forces Command approved the pilot project incorporating select MSC practices in operations, maintenance and training onboard five Navy LSDs.

Some of those practices include:

- Minimizing the starting and stopping of equipment. The goal of reducing equipment starts and stops is to reduce the associated wear and tear as well as associated equipment casualties. MSC conducts equipment shifts only as necessary.
- Improving the knowledge and skill levels of Engineering Department watchstanders and maintainers by increasing available training opportunities. The average MSC Sailor is 47 years old with more than of 20 years service.
- Authorizing pilot project ships to streamline the engineering watchbill by combining watchstations. MSC utilizes automation and remote monitoring to run their engineering plants with minimal manning.

The year-long evaluation, administered by LSD/LPDRON, is being done onboard:

- USS *Whidbey Island* (LSD 41)
- USS *Comstock* (LSD 45)
- USS *Carter Hall* (LSD 50)
- USS *Oak Hill* (LSD 51)
- USS *Pearl Harbor* (LSD 52)

Points of contact for the LSD Engineering Pilot Program are Lt. Cmdr. Derrick Hutchinson and CWO4 James Gallagher, 619-556-4839."



Navy Combatant Construction Builds Upon Successes

By Capt. Edward Lundquist, USN (Retired)

The U.S. Navy is leveraging successful aspects of two different surface combatant construction programs to improve both of them.

The *Arleigh Burke* (DDG 51) class of guided missile destroyers is nearing completion of the original 62 ships planned for the class, but at least three more of them will be procured with the restart of the production line.

The first of three *Zumwalt* (DDG 1000) class guided missile destroyers started fabrication in February 2009. Despite the highly transformational nature of virtually every part of the *Zumwalt* class, the construction began when the design was more than 80 percent complete, a greater level of design fidelity than any other combatant class has experienced at the start of construction.

Two shipyards – General Dynamics' Bath Iron Works (BIW) in Maine and Northrop Grumman Shipbuilding (NGSB) in Mississippi – are building *Arleigh Burke*-class destroyers. NGSB will assemble the DDG 1000 composite superstructures on the Gulf Coast, and then transport them by sea to BIW where they will build the three *Zumwalt*-class destroyers.

DDG 51's design and building process is proven and well understood. Many of the lessons learned in making the program so successful are now being employed with DDG 1000, according to Capt. Jim Syring, the Program Manager for DDG 1000.

Both ship construction programs use Computer Aided Design (CAD). The authoring tool is called Computer Aided Three-dimensional Interactive Application (CATIA), with the data managed by a system called Enterprise Innovation Interactive Application software (ENOVIA). All of the design

functions – including diagrams, three-dimensional (3D) models and drawings – are integrated into one system. The common system ensures a ship will be the same regardless of where it is built.

The 3D models allow examination of spaces with components, piping and wiring to see where equipment may fit, and how it should be installed. For example, engineers can try different ways of virtually removing an auxiliary seawater cooling pump from a space to see which way is best. Ergonomic studies can be done with virtual Sailors to see how to configure equipment for optimal operation and maintenance.

"We build directly from the model," Capt. Syring said. "It all links together."



▲ In March 2010, Bath Iron Works moved the *Zumwalt* peripheral vertical launch system (PVLS) unit outside, lifted and turned it, before returning it for continued work in an enclosed manufacturing environment. This is the first time that a DDG 1000 PVLS unit was turned, marking a milestone in the construction of the newest generation of surface combatants at Bath Iron Works. (Photo courtesy of Bath Iron Works)

The 3D design tool is useful in production planning. Designers can try many different ways to fit the pieces together before deciding what arrangement and process works best.

The first DDG 1000 was "virtually built" numerous times in CAD to validate the process before the first piece of metal was cut. The goal is to build a "producible ship," said Tom Bowler, BIW's vice president of programs.

"Once construction begins, it's important to resist the temptation to change or improve upon the design," Capt. Syring said. "Requirement stability is the key."

"Rarely do you make up in production what went wrong in design," explained Dirk Lesko, BIW's vice president for DDG 1000.

Alternatives for successfully employing CAD tools on other shipbuilding options are now being examined for the DDG 51 restart. Also, employing DDG 1000 common design standard "best practices" will be considered to help maintain cost efficiency.

"We are managing shipbuilding as a portfolio rather than a series of disparate, independent programs," explained Capt. Pete Lyle, DDG 51 Program Manager.

More Work Upstream

DDG 1000 has many developmental systems. The ship and systems evolved in parallel, and the design was more mature when construction began than previous combatants.

"The ship was designed around something that could be built," said Cmdr. Kevin Smith, the Program Manager's representative with the Supervisor of Shipbuilding, Conversion and Repair (SUPSHIP) at Bath.



▲ A 900-ton keel unit of the future USS *Spruance* (DDG 111) is removed from the Ultra Hall at General Dynamics Bath Iron Works (BIW) shipyard in Bath, Maine. The keel unit represents the first “ultra” module to be fabricated in BIW’s 1.5-acre facility, which allows workers to complete construction, pre-outfitting, and testing in a controlled climate. These advancements will be used in future *Arleigh Burke* and *Zumwalt-class* ship construction. (Photo courtesy Bath Iron Works)

DDG 1000 has 16 electronics module enclosures (EMEs) that are fully outfitted with 230 cabinets. The EMEs are fully tested and ready to install, saving 110,000 man hours per ship. “It brings the factory to the ship,” said Rear Adm. Bill Landay, Program Executive Officer for Ships (PEO Ships).

Traditionally, construction crews built basic hulls on an inclined building way, and then slid them down into the water when the hull was able to float. Then they completed the outfitting while the hull sat in the water pierside.

Today, more of the construction is done “upstream.” Sections of both DDG 51 and DDG 1000 are built as modules at a fabrication facility in nearby East Brunswick, Maine, and then transported by land to the shipyard. The sections are put

together in a huge building called the Ultra Hall, an investment that is paying dividends for both programs. Then each section is completely outfitted while inside the Ultra Hall under much more favorable conditions, with all tools and materials easily accessible, than if the ship were pier side.

The density of outfitting drives the shipbuilding cost. Today, crews do about 15 percent of the work while the ship is in the water.

“With more work done upstream, it’s safer, more efficient and more cost effective,” Bowler emphasized.

The DDG 51s are built in 25 different sections called units. They are joined together to become progressively larger units called super units, then mega units and then ultra units. The largest units are completed in the Ultra Hall. After the Ultra Hall,

the ship is taken out to the Land-Level Transfer Facility (LLTF) where masts and weapons are installed.

The A/N SQQ-89A(V)15 sonar is “government furnished equipment,” which is delivered to the yard. It is one of the last components to be installed before the ship is moved into the water.

Commonality

While the two destroyer classes have very different propulsion and combat systems, some aspects of the basic HM&E (hull, mechanical and electrical) systems, like valves and pumps, are very similar. The *Zumwalt* class was designed so that it will use many of the same parts created for DDG 51, and have fewer parts overall. DDG 1000 will have 30 percent fewer parts than the DDG 51.

Significant efficiencies are achieved by standardizing and reducing the total replacement parts library. “Instead of the shipbuilder buying all new ship parts, we directed them to reuse as many of the basic DDG 51 parts as possible,” Rear Adm. Landay explained. “There will be 63 percent parts commonality.”

From a larger point of view, the Navy is also standardizing on the types of ships. In 1988, the Navy had six classes of frigates and five classes of destroyers. Today it has one of each.

“Commonality will help keep our acquisition and our life cycle costs down,” Rear Adm. Landay said.

While there is little overlap between the programs, techniques perfected with DDG 51 have been employed to the benefit of the DDG 100 program. And investments made to build DDG 1000 have had an added benefit of making the DDG 51 production line better.

Follow-on ships are now built faster, more efficiently and more economically because much is learned with the initial ships, helping reach the goal of reducing risk and building the first ship like a follow-on ship.



Surface Forces Training Update

By Capt. Kurush Morris, Commander, Naval Surface Forces Training and Readiness Officer

As operational requirements for surface warriors continue to grow, it is becoming increasingly important to optimize shipboard training so that we can continue to execute the maritime strategy, meet combatant commander's tasking, and achieve necessary efficiencies while maintaining the highest level of proficiency across all warfare areas.

Updating Resources

When surface warriors pick up the latest revision of the Surface Forces Training Manual (SFTM), they will notice several changes implemented which reduce the administrative burden on surface ships while maintaining high standards.

The most significant change made to fleet training has been our transition to Fleet Response Plan (FRP) based certifications, which effectively aligns with deployment cycle variations. In most cases this means mission area certifications will go from basic



▲ GM2 Andres Fernandez and GMSN Thomas Chapman demonstrate proper handling of M-16 rifles during small arms qualifications aboard the amphibious dock landing ship USS *Tortuga* (LSD 46). (MC1 Geronimo Aquino/USN)

phase to basic phase, and enables required flexibility for those ships with deviations from standard cycle training such as multiple deployments between basic phase training.

Another change is an increase in the basic training phase allotment to a full 20 weeks. Previously set at 16 weeks, the new timeline will decrease the burden on both ships, and the shore commands that support them, after a maintenance availability during which basic training is conducted.

These revisions also increase the periodicity of the Unit Level Training Assessment-Sustainment (ULTRA-S) from every six months to every 15-21 months. This means no ULTRA-S while on deployment, enabling Sailors to fully focus on operational tasks. The new ULTRA-S will be lengthened from three to five days, allowing for more in-depth assessment and validation that optimal levels of

proficiency are maintained with less frequent inspection.

Revolutionizing Certification Requirements

The requirements for maintaining proficiency throughout the training cycle have traditionally been based on fleet exercise publications (FXP). FXP requirements, however, represented a second and separate set of requirements and were in need of an update to accommodate the flexible, fluid nature of modern operational schedules.

To meet this challenge, FXPs are now incorporated into the SFTM so you have a comprehensive list of ship training requirements represented as continuous certification requirements (CCR). Additionally, rather than dictate the former and more frequent M1 readiness periodicity for FXP completion, the current FXP CCR



▲ Sailors aboard USS *Makin Island* (LHD 8) plug a ruptured pipe during a repair locker training drill. (MC2 Kellie Arakawa/USN)

periodicity is now fixed at M2 for consistency, which more accurately reflect operational requirements.

CCRs are deliberately constructed to allow for easier completion than FXPs. For example, the harbor navigation package previously required piloting by gyroscope, piloting during low visibility, piloting during loss of gyroscope and piloting a swept channel all in a single event, creating a substantial administrative burden. The module is now tracked as four separate CCRs that can be completed independently, providing more flexibility for ship training and CCR tracking.

Investing in our People

Two formal training courses continue to be instrumental in effectively preparing Surface Warfare Officers (SWO) for success – the Surface Warfare Officers Indoctrination course (SWO Indoc), and the Senior Officer Ships Maintenance and Repair Course (SOSMRC).

SWO Indoc is a four-week course centered on improving warfighting readiness through interactive lectures

with exposure to senior leadership. The curriculum is designed to empower prospective SWOs by providing them the basic knowledge and skills they need to make an immediate impact on their ships.

Students dive into practical, hands-on training to understand damage control, engineering, navigation, seamanship, shiphandling, and maritime warfare during the first three weeks. The final week is focused on leadership development.

SWO Indoc is currently offered in San Diego; Norfolk, Va.; Mayport, Fla.; Everett, Wash.; Pearl Harbor, Hawaii and Yokosuka, Japan. Nearly 900 students have graduated since the program began in 2008.

SOSMRC is a five-week course attended by prospective Commanding Officers (PCO) and prospective Executive Officers (PXO) from around the Fleet. It is designed to improve and sustain overall ship and surface forces readiness.

SOSMRC is an updated version of a 13-week course available in the 1980s and 90s. The course is focused on providing PCOs and PXOs with

core knowledge and skills such as damage control procedures and equipment operation, material self-assessment and shipboard safety requirements, to be better prepared for assessing the material readiness of their prospective command.

During the first four weeks, training is conducted in individual and team environments that vary in combinations of classroom instruction, lab work, practical application and examination. In the fifth week, the PCOs and PXOs will be aboard a ship either in Norfolk, San Diego, or Mayport for their final lessons. They go aboard ships similar to the ones they will soon command. Newport, R.I. hosts about 140 SOSMRC students a year.

The Way Ahead

As we look to the future and how to best prepare our Sailors for the challenges they will face, we are developing a blended training solution that incorporates embedded shipboard trainers, shore-based trainers, and formal schoolhouse training.

Regardless of command or platform destination, any Sailor will begin the training process at the schoolhouse with basic instruction. Ideally, they will next proceed to a shore-based trainer to gain more hands-on experience, and finally report to their ship and put their training into operation. Shore-based refresher training provides continuous proficiency throughout a Sailor's career.

Sustaining a high level of readiness requires a significant level of flexibility and adaptability, neither of which are possible without a strong training foundation. As operational requirements continually shift, so, too, will our training mechanisms adapt and develop. What will not change, however, is our focus on doing everything possible to ensure we remain ready today, while preparing for tomorrow. 



▲ A hose team applies water to a fire during firefighting training at the Yokosuka Center for Naval Engineering Fire Fighting and Damage Control Learning Site. (MC3 Andrew Smith/USN)

Surface Forces Selects 2009 SWO of the Year

By Commander, Naval Surface Force Atlantic Public Affairs

Lt. Cmdr. Emily Wall recently attended a captain's call aboard USS *Nitze* (DDG 94), and during the call learned she had been selected as the Naval Surface Forces Surface Warfare Officer (SWO) of the Year.

The announcement left her speechless. "I was so shocked and surprised; when he asked me if I wanted to make a comment, I couldn't say anything," she said.

The Combat Systems Officer aboard *Nitze* and a 10-year Navy veteran, Lt. Cmdr. Wall was selected from a group of stellar SWO candidates from frigates, cruisers, destroyers and amphibs from Surface Forces Pacific and Atlantic.

The award recognizes "the Surface Warfare Officer who best personifies the ideals of SWO pride: excellence in warfighting and leadership, expertise in tactics, engineering, and weapons systems, and a commitment to mission accomplishment through superior professionalism and personal example."

Lt. Cmdr. Wall served as *Nitze's* Combat Systems Officer during the ship's 2008/9 Arabian Gulf deployment with the *Theodore Roosevelt* Carrier Strike Group. The ship operated in tactically-challenging environments, and conducted a variety of missions including maritime interception operations in support of Commander, Task Force Iraqi Maritime.

Lt. Cmdr. Wall said she is proud to have been selected SWO of the Year, but shares the success of her selection with her shipmates. "I think there



▲ Lt. Cmdr. Emily Wall, USS *Nitze* (DDG 94).

are a lot of people who work hard on this ship, and they have a part of this award," she said.

A *Nitze* crewmember since 2007, Lt. Cmdr. Wall has demonstrated outstanding leadership qualities, winning the ship's leadership award two years in a row. She said her recipe for getting the most from her Sailors is simple. "Give everybody the knowledge that they can embark change aboard the ship, and give them the opportunity to do so."

For junior SWOs, Lt. Cmdr. Wall recommended they start hungry for

challenges and be eager to learn. "Have a questioning attitude when it comes to your personnel and your equipment, and be aggressive with your qualifications," she advised.

A San Diego native, Lt. Cmdr. Wall leaves *Nitze* this summer for her next assignment as a student at the Naval War College in Newport, R.I. She will receive the Navy and Marine Corps Commendation Medal for her achievement, and a plaque in her honor will be displayed at the Surface Warfare Officers School in Newport.



Gravely Goes Back-to-Basics

No substitute for hands-on experience

By Ensign Jeff Wencl, Public Affairs Officer, PCU *Gravely* (DDG 107)

Like many ships in the pre-commissioning process, a significant portion of pre-commissioning unit (PCU) *Gravely's* crew is reporting aboard straight from Recruit Training Command Great Lakes, Ill., "A" and "C" schools, and various officer accession programs.

"Over half of our crew is straight out of basic training," observed *Gravely's* prospective Commanding Officer, Cmdr. Douglas Kunzman. And many of *Gravely's* senior Sailors have little shipboard experience and qualifications.

In light of an absence of experience, Cmdr. Kunzman believes pre-commissioning (PRECOM)

detachments must establish a command training team and training program early. Officers, and senior and junior enlisted should all participate in the program to help get Sailors well trained.

He noted that while computer-based training has significant merit in training operators and teams, there is limited utility when it comes to training technicians responsible for maintaining and fixing the equipment, unless coupled with hands-on training or when used as a refresher course. "You must be able to feel it, touch it and smell it," Cmdr. Kunzman explained, "to get the practical knowledge to stick."

Under the guidance of *Gravely's* prospective Executive Officer, Lt. Cmdr. Michael Witherspoon, the Norfolk-based PRECOM detachment developed a training pipeline for its Sailors, capitalizing on existing training opportunities at Naval Station Norfolk, and new relationships with area commands.

Partnering with Norfolk Naval Shipyard (NNSY) Deputy Shipyard Commander, Capt. Derrick Mitchell, they merged their leadership teams and built a hands-on training opportunity for all PRECOM Sailors. Initiated as a pilot program in May 2009, *Gravely* and PCU *Jason Dunham* (DDG 109) Sailors participated in the joint venture with instructors from NNSY engineering and technical shops.

Coordinating through DCC(SW) Robert Thompson of NNSY, OSC(SW) David Jackson and ISC(SW) David Yee successfully implemented a hands-on training program that helped more than

160 junior Sailors better understand and apply the knowledge they gained from "A" and "C" Schools.

"School house knowledge doesn't cover everything these Sailors are going to need," explained DC1(SW) Andrew Woods, a subject matter expert (SME) at NNSY. "They need to place their hands on the equipment and physically look for the problems to understand them. That is what we do here at NNSY."

OSC(SW) Jackson and ISC(SW) Yee formulated a plan which combined the training and knowledge of NNSY's master technicians and military SMEs with hands-on technical familiarization and troubleshooting experience for Sailors.

Gravely's Sailors now learn their rate-specific trade before setting foot in their actual work spaces. They have completed more than 2,000 hours of training.

In addition to receiving hull, mechanical, and electrical (HM&E), shipboard, and combat systems training, trainees have also studied standard troubleshooting procedures. Sailors in engineering ratings have logged more than 300 hours of classroom and on the job training.

These unique experiences have presented great opportunities for hard charging Sailors as they get a peek of what will be expected of them aboard *Gravely*, as well as contributing to their growing knowledge of their rating.

"There are three things we have as a PRECOM," Cmdr. Kunzman said. "Time, funding, and motivated young Sailors. We need to take full advantage of each." 



▲ PCU *Gravely's* (DDG 107) Chief Engineer Lt. Curtiss Bailey watches as IT1(SW/AW) Anthony Goldsmith, ENCS(SW) Luther Foster, FC1(SW/AW) Victor Guzman, and STG1(SW) Brad Goulden learn watertight door and hatch maintenance in Pascagoula, Miss. (FC1(SW) Robert Pryor/USN)

INSURV Puts the Spotlight on Safety

By Cmdr. David Ellenbecker, Deputy Chief of Staff, Occupational Safety and Health (OSH) and Environmental Protection (EP), Board of Inspection and Survey

When a division officer hears the words “INSURV inspection,” he knows that there are a million things to be done in preparation.

In the struggle to prepare, it is possible to overlook potential safety hazards. The Board of Inspection and Survey (INSURV) is committed to ensuring that safety is paramount as crews prepare for and execute material inspections. A team of occupation, safety and health experts, as well as experienced technicians and leaders in every facet of shipboard life, works hard to find, fix and document critical safety hazards.

Congress established INSURV in 1868 to help ensure that U.S. Navy ships are properly equipped for prompt, reliable and sustained operations at sea. Today, each ship in the Navy receives a material inspection (MI) every 48-60 months. Last year, the board conducted 31 surface ship inspections.

Despite the herculean effort ships put in to prepare for inspection, safety hazards continue to be found. Some of the more common and critical safety discrepancies seen by the INSURV occupational health and safety teams occur in electrical safety, tag out, hazardous material (HM) storage, securing for sea and ladder safety.

Electrical Safety

With the recent and tragic deaths of two Sailors due to electrical shock, much of the Fleet’s safety focus is on electrical safety. One of the fatalities involved incidental contact with a dilapidated power panel while the Sailor was standing in water. The other involved a Sailor working on an



▲ Dead-ended cables like these are probably the most common electrical safety hazard found by the Board of Inspection and Survey. (Cmdr. David Ellenbecker/USN)

energized load center while racking out a circuit breaker.

The most common electrical safety hazards uncovered during recent INSURV inspections involve:

- Dead-ended cabling (electrical wiring)
- Damaged/ degraded panel covers (for fuse boxes, power panels, etc.)
- Eyewash stations placed in close proximity to electrical equipment
- Damaged electrical sheathing and exposed wiring
- Damaged/ worn rubber toggle switch boots
- Piggy-backed surge suppressors

The number of computers, printers, speakers, and other electronic devices aboard ships is constantly increasing and so are the challenges of maintaining and safely routing all

of the associated wiring. Don’t be the next person to walk up and touch a cable that just happens to be live with electricity!

Tag Out

A big part of a ship’s electrical safety posture involves the proper execution of the tag out program. Finding tag out violations – or incorrectly prepared tags – is not an easy task. With greater than 95 percent of the tags being filled out properly, one would think we are doing a great job. This program, however, must strive for perfection. One small mistake could cost a Sailor’s life or result in severe damage to equipment.

“By far, the most common violation we see involves inoperative equipment that is not tagged out,” said Lt. Tom Foegelle, one of INSURV’s leading tag out inspectors.

These pieces of equipment are out of commission and are often listed in departmental eight o’clock reports as being inoperative or out of commission, but for some reason there is no tag out.

Incomplete tag outs and tags missing Commanding Officer (CO) authorization are the next most common violation areas. It is critical to note that some systems often include both mechanical and electrical components that must be tagged, and many switchboards and fuse boxes have redundant or multiple sources of power. Failure to get all of the components tagged out can cause severe personal injury or serious damage to the equipment.

Tag outs involving single valve protection from certain systems

(such as steam and fuel) require CO authorization. Despite the Fleet's shift away from paper tag out logs to the Shift Operations Management System (SOMS), tag out violations continue to be an area that requires intrusive leadership.

Hazardous Material Storage

The top issue for HM continues to be stowing incompatible materials together. The board regularly sees acids stored right next to or on top of strong bases, flammables next to oxidizers, and alcohols with acids – all potential hazards. While reviewing spaces or lockers containing HM, one should see “likes” stored with “likes,” not piles of different types of HM containers mixed together.

Another HM trouble area involves the paint locker. During inspection preps, ships often conduct a great deal of painting, and as a result the paint lockers become one of busiest spaces on the ship. For inspection, the locker should be clean, neatly stowed, with



▲ Liquid bleach (a corrosive oxidizer) and this acetone container (flammable) should be stowed in separate storage areas with at least three feet of separation. (Cmdr. David Ellenbecker/USN)



▲ Excessive amounts of leaking and unlabeled containers continue to be problem for Fleet paint lockers. (Cmdr. David Ellenbecker/USN)

no leaking or open containers, and all containers should have legible labels. All too often the paint locker gets neglected. With a little attention to detail, you can prevent unnecessary chemical exposures to your paint locker personnel and minimize the potential for a HM spill.

What does your paint locker look like?

Secure For Sea

A mainstay event during an INSURV inspection is the full power run, emergency crash-back and rudder swing checks. These events can lead to heavy rolls and sudden shifts of unsecured items. Despite practice runs prior to the inspection and constant 1MC announcements calling “all hands secure for sea,” crews still fail to properly secure loose items. The greatest concern in this area involves compressed gas cylinder and HAZMAT stowage.

With hurricane season rapidly approaching, the time is now for checking your safe stowage for sea!

Ladder Safety

During the safety administration inspection, the ship's accident and injury logs are reviewed. These list all

personnel injuries reported to medical. Some of the most common injuries are slips, trips and falls. Many of the falls occur on ladders.

Shipboard ladder inspections consistently find ladders that are missing safety chains, have loose or damaged treads, or lack proper hand-rail clearance. Any one of these can serve as the prime causal factor to a ladder mishap. Take a few extra minutes and look at your ladders to make sure they are in good working order. Your efforts could prevent a major injury.

Shipboard life is inherently dangerous; there are so many moving parts and complex evolutions. In order to safely mitigate all of the hazards we must constantly be on the look-out for them. These tips from the “Gray Coverall” crew at INSURV are shared not to point out deficiencies, but to help draw attention to some of the current safety concerns. If we take just a few moments to focus in on safety, we can complete our mission and keep each other safe from harm!



HISTORY IN THE NAMING

By MC1(AW) Scott Vanderwyst, *Surface Warfare*

From the founding days of our Navy, when sail and 24-pound cannons were the order of the day, to our current era of nuclear-powered ships and precision guided weapons, the Navy is constantly developing new technologies and maritime strategies. In some cases, however, the more things change, the more they stay the same. Despite our modern capabilities, many of the spaces aboard ships from which we conduct operations, retain names steeped in tradition.

How did the bridge get its name? Why is the jail called a brig? Where did the forecastle (foc'sle) get its name? Why do we call the bathroom a head? Ever wonder why you have to salute the watch at the quarterdeck? Why do officers sleep in a stateroom and eat in the wardroom?

From the days of the Roman Empire and the Vikings to the days of the paddlewheel riverboats, each of the spaces listed below have an interesting tale to tell.

Bridge. When ships transitioned from sail to steam, orders were given by remote methods such as the engine-order telegraph. A control

deck with an enclosed pilot house was constructed above the main deck of the ship, usually reaching across the entire deck, thus "bridging" it. It described the space where captains gave orders and steered the ship.

Brig. A small and versatile warship of the sailing era was called the brigantine, a French term meaning bandit. Fast and well-armed for its size, it served many purposes for the English Navy, including personnel transport. Adm. Horatio Nelson found them useful to transport prisoners-of-war back to England. His numerous victories led to many of the brigantines being modified strictly as sea-going jails. Thus, captured enemies were sent to the "brig."

Forecastle. This space, located in the forward part of the main deck, got its name from the days of Viking galleys when wooden castles were built on the forward and aft parts of the main deck. From there, archers and other fighting men could shoot arrows and throw spears downward towards their enemies.

Head. Since sailing ships could not lie directly into the wind when underway, toilet facilities were placed forward in the bows. This ensured that the unpleasant odors would be blown downwind and away from the ship. The extreme forward part of a ship was known as the "beakhead," which over time was shortened to "head."



U.S. Frigate **Constellation** confronts the French frigate **Insurgente** circa February 1799. (Photo courtesy of Naval History and Heritage Command)

Quarterdeck. During the Roman Empire, small religious shrines were set up aboard ships. Sailors going by would take off their hat in respect – or saluted it – as they passed. This routine of saluting on the quarterdeck still persists today. Some historians, however, place this tradition much later to medieval England. It was also the place where Sailors gathered to muster and receive their orders. This is the origin of the watch, quarter, and station bill.

Stateroom. This space got its name from the first-class cabins aboard the paddlewheel riverboats which steamed up and down the major rivers of the United States during the 1800's. Each first-class cabin was named after a state in the union.

Wardroom. This space was originally called the wardrobe room. It was a place where officers kept their spare clothing, and where they secured loot taken from enemy ships. Wanting some privacy on crowded ships, officers would sometimes take their meals to the wardrobe room.



▲ USS **Farragut** (DDG 99) sails alongside USS **Dwight D. Eisenhower** (CVN 69) during a replenishment at sea. (MC2 Gina Wollman/USN)

Book Reviews

Vicksburg, 1863

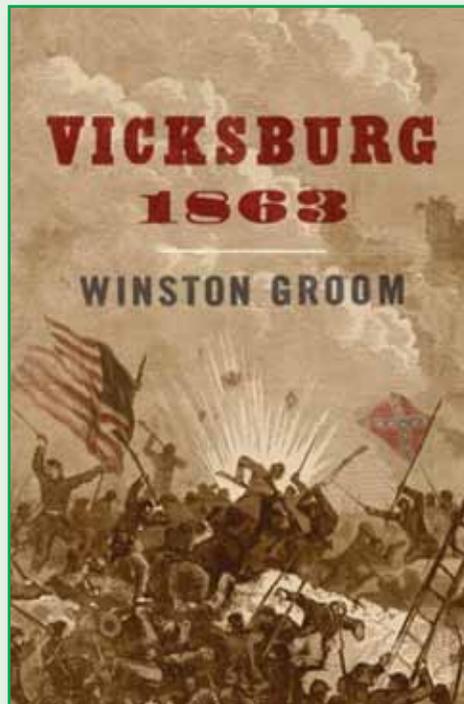
By Padraic McDermott

This past April, a 2009 work of history by Walter Groom hit paperbacks to the benefit of all those interested in the history of U.S. joint operations between the Army and Navy. As Groom shows, Vicksburg is a seminal battle in American military history for many reasons: its effect on Confederate fortunes, which Groom argues was decisive; its importance to the career of Gen. Ulysses Grant; the short-term impact on public and congressional support for the Lincoln administration's war efforts; and the historic cooperation between the Army and the Navy, which delivered Union victory.

Fifteen decades after the outbreak of the Civil War, it is somewhat difficult to imagine the importance of western rivers to the national economic fabric in those days. The city of Vicksburg, Miss., was located at a strategic and well-defended point on the Mississippi River. Its importance was, by 1862, much increased by the fall of Southern strategic bastions both north of the city and south – at the river's mouth itself – at New Orleans. Vicksburg became the major obstacle to the Union's campaign to shut down interior Southern river traffic completely, as well as sever a major portion of the western Confederacy from the eastern seaboard states.

Grant was joined in the list of famous names by other Army generals, including Sherman and Halleck, as well as names which would enter the annals of naval history: Farragut, Porter, and Foote. Groom's primary intention is not to write a naval history, but in his detailed and well-paced

Summer 2010



narrative, he takes ample time to explain the challenges faced by Union forces and their adversaries in a battle which would rise and fall based on the control of the river.

The Union Navy, while dominant in the blue water where it enforced the embargo of Southern shipping, did not begin the war with ships or Sailors prepared for riverine warfare. However, northern industrial superiority, and the fact that nearly all American shipbuilding resided in the North before the war, enabled the Union Navy to put to sea small fleets of ironclads with shallow enough drafts to navigate most of the Mississippi River. To deliver more capability, the War Department and the Navy Department each bought

smaller river craft and whole crews along with them.

Army and Navy commanders cooperated relatively well throughout the campaign. This is understood by the fact that many of the naval craft were manned by Army soldiers, while others had civilian crews.

The most dramatic challenges arose from the fact that many of the "naval" craft were in fact manned by Army soldiers, and many also had civilian crews, who were pressed into service or lured into volunteering. The Navy itself faced acute manpower shortages and fought efforts to divert Sailors to interior forces.

The story of *Vicksburg, 1863* is a case study of how military commanders can overcome minor issues and major obstacles in a resource-constrained joint environment. Groom ably brings to life the enormous personalities and agonizing stakes of victory and defeat. He winds his narrative to include both the national concerns of the War and Navy Departments and to the short-range fighting between rival Sailors. Along the way, the author provides a vivid reminder that naval forces played an instrumental role in the Civil War. 

Vicksburg, 1863

By Walter Groom

Vintage (April 20, 2010)

512 pages

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List price: \$17.00

Looking to Quit Tobacco? Here's How ...

By Hugh Cox, Navy & Marine Corps Public Health Center Public Affairs

It's no secret that tobacco use is a health hazard, increasing the risk of various forms of cancer and other serious health problems.

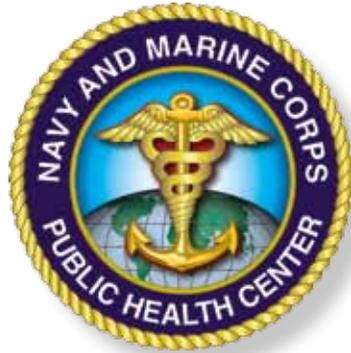
For years, U.S. Surgeon Generals and the Center for Disease Control (CDC) have encouraged Americans to quit using tobacco. They have designed messages and campaigns to promote the prevention and cessation of tobacco use, and to educate all segments of the population about the harm of secondhand smoke.

Not surprisingly, the Department of Defense (DoD) and the Department of the Navy (DoN) have been equally aggressive with touting the negative health impacts from habitual tobacco use, including a DoD campaign targeting young adults called, "Quit Tobacco: Make Everyone Proud."

Of equal concern to Navy leadership is the impact that tobacco has on a Sailor's ability to effectively perform their mission. The negative effects of tobacco use include increased illness, reduced fitness, increased stress, reduced productivity and time away from the job due to smoking breaks, and contending with physical and psychological effects of nicotine withdrawal.

In fact, unauthorized smoking has been linked to the fire that occurred aboard USS *George Washington* (CVN 73) in 2008. The investigation determined that the likely cause of the fire was unauthorized smoking which ignited flammable liquids and other combustible material improperly stored in an adjacent space.

"If you smoke or use smokeless tobacco products as the tobacco companies suggest, it will kill you,"



said Dr. Mark Long, from the Health Promotion and Analysis Department at the Navy and Marine Corps Public Health Center (NMCPHC). "Smoking harms almost every organ in your body."

In 1994, the Pentagon adopted a policy prohibiting smoking in DoD buildings and recently, the Navy announced a new policy banning smoking aboard submarines, acknowledging the dangers associated with secondhand smoke to non-smokers and smokers alike.

"The real challenge begins at the deck-plates, helping Sailors quit tobacco use," Dr. Long emphasized. "There are many ways to stop use and finding a way that works best for you is the key." He said that it is important for Sailors to identify their personal reasons for quitting, then decide to quit, select a date and develop a plan for quitting, and then stay tobacco free.

"This process has successfully worked for hundreds of Sailors," he said.

Dr. Long further suggests speaking with shipboard medical staff to help begin the process and see what options are available aboard, online or through the local military treatment facility (MTF).

Fortunately, there are plenty of web-based resources available for

Sailors and their families to assist in quitting tobacco use. NMCPHC, CDC, DoD, HealthNet, and the federal government all have robust websites with numerous tips, tools and programs.

By calling 1-800-QUITNOW, anyone can speak to a coach and develop a plan for quitting tobacco.

MTFs offer counseling, medications and group classes and/or seminars on tobacco cessation.

The following is a list of the websites previously referenced and other helpful references:

NMCPHC:

http://www.nmcpHC.med.navy.mil/Healthy_Living/Stages_of_Change/index.aspx

NMCPHC

http://www.nmcpHC.med.navy.mil/Healthy_Living/Tobacco_Cessation/quitting_resources.aspx

CDC

www.cdc.gov/tobacco/quit_smoking/how_to_quit/quit_tips/index.htm

HealthNet

<https://www.hnfs.net/bene/healthyliving/Tobacco+Printable+Resources.htm>

DOD Quit Tobacco:

Make Everyone Proud
www.ucanquit2.org

Smokefree:

www.smokefree.gov

For more information on health and wellness, visit the Navy and Marine Corps Public Health Center website at www.nmcpHC.med.navy.mil.





SHIP SHAPE

Are you an expert at identifying surface combatants from foreign navies? Can you tell whether a ship on the horizon is an ally or an enemy? It's time to test your ship identification skills. How about all of you manning the "big eyes," take a look at the ship pictured below and let us know what type of vessel it is, its name and what nation operates it.

Send your entry to surfwarmag@navy.mil with "Ship Shape" in the subject line. Be sure to include your rate, name, ship or unit of assignment and current mailing address. The first individual to provide the correct information will receive recognition in the next issue of *Surface Warfare*.

Congratulations to David Lyle, a retired Navy commander now working as an operations research analyst at Headquarters, Military Sealift Command, who was the first to identify last issue's ship as the Royal Thai Navy medium landing ship HTMS *Surin* (LST 722).



▲ The Royal Thai Navy medium landing ship HTMS *Surin* (LST 722) transits the Gulf of Thailand while participating in *Cobra Gold 2010*, an annual exercise designed to train Thai, U.S., Republic of Korea and Singaporean task force personnel. (MCI Geronimo Aquino/USN)



◀ This ship maneuvered alongside USNS *Leroy Grumman* (T-AO 195) during an underway replenishment while participating in exercise *Joint Warrior 10-1*. (MCI Darius Jackson/USN)

Views

From the Fleet

► Service members from Fleet Activities Sasebo, Japan participate in a Sexual Assault Awareness 5-kilometer run. Participants wore white ribbons to spread awareness of the effects of sexual assault on a community. (MC3 Casey Kyhl/USN)



◀ Sailors aboard the guided-missile destroyer USS *Laboon* (DDG 58) heave a mooring line during sea and anchor detail as *Laboon* gets underway after a port visit to Tallinn, Estonia. (MC1 Darius Jackson/USN)

➤ LS2 Stephen Hallerman uses a sound-powered phone to communicate the distance of the Military Sealift Command (MSC) hospital ship USNS *Mercy* (T-AH 19) from the MSC fleet replenishment oiler USNS *Guadelupe* (T-AO 200) during an underway replenishment. (MC3 Joshua Martin/USN)

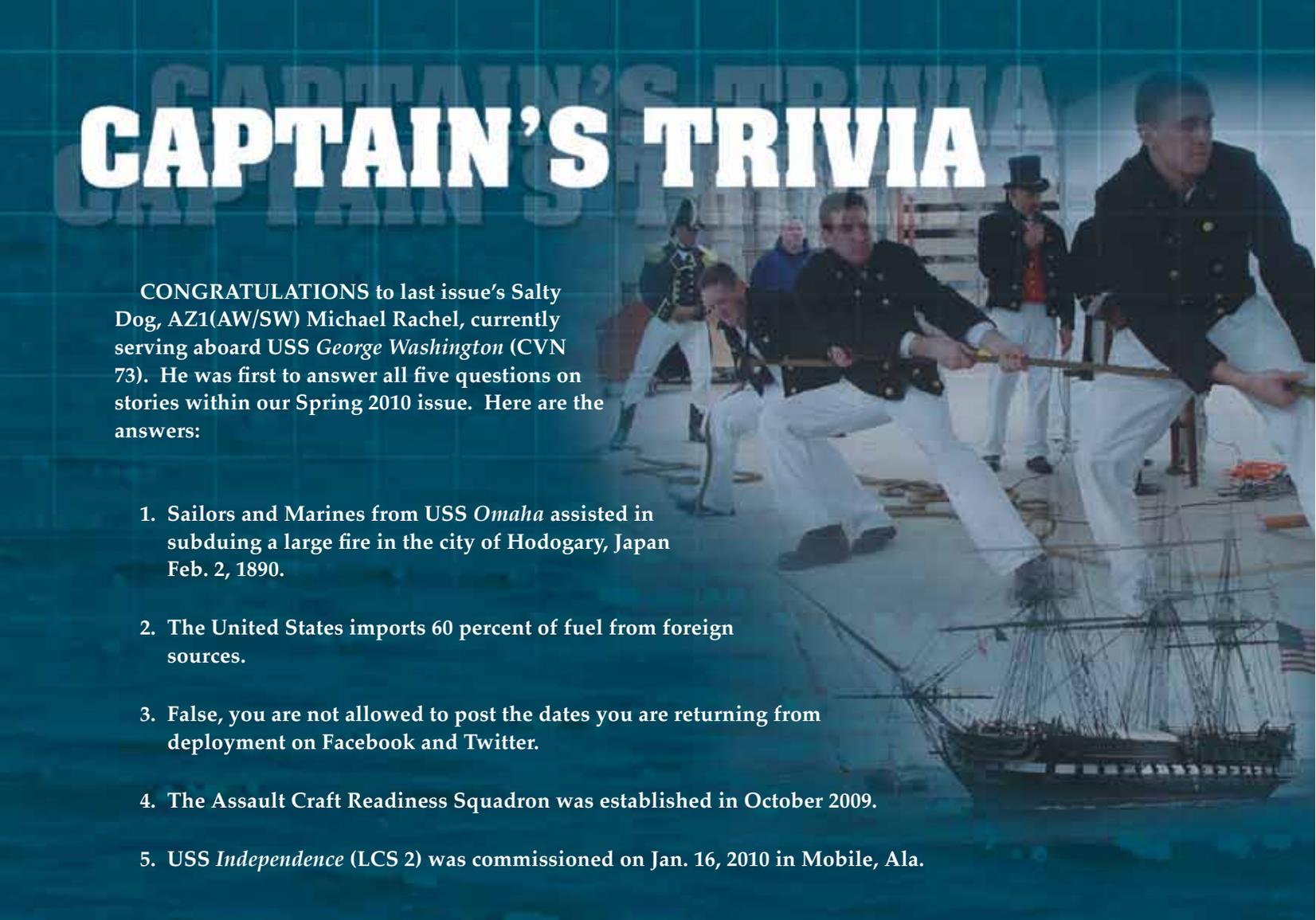


◀ AZAN Dylan Roberts paints the side of USS *Constitution*. Known as Old Ironsides, *Constitution* is the oldest commissioned warship afloat in the world and is undergoing a three-year restoration. (ABHAN Mark Alexander/USN)



➤ Sailors moor the mine countermeasures ship USS *Patriot* (MCM 7) to a buoy for a port visit to Hong Kong during the ship's spring patrol. (MC1 Richard Doolin/USN)

CAPTAIN'S TRIVIA



CONGRATULATIONS to last issue's Salty Dog, AZ1(AW/SW) Michael Rachel, currently serving aboard USS *George Washington* (CVN 73). He was first to answer all five questions on stories within our Spring 2010 issue. Here are the answers:

1. Sailors and Marines from USS *Omaha* assisted in subduing a large fire in the city of Hodogary, Japan Feb. 2, 1890.
2. The United States imports 60 percent of fuel from foreign sources.
3. False, you are not allowed to post the dates you are returning from deployment on Facebook and Twitter.
4. The Assault Craft Readiness Squadron was established in October 2009.
5. USS *Independence* (LCS 2) was commissioned on Jan. 16, 2010 in Mobile, Ala.

This issue's challenges are below. The first person to correctly answer all five questions will receive recognition in the next issue. Good luck!

1. What Naval Ship's Technical Manual (NSTM) provides the requirements for working on energized equipment?
2. Name one type of tag out that requires Commanding Officer permission?
3. What OPNAV instruction should you reference for guidance on hazardous material (HAZMAT) storage?
4. What shipboard department is generally responsible for all HAZMAT?
5. True or False: INSURV instructions govern Fleet maintenance procedures for all shipboard equipment.

CHANGES OF COMMAND

COMDESRON 9 / August Capt. Carol Hottenrott relieves Capt. Michael Slotsky	USS <i>Cole</i> / July Cmdr. Andrew Ehlers relieves Cmdr. Edward Devinney II	USS <i>Mitscher</i> / August Cmdr. Brian Sorenson relieves Cmdr. Sterling Dawley	MCM Crew <i>Conflict</i> / August Lt. Cmdr. Courtney Minetree relieves Lt. Cmdr. Jose Roman
COMDESRON 60 / August Capt. Dan Shaffer relieves Capt. Cynthia Thebaud	USS <i>Curts</i> / July Cmdr. David Rowland relieves Cmdr. Harold Workman	USS <i>Momsen</i> / July Cmdr. Jay Wylie relieves Cmdr. Robert Bodvake	MCM Crew <i>Dominant</i> / August Lt. Cmdr. Gerald Lorio relieves Lt. Cmdr. Pat Murphy
COMPHIBRON 1 / August Capt. John Shaub relieves Capt. Andrew Cully	USS <i>Freedom</i> / July Crew 101 Cmdr. James Edwards, Jr. relieves Cmdr. Kristy Doyle	USS <i>Normandy</i> / August Capt. Joseph Creed relieves Capt. Jeffrey Griffin	MCM Crew <i>Reaper</i> / July Lt. Cmdr. Wayne Liebold relieves Lt. Cmdr. Chris Gilbertson
Maritime Expeditionary Security Group 2 / July Capt. Paul McElroy III relieves Capt. David McDuffie	USS <i>Gary</i> / August Cmdr. Christopher Budde relieves Cmdr. Daniel Senesky	USS <i>Pearl Harbor</i> / July Cmdr. Homer Denius III relieves Cmdr. David Guluzian	* PC Crew <i>Bravo</i> / June Lt. Brian Luebbert relieved Lt. Cmdr. Mac Harkin
Maritime Prepositioning Ship Squadron 2 / September Capt. Wesley Brown relieves Capt. Gene Harr	USS <i>Hue City</i> / July Capt. Paul Stader relieves Capt. Anthony Swain	USS <i>Preble</i> / September Cmdr. Joseph Cahill III relieves Cmdr. John Wade	PC Crew <i>Echo</i> / August Lt. Matt Foster relieves Lt. Cmdr. Walt Kennedy
Naval Beach Group 2 / July Capt. Sean Geaney relieves Capt. Clayton Saunders	USS <i>Lake Champlain</i> / September Capt. Mark Johnson relieves Capt. Kevin Campbell	USS <i>Samuel B. Roberts</i> / July Cmdr. Angel Cruz relieves Cmdr. Charles Sellers	* PC Crew <i>Juliet</i> / June Lt. Kevin Ducharme relieved Lt. Cmdr. Tom Brashear
USS <i>Carney</i> / August Cmdr. Richard Field relieves Cmdr. Brendan McLane	USS <i>Makin Island</i> / August Capt. James Landers relieves Capt. Robert Kopas	USS <i>Sampson</i> / July Cmdr. Christopher Alexander relieves Cmdr. Martin Hardy	* All commands marked were not listed in previous issues.

LIST OF ALL O-3/O-4 COMMANDS

PC Crew <i>Alpha</i>	Lt. Cmdr. Phil Knight	MCM Crew <i>Bulwark</i>	Lt. Cmdr. Brandon Murray
PC Crew <i>Bravo</i>	Lt. Brian Luebbert	MCM Crew <i>Conflict</i>	Lt. Cmdr. Courtney Minetree
PC Crew <i>Charlie</i>	Lt. Cmdr. John Lucas	MCM Crew <i>Constant</i>	Lt. Cmdr. Jim Rushton
PC Crew <i>Delta</i>	Lt. Cmdr. Donovan Rivera	MCM Crew <i>Dominant</i>	Lt. Cmdr. Gerald Lorio
PC Crew <i>Echo</i>	Lt. Matt Foster	MCM Crew <i>Exultant</i>	Lt. Cmdr. Jennifer Forbus
PC Crew <i>Foxtrot</i>	Lt. Andrew Klug	MCM Crew <i>Fearless</i>	Lt. Cmdr. Spence Austin
PC Crew <i>Golf</i>	Lt. Cmdr. Kurt Braeckel	MCM Crew <i>Leader</i>	Lt. Cmdr. Elaine Brunelle
PC Crew <i>Hotel</i>	Lt. Matt Lehmann	MCM Crew <i>Persistent</i>	Lt. Cmdr. Vic Sheldon
PC Crew <i>India</i>	Lt. Cmdr. Nate Diaz	MCM Crew <i>Reaper</i>	Lt. Cmdr. Wayne Liebold
PC Crew <i>Juliet</i>	Lt. Cmdr. Kevin Ducharme	MCM Crew <i>Swerve</i>	Lt. Cmdr. Ian Scaliatine
PC Crew <i>Kilo</i>	Lt. Cmdr. Jay Sego	USS <i>Avenger</i> (MCM 1)	Lt. Cmdr. Ken Lieberman
PC Crew <i>Lima</i>	Lt. Cmdr. Mark Hobdy	USS <i>Defender</i> (MCM 2)	Lt. Cmdr. Andria Slough
PC Crew <i>Mike</i>	Lt. Kelly Jones	USS <i>Guardian</i> (MCM 5)	Lt. Cmdr. Bryce Benson
		USS <i>Patriot</i> (MCM 7)	Lt. Cmdr. Walt Mainor

»» duty

»» degree

»» dream



The Post-9/11 GI Bill can provide the financial support to help get you there. If you served after September 10, 2001 (at least 90 days) and are active duty, have an honorable discharge or were discharged for a service-connected disability (at least 30 days service) – You have earned the right to the Post-9/11 GI Bill.



Benefits may include:

Up to 100% paid tuition

Up to \$1000 a year for books and supplies

Monthly Housing Allowance

You may also qualify to
Transfer the benefit to your dependents



**POST-9/11
GI BILL**

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is the right benefit for you, visit our website.
www.gibill.va.gov