

*The Silent Service*

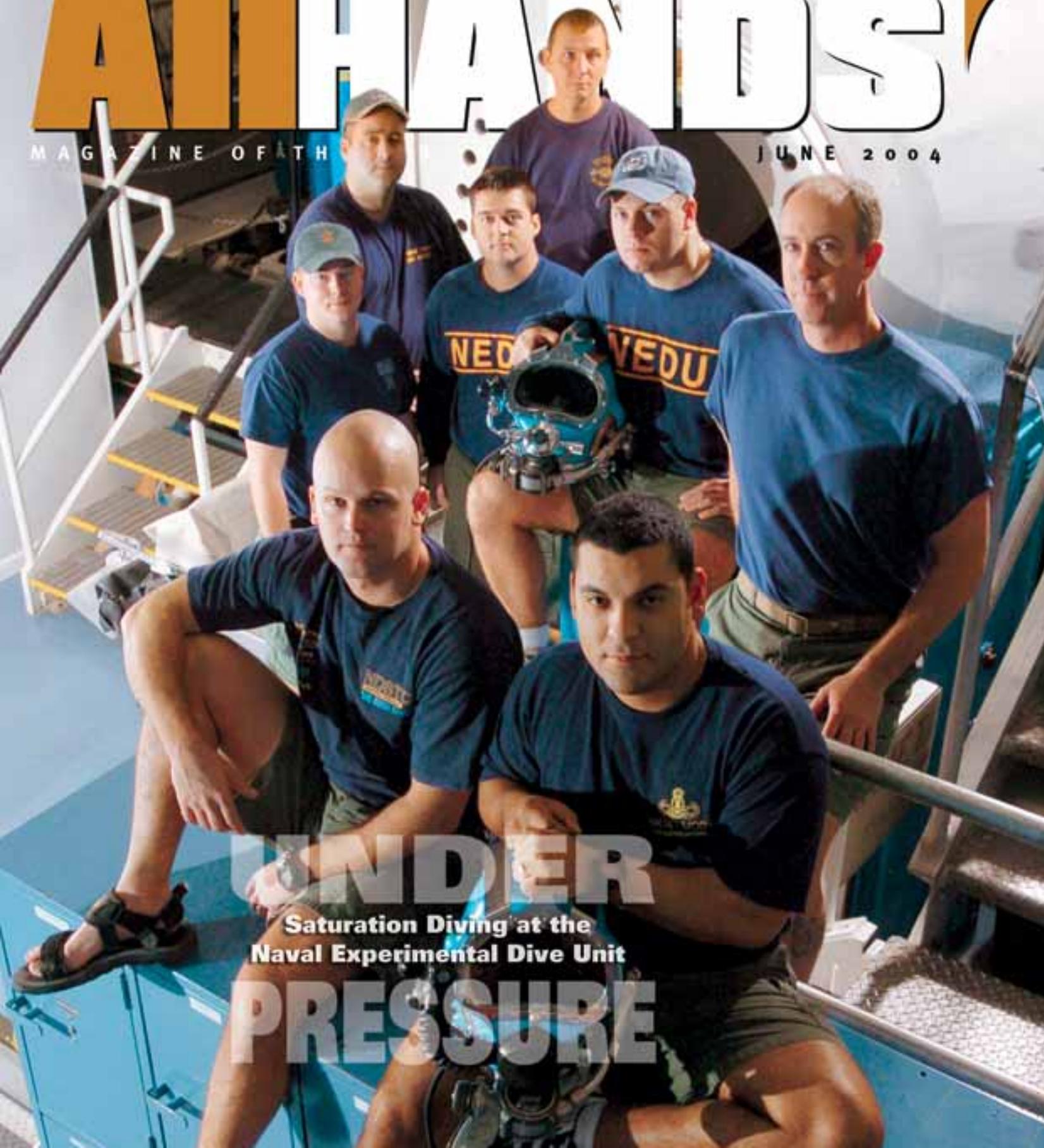


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# ALL HANDS

MAGAZINE OF THE

JUNE 2004



## UNDER

Saturation Diving at the  
Naval Experimental Dive Unit

## PRESSURE



# 30 The Silent Service

## [On the Front Cover]

Divers from the Naval Experimental Dive Unit gather outside the Ocean Simulation Facility Chamber complex where they lived for two weeks.

Photo by PH1 Shane T. McCoy

## [Next Month]

Join *All Hands* as we discover what it's like to have Navy recruiting duty in the Army town of Fayetteville, N.C.

Meet Machinist's Mate 3rd Class Trevor Kopp and his 154 brothers, of USS *Maine* (SSBN 741). But, unlike most families, what binds these men together isn't their last name; it's a 560 foot-long steel boat with no windows, no fantail, and in the event of a casualty — no easy escape. These brothers are submariners.

Photo by JO1(SCW/SS) James Pinsky

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[Number 1046]

**ALL HANDS**

# June

[Features]



Photo by JO2 Charles L. Ludwig

Photo by PH1 Shane T. McCoy

## 14 Staying Alive

Students at the Navy's Basic Enlisted Submarine School have long been faced with the stress and strain of their final week of training. Packed like sardines into a room just larger than the average American living room, 17 Sailors in full battle dress receive their latest in a series of damage control training classes in a replicated submarine space known as the "wet trainer."



## 22 Under Pressure

Eight Sailors from Naval Experimental Dive Unit (NEDU) and Mobile Diving and Salvage Unit 2 lived in the Ocean Simulation Facility at NEDU for two weeks in conditions that would make even the mildly claustrophobic cringe. Added to their cramped spaces is a 727 ft. saturation (SAT) dive that can place as much as 339 psi on a person turning a task as easy as breathing into a chore.





During the 2004 Armed Forces Wrestling Championship held at Archbishop Rummel High School, New Orleans, Marine Corps Cpl. Justin Cannon, in red, slams Navy Wrestler ABE2 Gerarado Martínez to the mat. Cannon received the gold medal in Freestyle Wrestling 55k Weight Class.

Photo by Lance Cpl. Lydia Collison



A "final checker" gets into position to clear an F-14B *Tomcat* assigned to Fighter Squadron (VF) 32 for its launch from the flight deck of USS *Harry S. Truman* (CVN 75). The nuclear-powered aircraft carrier is currently undergoing carrier qualifications and flight deck certification off the Atlantic coast.

Photo by PH2 Christopher Stoltz





# Speaking with Sailors

Master Chief Petty Officer of the Navy  
MCPON (SS/AW) Terry D. Scott

I recently had the opportunity to carry out what I consider to be one of the most important responsibilities I have to Sailors as the Master Chief Petty Officer of the Navy – testifying on their behalf to the United States Congress. My testimony this year was to the House Appropriations Committee (HAC) for Military Construction.

The House Appropriations Committee has jurisdiction over discretionary spending, which is approximately one-third of the federal budget. It consists of thousands of programs controlled through annual appropriations acts.

In addition to the current status of our Navy, and the highlighting of our accomplishments in the past year, my statement to the subcommittee concentrated on the areas of family and bachelor housing; quality of service (a combination of quality of life and quality of work); and our Morale, Welfare and Recreation (MWR) programs.

The quality of life and quality of work our Sailors are able to enjoy are key factors in their decision to make the Navy a career or leave for other employment that will deliver a better standard of living. Today, our Sailors enjoy a quality of service which is improving and has helped us to achieve the retention behavior we desired.

Pay, benefits and other monetary compensation certainly play a key role in this retention trend. And the impact of targeted pay raises of recent years in retaining the quality, highly-skilled people we need cannot be underestimated. Currently, we are meeting our retention goals—but my concern is how many of our highest quality, most capable Sailors will stay with us, considering the demands we are placing on them with current operations.

I discussed improving quality of service for Sailors and their families with improvements to virtually every form of housing for both Navy families and single Sailors. In recent years, we have made strides in improving the living conditions of our Sailors.

The authorization to fully fund our Basic Allowance for

Housing (BAH) is a step in the right direction, and we are making progress in this area. The result of fully-funded BAH will enhance our long-term ability to provide quality housing for all service members.

While we are making significant strides in this area, we must sustain our three-pronged approach to improve housing for Sailors and their families: continued funding increases for BAH to zero out-of-pocket expenses; continued traditional military construction housing projects; and continued support of public-private ventures.

Some aspects of quality of service are tangible, such as adequate compensation, a guaranteed retirement package, comprehensive health care and other traditional quality-of-life benefits. Others are intangible but are fundamental factors that make a Navy career attractive to talented people.

We must continue our efforts to provide first-rate working environments for all Sailors. This subcommittee's continuous efforts aimed at ensuring that we remain good stewards of military construction dollars plays a big role in our quality of service.

Our Navy community support facilities provide for fitness, childcare, recreation and family support programs that are valuable services to our Sailors and their families. I emphasized how important these programs are to Sailors and their families while also serving to increase readiness and retention in the Navy.

Navy MWR provides a varied program of recreation, fitness, and social and community support activities in U.S. Navy ships, squadrons and shore installations worldwide. Our historical and considerable investment in these facilities and programs has paid significant dividends in improved quality of life for Sailors and their families.

Along with my counterparts from the other services, who also testified on behalf of Soldiers, Airmen and Marines serving around the world, we all agreed that our successes are directly attributed to the patriotism, dedication and professionalism of our all-volunteer force. As the first responders in defense of our way of life, [service members] deserve to know that what they do is vital to world peace and security, and therefore, that the significant personal sacrifices they make are appreciated and are not in vain.

A copy of my full testimony is available at the following web address: [www.chinfo.navy.mil/navpalib/testimony/facilities/scotto40225.txt](http://www.chinfo.navy.mil/navpalib/testimony/facilities/scotto40225.txt). 

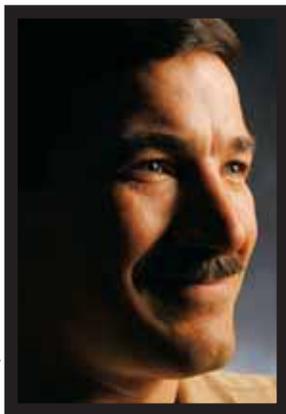


Photo by JO1 Preston Keres

*Speaking with Sailors* is a monthly column initiated by the Master Chief Petty Officer of the Navy as a way of reaching out to the men and women of the fleet, whether they are stationed just down the road or halfway around the world.

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# Relax...

You Now Have An Entire Year



*All Hands* photo editors are looking for the year's top photos for the October "Any Day in the Navy" issue. Deadline for submission is July 15, 2004. Send your best shots taken between July 1, 2003 and July 1, 2004 to: [anyday@mediacen.navy.mil](mailto:anyday@mediacen.navy.mil)

For information on submissions:

[www.mediacen.navy.mil/still/anyday](http://www.mediacen.navy.mil/still/anyday)

ANY DAY  
IN THE  
NAVY

## New Ratings' 5VMs Go Live

**T**he Naval Personnel Development Command (NPDC) released the latest version of each of its 5 Vector Models (5VM) in March, working to achieve its goal of providing every Sailor an active, tailored 5VM this year.

5VM has many new features within the Sailor viewing screen, and now includes both mentor and manager screens, to allow mentors and community managers to access individual models to conduct assessments of progress, and to become more fully involved in Sailor growth and development. Additionally, the Certifications and Qualifications Vector is now available for all ratings having previously gone live, and will now be standard in the release of subsequent rating models.

However, Sailors should bear in mind the functionality of the 5VM is limited by the amount of data available to support the various features. 5VM is based only on occupational data collected through currently linked personnel and training databases, such as the electronic training jacket, and Navy Training Management and Planning System (NTMPS). As this initial data is validated, additional databases will be linked to the model to provide a broader spectrum of information available, thereby increasing functionality. And so, while the current iteration of the model is not capable of promoting, detailing or determining performance rankings, additional training and education data will allow that functionality to be realized.

"Certainly this is an ongoing process, but with every iteration, the 5VM is becoming more functional,

more intuitive and more robust," said NPDC Command Master Chief CNOCM (SS/SW/AW) John Snell. "The primary goal is to get the models live for everyone, then we will focus our attention on working out the bugs, then it will be on to further upgrades and integrations and adaptations. This truly is the career development and management tool of the future."

Currently, 20 ratings are live, including most recently those within the cryptology and construction force communities. The Centers for Naval Cryptology, Seabees and Facilities Engineering, respectively, announced the release of their ratings' models earlier this year. The Center for Naval Aviation Technical Training has also begun releasing their ratings' models (aircrew survival equipmentman, aviation machinist's mate, aviation maintenance administrationman, aviation structural mechanic [electrical], and aviation support equipment technician) and is slated to have all within their community live by April.

Additionally, the Center for Service Support will be releasing those for both legalman and Navy career counselor within the coming weeks.

"The feedback has been tremendous," said Snell. "We have some data issues, to be sure, and there are technical issues that must be resolved. But I strongly encourage



Photo by PH2 Felix Garza Jr.

**UT1 John Brillowski, UT1 Robert Hornej,** and other Navy Seabees attached to the Naval Mobile Construction Battalion 25, work shoulder-to-shoulder with the armed forces of the Philippines to lower a pipe down a deep well. The 5VMs for ratings in the construction force community are available at Navy Knowledge Online (NKO) website.

every Sailor to log onto NKO [Navy Knowledge Online] and become intimately familiar with the model, its functions, and what it is going to mean to their future. That way, when their 5VM does go live, they will know what to expect."

Additional ratings are slated for release in the coming months, with those under the Centers for Submarine Learning, Surface Combat Systems, Intelligence and Anti-Terrorism/Force Protection

being the next big push. For more information on the 5VM and to view the most recent tutorial, log onto NKO at [www.nko.navy.mil](http://www.nko.navy.mil).

For related news, visit the Naval Personnel Development Command/Task Force EXCEL Navy NewsStand page at [www.news.navy.mil/local/tfe](http://www.news.navy.mil/local/tfe). 

*Story by JO1 Jd Walter who is assigned to the public affairs office, Naval Personnel Development Command, Norfolk.*

## Navy Stands up Fleet Anti-submarine Warfare Command

The Navy boosted its anti-submarine warfare capabilities with the creation of the Fleet Anti-submarine Warfare (ASW) Command (FASWC) in San Diego April 8.

The new operational command's mission will include integrating advanced ASW networks, establishing doctrine and new operating concepts, coordinating fleet ASW training and assisting naval leadership with ASW policy.

FASWC's primary goal will be to ensure Navy warfighters can neutralize enemy submarine threats. To do this, Navy ASW must be able to detect and engage ASW threats at will. It must also be able to form maritime shields against submarines and mines to permit U.S. and coalition forces protected passage to and from operational theaters.

ADM Walter F. Doran, commander, U.S. Pacific Fleet, recognizes the need for increased emphasis in ASW excellence.

"When I look at the threats we may face in the 21st century, one emerging challenge is the improved diesel submarine technology, and the threat that technology poses. Anti-submarine warfare is a Navy core competency which needed a reinvigorated focus. We have recognized that we must take positive action and reorganize to meet this challenge ... and why I have made ASW as my No. 1 war-fighting priority," said Doran.

Bob Brandhuber, the director for ASW improvement and deputy chief of staff for training at U.S. Pacific Fleet, said the resurgence in ASW is a major step in the right direction to meet new threats in shallow, brown-water areas, as well as on the open ocean.

"ASW is a critical enabler, and

there are a lot of submarines out there that will prevent us from doing that...and how we as a Navy bring surface, air, submarine, integrated underwater sonar system arrays, and integrate that in a common undersea picture so that we can control the water column to exert the influence that we need to exert in the littorals—that's why ASW is important; that's what FASWC is going to be all about," said Brandhuber.

The Chief of Naval Operations-directed review Task Force ASW has started two teams of planners and fleet operators to work on the challenges of operations and technology.

Team "A" looks at the science and technology aspects of ASW, aligning themselves with the defense industry to pinpoint key requirements and emerging new technologies. That partnership will help transform ASW capabilities to improve littoral effectiveness and reduce the time between finding a threat and neutralizing it.

"Think of how many billions of dollars have been spent on ASW research. It's not an easily solvable problem. There is a science and an art to it," said Brandhuber.

Blending the science and art is the training and operational concepts mission for Team "B." This team will be constantly testing and evaluating ASW tactics, improving on them and developing better training in order to improve war-fighting skills. This includes integrated training on a fleetwide scale under the guidance of FASWC.

RADM John J. Waickwicz, who currently serves as commander, Iceland Defense Force; Fleet Air Keflavik; U.S. Anti-Submarine Warfare Reconnaissance Forces Eastern Atlantic and Island Commander Iceland, has been selected by the Navy as FASWC's first commander.

The Spencer, Mass., native will be the Navy's foremost ASW

## Shipmates

### Storekeeper 2nd Class (SW)

**Anthony L. Hinds** was recently selected as Fleet and Industrial Supply Centers, San Diego's Junior Sailor of the Year for 2003. Hinds is the customer service work center supervisor for the FISC San Diego Shore Intermediate Maintenance Activity site. Hinds' accomplishments include assisting in validating, screening, processing, and releasing in excess of 60,000 material requirements valued at more than \$80 million. Hinds was also a key player in implementing the Navy Enterprise Maintenance Automated Information system, and devoted countless hours to the overall project by persistently screening and processing more than 10,000 new and complicated orders during its early stages. His collateral duties include command safety officer and plant property coordinator. Outside of work, Hinds stays active by volunteering his time to Meals on Wheels, Partnership with Education, the Combined Federal Campaign, Operation Clean Sweep and Vietnam Veterans of San Diego.



advocate, redirecting the focus of the Navy back to ASW and overhauling it as a critical core competency for Navy warfighters.

For related news, visit the Pacific Fleet Navy NewsStand page at [www.news.navy.mil/local/cpf](http://www.news.navy.mil/local/cpf).

*Story courtesy of the public affairs office, Commander, U.S. Pacific Fleet, San Diego.*

## Basic Allowance for Housing Revised for Married Junior Enlisted Sailors

The Navy recently announced good news for junior Sailors married to other junior Sailors: if you are both on sea duty, you can now each receive basic allowance for housing (BAH).

"This benefit clarifies the BAH entitlement policy and is designed to reduce the financial burden on our junior Sailors," said CDR Katharine Reed, head of the pay and allowances section of the

Navy's Military Compensation Policy Coordination Branch in Washington. "It also better achieves parity between our junior and senior enlisted afloat dual military families."

Before this change was instituted, dual military couples were only entitled to one joint housing allowance.

To receive the benefit, eligible Sailors must meet all of the following criteria:

- Both are E-5 and below
- Both assigned to sea duty
- Have no other dependents
- Share the same household
- Have declined government quarters

The entitlement, authorized by the National Defense Authorization Act, is effective Oct. 1, 2003. The Navy has programmed for the estimated \$9.3 million FY04 cost.

This policy change will benefit approximately 1,200 Navy couples.

More information on this policy change is available in NAVADMIN 059/04, which can be found on the Web at [www.bupers.navy.mil](http://www.bupers.navy.mil).

# Around the Fleet

For related news, visit the Chief of Naval Personnel Navy NewsStand page at [www.news.navy.mil/local/cnp](http://www.news.navy.mil/local/cnp). ☞

*Story courtesy of the public affairs office, Chief of Naval Personnel, Washington, D.C.*

## Sailors, Marines Now Eligible for FAA A&P License

**D**OD partnered with the Federal Aviation Administration (FAA) to give enlisted mechanics in the military the same credentials as their civilian counterparts. For Sailors and Marines, the Navy and Marine Corps Airframes and Powerplant Program (NMCAPP) has been established at the Center for Naval Aviation Technical Training (CNATT), to ensure all aviation technicians are given the opportunity to earn the federal agency's industry standard certification.

In the past, military experience was not widely recognized by the FAA, significantly decreasing Sailor and Marine marketability in the civilian sector.

"Trying to get a civilian job without an A&P License is similar to trying to gain access to a military base without the proper cre-

entials—almost impossible," said CNATT NMCAPP Officer, LCDR Gabe Castro. "Well, that time is gone. There are now certifications in place for Sailors and Marines which allow our mechanics to enroll in the A&P [airframes and power plants] licensing program."

To enroll, participants must meet basic eligibility requirements, be 18 years of age, an E-4, and have 36 months or more in service. It will take about 30 months to complete the entire program, which includes completing a Qualification Training Package and passing a series of written and oral exams, as well as passing a practical test. After successful completion of the program and required exams, each participant will receive the airframes and power plants certification from the FAA.

The benefits to Sailors and Marines include no out-of-pocket expenses, as well as the ability to use their military experience and on-the-job training toward certification. Many non-military universities and vocational technical schools offer FAA-approved classes, but the cost associated with these courses can be overwhelming, even with tuition assistance and assistance from the GI Bill.

"It's one of the great new ways we are taking care of our Sailors and Marines," said CNATT

Gunnery Sergeant, Gunnery Sgt. Anthony Sosa. "It shows young Sailors and Marines that we are interested in their future as they continue their careers in the Navy and Marine Corps, but also after they leave their service and embark upon a civilian career."

For more info on the A&P Licensing Program, visit the USMAP Web site at [www.cnet.navy.mil/usmap](http://www.cnet.navy.mil/usmap) or visit the Center for Naval Aviation Technical Training page on Navy Knowledge Online at [www.nko.navy.mil](http://www.nko.navy.mil). ☞

*Story by LTJG Doug Johnson, who is assigned to the public affairs office, Center for Naval Aviation Technical Training Public Affairs.*

## Top Enlisted Sailors See Healthy Competition For Advancement To E-9

**G**etting to the top of the enlisted ranks remains competitive, as eligible E-8s face a slight drop in advancement opportunity this year.

Advancement opportunity to E-9 in FY05 stands at 13.5 percent, falling a little more than 1 percentage point from FY04.

Chief of Naval Personnel VADM Gerry Hoewing said he

was not surprised that the opportunity stayed nearly the same.

"Competition for promotion to Master Chief Petty Officer has, and should be, very competitive. We expect a lot from these leaders," said Hoewing. "Given the tremendous retention we continue to experience throughout the Navy today, and the incredible talent at our more senior enlisted ranks, I would expect the advancement opportunity to remain about the same."

The number of Sailors competing for E-9 increased by 284 to 3,427 this year, while quotas fell only by five from 470 to 465. Advancement opportunity improved or stayed the same in 34 ratings. Forty-one ratings saw declining advancement opportunity, but 36 of those will still enjoy advancement opportunity above the Navy average.

Fire controlman (AEGIS NEC) showed the best overall advancement opportunity at 57 percent. Other ratings with improved advancement opportunity include aviation warfare systems operator, which grew from 20.7 percent in the last cycle to 37 percent this cycle, and hospital corpsman, which experienced a jump of more than six points from 6.3 percent to 12.8.

Ratings that saw some decline

## Ricky's Tour

By J02 Mike Jones

[www.rickystour.com](http://www.rickystour.com)



# Time Capsule

This month we look back in the *All Hands* archive to see what was going on in the month of June. To view these issues in more detail on the Web, go to [www.news.navy.mil/allhands.asp?x=search](http://www.news.navy.mil/allhands.asp?x=search)

in advancement opportunity include master-at-arms (down 15 points this cycle to a little more than 35 percent), air traffic controller, which saw a decrease of eight points to 4 percent, and mineman with a decrease of 10 points from last year's opportunity of 25 percent.

A full list of E-9 advancement quotas will soon be available at [www.bupers.navy.mil](http://www.bupers.navy.mil), under Advancements.

For related news, visit the Chief of Naval Personnel Navy NewsStand page at [www.news.navy.mil/local/cnp](http://www.news.navy.mil/local/cnp). 

*Story courtesy of the public affairs office, Chief of Naval Personnel, Washington, D.C.*

## Sea Basing Key Element of Navy 2020

The Navy of 2020 will have unmanned underwater reconnaissance vehicles. Our weapons systems and ability to communicate are far better than they've ever been," VADM J. Cutler Dawson Jr. recently told attendees of the Annapolis Naval History Symposium at the U.S. Naval Academy.

The Navy of 2020 also will have "distributed systems that lie in parts of the ocean that can deny access to an enemy and rapidly kill him if he goes into those areas," said the Academy graduate.

The service, he added, has transformed from a "blue-water" Navy that was structured to defeat the Soviets at sea during the Cold War to a force that will be sea-based.

According to Dawson, sea basing has three critical elements: access, speed and reduced footprint.

Dawson talked about the deployment of the U.S. 2nd Fleet flagship, USS *Mount Whitney*

(LCC 20), that provided sea-based support to Marines in Djibouti at the Horn of Africa.

"Why did we do that?" he asked. "Because access was not assured, and even when we did have access, it was so immature that the investment to get ashore took time and money."

In planning the future force, the admiral said the Navy considers five elements. "We look at the most likely combat operations and possible rules of engagement," said Dawson. "We look at bases and access, which has recently been greatly influenced by denial of access to Turkey. We look at potential systems, and we try to input the performance that we expect from those systems, and finally, we look at joint and coalition (operations)."

Planners also think about how many personnel—uniformed, civilians and contractors—will be needed in 2020, he said.

"We look at the development of personnel and ask, 'What will they need?'" he added.

For more Department of Defense News, go to [www.defenselink.mil](http://www.defenselink.mil). 

*Story by K.L. Vantran, who is assigned to American Forces Press Service, Alexandria, Va.*

## USS Higgins to Return from Sea Swap Deployment

USS *Higgins* (DDG 76) recently returned to her homeport after more than 16 months at sea—with the last of three rotating crews that served aboard in six-month deployments in the Navy's Sea Swap program.

Sea Swap is an experimental initiative that increases forward naval presence by utilizing both *Arleigh Burke*-class guided-missile destroyers and *Spruance*-class destroyers.



### June 1964 – 40 years ago

As indicated on the cover, *All Hands* addressed SEAVEY & SHORVEY, which in today's lingo is sea/shore rotation. We also featured descriptions of every boat used by the Navy. To compliment our boat descriptions we highlighted the language of boatmanship, and celebrated the 22nd anniversary of the Navy's amphibious force.



### June 1976 – 28 years ago

Our cover reflected one of our features, the company commanders at Recruit Training Command, Orlando, Fla. We spent some time with the Armed Forces Police in the Washington, D.C., area and then headed to the U.S. Naval Academy, Annapolis, Md., to talk to Tom Harper, a senior midshipman who was diagnosed with stomach cancer during his freshman year. He won his fight with cancer and graduated with the Class of '76. We also explored the Navy's advances in laser research.



### June 1986 – 18 years ago

*All Hands* looked at the Navy's salvage teams, more specifically the crew of USS *Preserver* (ARS 8) who answered the call to salvage NASA's *Challenger*. We talked with the MCPON Master Chief Radioman (SW) William H. Plackett about his view of the Navy, and we presented a photo-feature on the just-opened *Nautilus* Memorial and Submarine Force Library and Museum at Naval Submarine Base, Groton, Conn. As a matter of note, Inter-service Volleyball was the sport of the year as the Navy women won the gold medal and Navy men brought home the silver.

*Higgins* and USS *Fletcher* (DD 992) have provided continuous presence in the U.S. 5th Fleet area of responsibility (AOR), while

swapping crews at six-month intervals aboard the two ships, involving approximately 2,000 Sailors.

# Around the Fleet



Photo by JO2 Todd Macdonald

**Crew members assigned** to the guided-missile destroyer USS *Benfold* (DDG 65) board the guided-missile destroyer USS *Higgins* (DDG 76) to begin the turnover process with the *Higgins* crew as part of the U.S. Navy's Sea Swap initiative. This was the first phase of the Navy's Sea Swap initiative, which involves rotating more than one crew through a single ship to allow for more time on station in theater, while returning crews home at six-month intervals.

The Sea Swap initiative demonstrated efficiency by deploying a single ship to a theater of operations for 18 months, reducing the transit time and increasing Sailor time on station conducting real-world operations.

As part of the Sea Swap process, the Navy is conducting a detailed analysis of the Sea Swap experiment to determine the viability of the Sea Swap option for potential future forward presence requirements.

Sea Swap for *Higgins* began in November 2002, when the initial crew departed San Diego. That crew was part of the coalition force that launched *Tomahawk* Land Attack Missiles against military targets in Iraq during the opening stages of Operation *Iraqi Freedom*.

The crew of USS *Benfold* (DDG 65) replaced the original *Higgins* crew in April 2003, and the *Higgins* crew flew back to San Diego to become the new *Benfold* crew.

The third *Higgins* crew came from USS *John Paul Jones* (DDG 53) in October 2003, and this

crew will remain as the crew of *Higgins*. The three *Higgins* crews accounted for 116 additional days of presence in the U.S. 5th Fleet AOR, which would normally take more than four standard DDG deployments.

"I am very pleased with the results of Sea Swap," said VADM Tim LaFleur, commander, Naval Surface Forces. "Sea Swap improves our culture of readiness by providing increased operational availability and provides continuous forward presence without extending deployments for our Sailors. The ship is in good shape, and the crews have done a remarkable job. With a fleet of less than 300 ships, we need to look continually at new ways to deliver the Navy's combat capability."

The *Spruance*-class destroyer (DD) Sea Swap program is continuing, with a fourth crew now aboard *Fletcher*. She is scheduled to return to San Diego in June. The four DD crews consisted of Sailors from *Fletcher*, USS *Kincaid* (DD 965), USS *Oldendorf* (DD 972) and USS *Elliot* (DD 967).

Crews aboard both *Higgins* and *Fletcher* participated in a wide array of multi-ship operations in the 5th Fleet AOR, including operating with multi-national forces supporting coalition efforts in Iraq, and including escort duties, intelligence gathering and maritime interdiction operations.

For related news, visit the Commander, Naval Surface Force, U.S. Pacific Fleet Navy NewsStand page at [www.news.navy.mil/local/cnsp](http://www.news.navy.mil/local/cnsp). 📰

*Story courtesy of the public affairs office, Commander, Naval Surface Force, U.S. Pacific Fleet.*

## NAS Pensacola Wins Top Navy Environmental Award

In a recent message from Secretary of the Navy Gordon England, Naval Air Station (NAS) Pensacola was named the recipient of the 2003 Environmental Award for a small-size installation in the Natural Resources Conservation category.

"Congratulations to all the competitors for this year's awards," said England. "The quality of the competition was high—an indication of the effort our Navy and Marine Corps team contributes every day."

Significant program accomplishments include completion of the Installation Natural Resources Management Plan and funding stream, partnership with the Florida Department of Environmental Protection and the local community for Project Greenshores; continuing to work with state and local governments, and communities to set aside more than 10,000 acres of sensitive lands; and the ongoing work to maintain the regional Osprey population with 20 new fledglings produced annually.

"It's exciting to win the SECNAV award for our natural resources," said Mark Gibson, natural resources manager, NAS Pensacola. "Although we're being recognized, the work to get the best possible job done is still a constant, every day 'work in progress' that we strive to get better at ... and, of course, it requires teamwork from all involved."

Gibson said the careful management of the natural resource assets at NAS Pensacola has allowed base personnel and the public to enjoy protected habitats via trails, boardwalks and camping areas.

NAS Pensacola has won several awards for its outstanding environmental program. The Coastal America "Partnership Award" was presented Nov. 6 for protecting and restoring Pensacola Bay. In 2001, NAS Pensacola also won the Chief of Naval Operations (CNO) Environmental awards for Natural Resources Conservation for the small installation category, Cultural Resources Management Installation and Pollution Prevention for a non-industrial installation.

"A main factor in our success is that we permanently established the regional forester position to allow for increased and efficient management and oversight of our resources, allowing us to tackle each project that comes up properly," said Gibson.

For related news, visit the Naval Air Station Pensacola Navy NewsStand page at [www.news.navy.mil/local/naspensacola](http://www.news.navy.mil/local/naspensacola). 📰

*Story by Sheri L. Crowe, who is assigned to the public affairs office, Naval Air Station Pensacola, Fla.*

## Navy MWR Teams Up with PGA to Promote Golf

Navy Morale, Welfare and Recreation (MWR) has teamed up with the Professional Golfers' Association (PGA) of America and the National Golf Course Owners Association to promote the sport

of golf through the "Play Golf America" program at Navy installations.

Play Golf America at [www.playgolfamerica.com](http://www.playgolfamerica.com) is a one-stop Web site that provides access to a variety of golf clinics and events for players of all abilities.

"Navy MWR is really gearing up and adding courses to the Play Golf America Web site," said Clay Murray, head of the Navy MWR

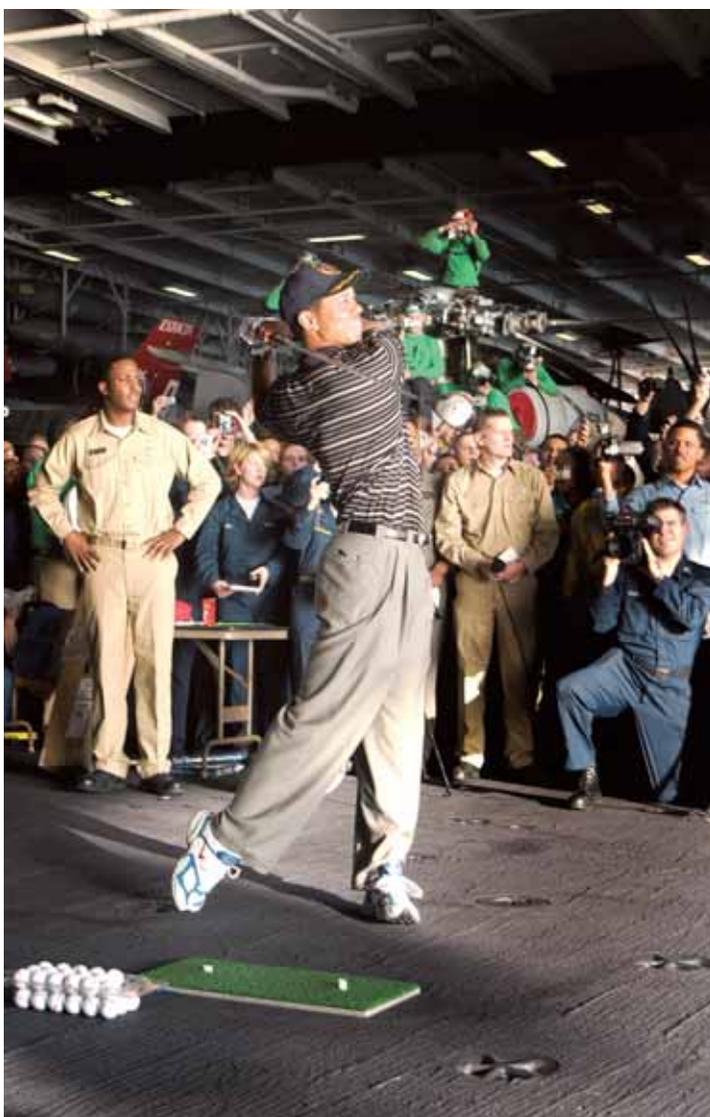


Photo by PH1 Brian Aho

**Sailors watch professional golfer Tiger Woods** hit a few golf balls during a demonstration in the hanger bay of USS *George Washington* (CVN 73). The Professional Golfers' Association has teamed up with Navy Morale, Welfare and Recreation to promote golf aboard Navy installations.

## Shipmates



### Electrician's Mate 2nd Class (SW)

Mark Marzella (left), Seaman K.C. Geisler (standing), LTJG Scott McDonald (center) and Yeoman

3rd Class Ed Barrientes stationed aboard USS *Defender* (MCM 2), were honored as heroes when they each donated blood to save the life of a 3-year-old girl in San Antonio. Emily Wiatrek, suffering from congenital scoliosis, was in need of a rare blood type for a life-saving surgery. According to each of these shipmates, they were more than glad to help the family in need. "When I heard about the little girl's need, I knew I had to do it," said McDonald.

golf program. "This is a great way for Sailors and their families to learn the game and to help grow our Navy golf program for the future."

"Glen Eagle Golf Course used the Web site to publish information and register people for our Link Up 2 Golf orientation in March," said Mike Penn, PGA golf professional at Naval Support Activity Mid-South, Millington, Tenn. "We had a great response, with 36 people registering online."

Link Up 2 Golf, also available at the Play Golf America Web site, is a golf-orientation program designed to introduce adults to the sport of golf. The program combines an orientation to the golf course with a series of lessons taught by PGA professionals, and concludes with a number of supervised on-course playing experiences.

"Players can register for local golf events and group lessons online at the PGA site," said Penn. "The site has been a time-saver and a promotion tool for our course."

To date, eight of the 38 Navy MWR golf courses are listed on the Play Golf America Web site, and more are being added as the golf season begins. The participat-

ing courses currently include ADM Baker Golf Course, Naval Air Station San Diego; Casa Linda Oaks Golf Course, Naval Air Station Jacksonville, Fla.; Gallery Golf Course, Naval Air Station Whidbey Island, Wash.; Glen Eagle Golf Course, Naval Support Activity Mid-South, Millington, Tenn.; Monterey Pines Golf Course, Naval Post Graduate School, Monterey, Calif.; Pine Ridge Golf Course, Naval Air Engineering Station Lakehurst, N.J.; Pine Bayou Golf Course, Naval Construction Battalion Center Gulfport, Fla.; Sea and Air Golf Course, Naval Air Station North Island, Calif.

To find out more about these programs, go to [www.playgolfamerica.com](http://www.playgolfamerica.com) and select the programs that appeal to you. By typing in your zip code, the site will pull up the courses in your area that are offering programs. To find a course on a military installation, be sure to type in your base's zip code. **ES**

*Story by Robin Hillyer Miles, MWR Communications Group.*

▼ **During fire fighting instruction,** students in full battle dress await safety training.

Photo by PH3 Todd Frantom



**P**ACKED LIKE SARDINES INTO A ROOM JUST LARGER THAN THE AVERAGE AMERICAN'S LIVING ROOM, THE 17 SAILORS, IN FULL BATTLE DRESS, WERE RECEIVING THEIR LATEST IN A SERIES OF DAMAGE CONTROL TRAINING CLASSES, A WALK-THROUGH OF A REPLICATED SUBMARINE SPACE KNOWN AS THE "WET TRAINER."

IN MERE MINUTES, THESE SAME SAILORS WOULD BE LOCKED IN THAT SAME SPACE, FIGHTING LEAKS FROM PIPES AND FLANGES, ALONG WITH A RAPIDLY RISING WATER LEVEL, IN A FRANTIC EFFORT TO "SAVE THE BOAT." BUT, IN THAT TASK, THEY WOULD NOT BE ALONE...



# Stayin' Alive

SAILORS TRAIN TO BE SUBMARINERS

Just a quick turn down a winding road from the wet trainer, another group of Sailors prepared themselves to save the ship as well. Only, their potential danger would not be water; these eager Sailors would face a dark room full of smoke and scorching, blistering fire.

Soon both sets of students would be struggling to accomplish two completely different tasks. There may be nothing as out-and-out diverse as fire and water, but in completing their independent tasks, the Sailors are working toward one common goal—attempting to move on.

As students at the Navy's Basic Enlisted Submarine School (BESS), students have long been faced with the stress and strain of this final week of training. The trainers serve as the final obstacle for the wannabe submariners before BESS graduation,

capping off a month-long learning process.

The day's importance is not lost on the students, either. "It's definitely a nervous day for all of us," said Seaman Brandon Nims, as he awaited fire extinguisher training. "It really has some guys losing sleep. I know I was very nervous, just knowing that this is the end of it for BESS. It's more than just training for us."

Adding to the stress of the event is the jam-packed aspect of the week's training schedule. Prior to the groups' final scenario, they spend two days training and performing in the wet trainer.

The relatively quick pace of the hands-on training proved to be another barrier for the students to cross.

"I thought everything was going to be a bit slower," Electronics Technician Seaman Recruit Joseph Drawns said after wrapping

up his time in the wet trainer. "You had to really be on your toes. (The instructors) had to fit a lot of information into a short period of time, so they just kept cramming stuff into our heads. When it came time to perform, sometimes it was difficult to remember everything right away."

The pace of the final week seemed to mirror the prior three, in which Sailors—most straight out of boot camp—began to lay the groundwork of becoming a submariner.

The path starts just before classing up for BESS, when potential students are made to endure the submarine escape trainer. The trainer, which simulates the general arrangement of a 637-class submarine escape trunk, allows students to apply the egress training they learn in a basic classroom environment.

This involves the Sailors forcing them-

▼ **Escape training can be** a harrowing experience especially for those who are claustrophobic. Five students are loaded into a small escape trunk with an instructor. Once inside, the tank is filled with about five feet of water.

Photo by JO2 Charles L. Ludwig





Photo by JOZ Charles L. Ludwig

◀ **Before students get to** the school-house portion of their training, they must complete a day of submarine escape training. During one of the training classes, instructor BM2(DSW) Johnathon Neal demonstrates the proper use of the Steinke hood that will be used for one of the underwater escape procedures.



Photo by PH3 Todd Frantom

◀ **In the classroom,** students like SA Garth Pouzek and SR Andrew Cox learn about the basics of submarine systems. In a matter of months, some of the students will be faced with nearly identical systems when they report to their first submarine.



Photo by JOZ Charles L. Ludwig

◀ **When conducting operations** in the damage control trainer, instructors sitting inside a control room use plastic placards to inform students when they make an error. The sign is pressed against the glass after a horn is sounded in the trainer.



Photos by JO2 Charles L. Ludwig

▲ **FR Adam Neely** uses a roll of marlin to patch a leak inside the submarine school's damage control trainer. The damage control trainer is the final test taken by sub school classes before graduation.

► **Sitting in the damage** control trainer's overhead, two students attempt to tighten down on a leaking flange. The damage control trainer can flood with more than 20,000 gallons of water at the rate of 1,200 gallons a minute.

selves, four at a time, into a cramped escape hatch that soon fills about neck-high with water. Then they each don a "Steinke hood," an inflatable mask of sorts that allows the prospective submariners to breathe while ducking underwater to escape the tank from a watertight hatch that opens to a swimming pool. Once there, the Sailors assemble in a tight huddle pattern before making a final swim across the pool. One thing is for sure—if anyone in the class is claustrophobic, it won't take long to find out.

"That's the last thing you want on a submarine," said Information Systems Technician 2nd Class (DV) Curt Ramsey, one of the escape trainer instructors. "This ought to identify those who may have a problem with it. Between having the hood close over your face and the tight environment of the tank, no one should be able to fool us." Despite the gripping fear caused by claustrophobia, Ramsey said most people

who panic in the conditions are able to "rally up and finish the training."

The escape portion of the school was a surprise to many of the students. "I had no idea it was even possible to escape a sub," Drawns said. "I figured it was pretty much over for you if your boat went down. I was really paying attention in that class."

And that classroom instruction kicked in for most students in the pool, Seaman Recruit Joshua Henderson said. "The escape was pretty intense, but it was explained to us very well before in the classroom. So we knew what to do when we got in there."

Students closed a successful day at the escape trainer by performing a two-man escape that culminated in learning to use a single-man raft. "Everyone was pretty fired up after we were done," Henderson said. "We were all happy to get it over with."

The sense of accomplishment is not allowed to last long, however. The following



week, the escape trainer students class up for their official BESS kickoff.

What follows is a three-week period of intensive classroom study that challenges students on a daily basis. "It was much harder than I ever expected it to be," said Machinist's Mate Fireman Micheal Bybee. "The information was crammed into your heads so that you had no time to breathe. It took up nearly every second we had here."

True to Bybee's word, the typical day of instruction ran from 7 a.m. until 4 p.m. with an hour for lunch. During that time, the instructors made sure to pack as many lessons as possible in the student's day.

"It's something we really have to do," said MM1(SS) John Roberts, one of BESS' instructors. "Three weeks seems like a long time for some people, but when you have as many things to teach about as we do, you need all the time you can get. We practically go through every system and major piece of

equipment on the boat. It's a lot of info."

Learning all that information requires a longer than average school day for students. After taking a break around 4 p.m. to relax and eat dinner, nearly all students return to the schoolhouse at 6 p.m. for three hours of night study. Rare exceptions to night study are given to students who are excelling in the classroom.

Add that to a 5:15 a.m. muster for breakfast, and BESS students know they are in for a long day.

"For those couple of weeks, the day was nothing but school," Drawns said. "Then you throw in night study, and you have only a little bit of free time during the week. But no matter how much you hate night study, you really need it."

That night study comes in handy for the students during each of their three major tests during the course of the school. All Sailors in the school must pass the tests to

complete the submarine school training.

It's only after conquering the escape trainer and running through the schoolhouse that the students are able to challenge rushing waters and burning fires.

It's a moment they are more than happy to see. "After doing nothing but sitting in a classroom for a few weeks, it was welcome," Bybee said. "The entire time you're just looking forward to the trainers. You almost sit there and dream about fighting fires and patching up leaks."

When the class reaches that point, the group splits into two and alternates a two-day period in each trainer. For each, the first day is purely a classroom day. Instructors use this time to go over basic scenarios and rules with the students. The second day of training is when all the action takes place.

For students in the fire trainer, that means dressing out in full battle dress and going through several different firefighting



◀ **Sailors at the school**

are required to form up in ranks and march to breakfast and lunch each day.

Photo by PH3 Todd Frantom

▼ **The submarine**

**school's** submarine fire fighting trainer allows students to work with a live fire for the first time. By the time they are finished with the training, all students should know the basics of how to fight various types of fire.

Photo by PH3 Todd Frantom

scenarios, including the use of fire extinguishers, hoses and self-contained breathing apparatuses.

The entire time, the Sailors are fighting actual fires limited to a control room. “That added a new twist for us,” said Bybee. “The heat coming off of those fires was great. It was simulated, but it was real. We had faced nothing like that before.”

The heat from the fire may have been real, but instructors are nearby to ensure each evolution is conducted safely. “We want the students to get a real feel of what would happen in an actual submarine fire,” said Firefighting Instructor MM2(SS) Laurence Georghan, “but, with BESS classes, everything is very structured and rigid. We need to make sure everything is done without anyone getting injured.”

While ensuring safety, the instructors build the training to a peak with a scenario that tests what the students have learned in the day’s earlier sessions. “After we take them in and let them know what they are using,” Georghan said, “we hit them with a situation where fire will break out, and they must decide what kind of agent to put the fire out with. We’re there to make sure nothing goes wrong, but in that situation, the BESS students are definitely more in control than before.”

By the time the day is finished, the



students should be able to combat the flames of various types of fires if the need ever arises.

Those finished with the firefighting portion are only half done with the week, however. What awaits them in the wet trainer is more than 20,000 gallons of water spraying out of 12 leaks in a simulated arrangement of an SSBN 650-class lower-level engine room.

For those not used to waist-high water, the damage control exercise can be a harrowing experience. “The water level rises

so fast,” Nims said about his time in the wet trainer. “It definitely opens your eyes about what could happen down there. You know it’s all controlled, but it can get pretty scary.”

But in the end, the young BESS Sailors know it is training they may eventually use, whether they want to or not. “We definitely need to know it for when we get out to a boat,” Bybee said. “I’m hoping I never get to use it, but knowing my luck, it will come in handy.”

*Ludwig and Frantom are photojournalists assigned to All Hands.*



Photo by PH3 Todd Frantom

◀ **For three weeks**, U.S. Navy Submarine School students spend nearly 11 hours a day inside the schoolhouse at Wilkerson Hall. Sailors arrive at the school between 7 and 7:30 a.m. and depart at 4 p.m. before returning for two to three hours of night study each night.



Photo by PH3 Todd Frantom

◀ **SA Eskandar Nikchehi** focuses his attention on an instructor during a morning fire extinguisher training session. In a matter of moments, the class will split into pairs before entering the submarine fire fighting control trainer to combat controlled fires.

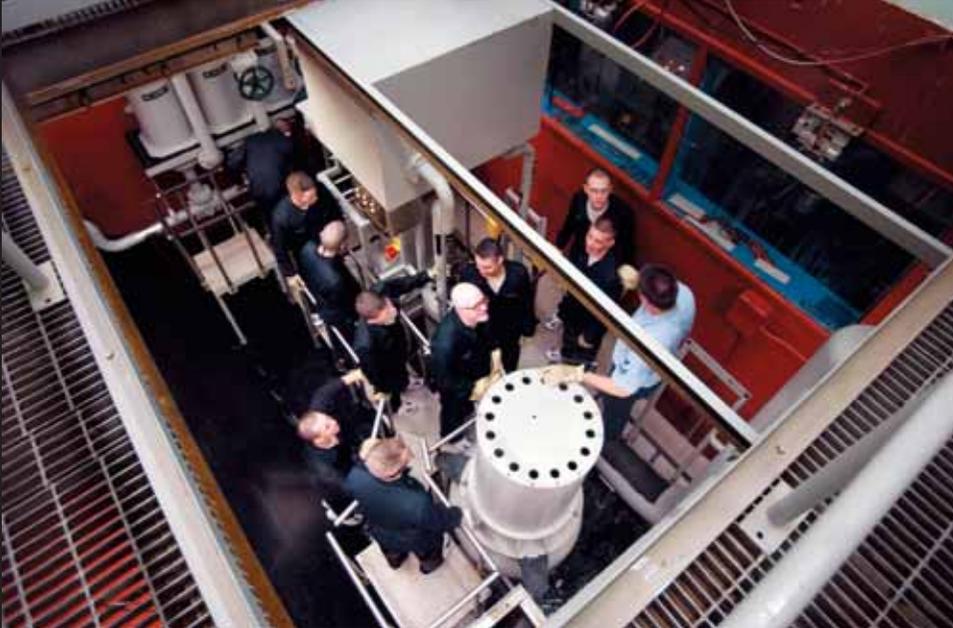
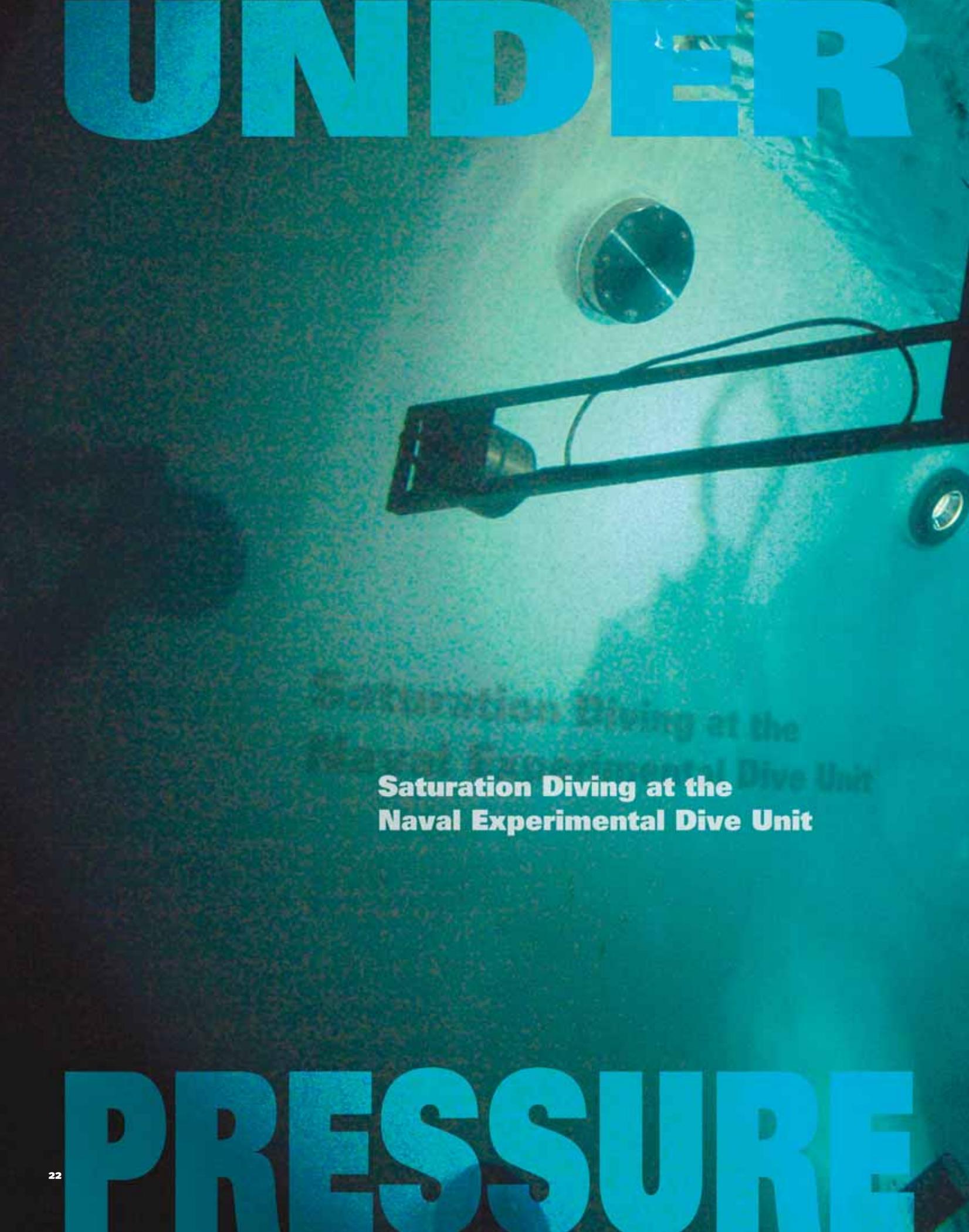


Photo by JO2 Charles L. Ludwig

◀ **Before the start** of the flooding exercise, MM2 (SW) Todd Wysopal takes his students through a step-by-step review of everything they will face in the damage control trainer.

# UNDER

An underwater photograph showing a diver's head and a light fixture. The diver's head is in the upper right, with a circular porthole visible. A long, black light fixture extends from the right towards the center. The water is a deep blue-green color, and the overall scene is dimly lit.

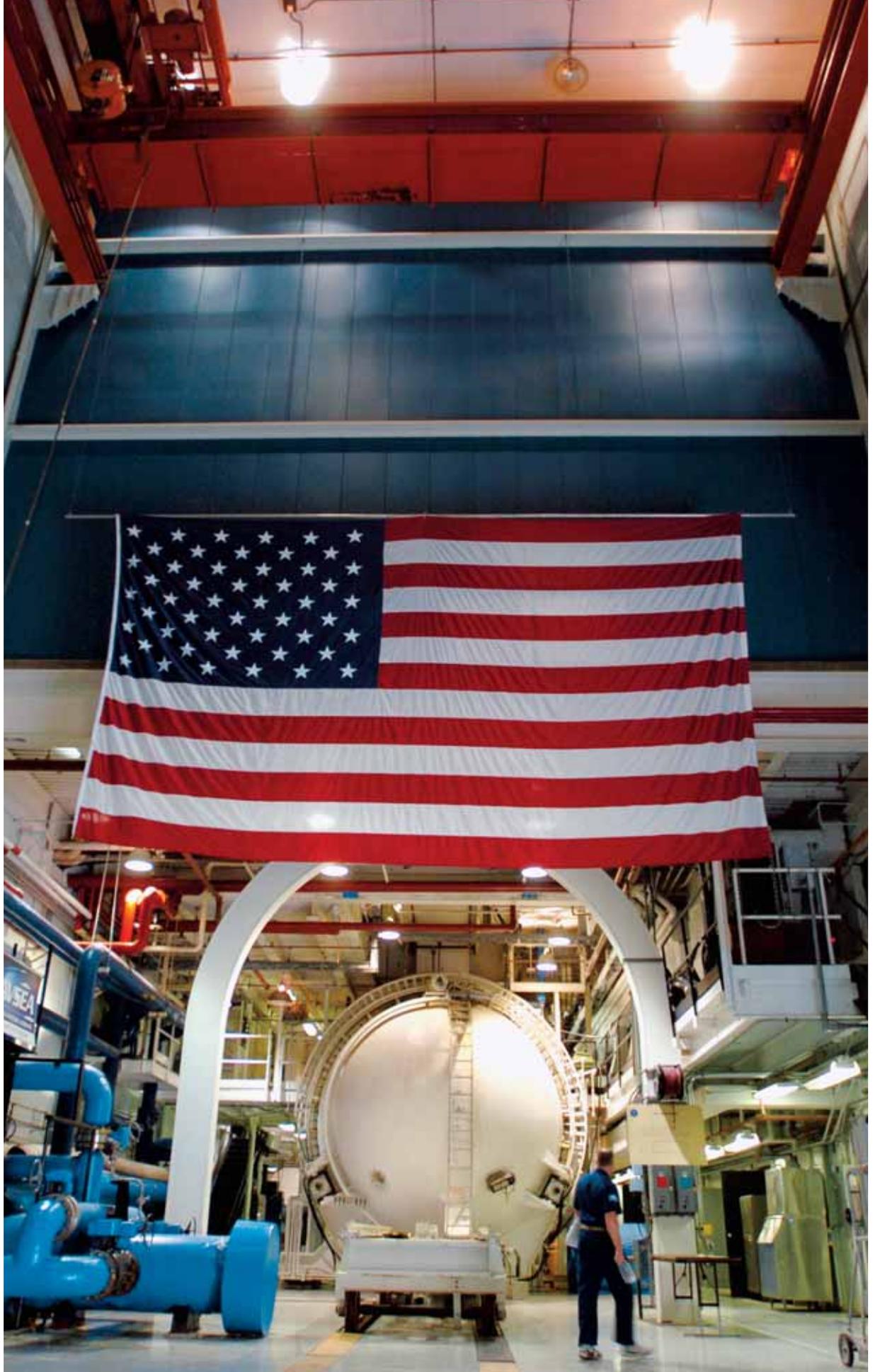
**Saturation Diving at the  
Naval Experimental Dive Unit**

# PRESSURE

Story and photos by PH1 Shane T. McCoy

◀ **The water temperature** in the wet pod is maintained at around 34 degrees to help simulate actual conditions in which the Secondary Life Support System backpack would be used.

► **The wet pod** of the complex takes up nearly two floors of the building. After water inside is drained, the wet pod can be opened up to add or remove equipment for the next dive.



**P**roper pressure in a bicycle tire is 30 to 50 pounds per square inch (psi); in a basketball, 4 psi; and paint ball guns shoot at 120 to 200 psi. The pressure placed upon a deep-sea diver during a two-week, 727-ft. saturation (SAT) dive can be as high as 339 psi, turning a task as easy as breathing into a chore.

“It’s like we’re trying to breathe through a hose in a couple feet of water,” said Builder 1st Class Joshua Ross. “We were always trying to catch our breath.”

Eight Sailors from Naval Experimental Dive Unit (NEDU) and Mobile Diving and Salvage Unit (MDSU) 2 lived in the Ocean Simulation Facility at NEDU in conditions that would make anyone with a twinge of claustrophobia cringe.

It’s called SAT diving, because at extreme depths, the tissues in the body collect gases from the surrounding environment until a point of saturation is reached. Once a diver reaches saturation, they will need to decompress once, even if they were under pressure for weeks.

“SAT diving is the only way we can stay on the bottom for extended periods of time,” said Chief Boatswain’s Mate (DSW) Keith Nelson. “The key to working for long periods of time on the bottom of the ocean is to use decompression tanks as living quarters.”

“On a SAT dive, we can go down, set up the equipment and just leave it on the bottom. Then as divers swap out, the next guy can jump on the same job the last diver was doing,” said Nelson.

Why would SAT divers put themselves into tight, dark, damp and dangerous conditions? The answer is different for every dive and every diver. Last year, off the coast of North Carolina, NEDU’s SAT divers helped to recover the sunken turret of USS *Monitor*, the Civil War Ironclad ship.

If you want to find the Navy’s largest hyperbaric complex in the world, you come to NEDU.

“This is the ‘Cadillac’ of saturation systems,” said Damage Controlman 1st Class (DSW) Jorge Guillen, the team’s leader. “Other countries have them, but I don’t think any are as large.”

As team leader, Guillen keeps a close eye on his team inside the chamber. “The doctors outside the chamber would talk to me each morning and evening during sick call to check on each person’s morale and condition,” said Guillen. “Then they speak to each member and our corpsmen using a two-way video conference.”

Medical concerns are taken very seriously during a SAT dive. At depth, every little cut can become infected, causing



▲ **Brightly colored Purafill** pellets filter out odors in the chambers. The deeper the chamber goes, the more intense odors become.

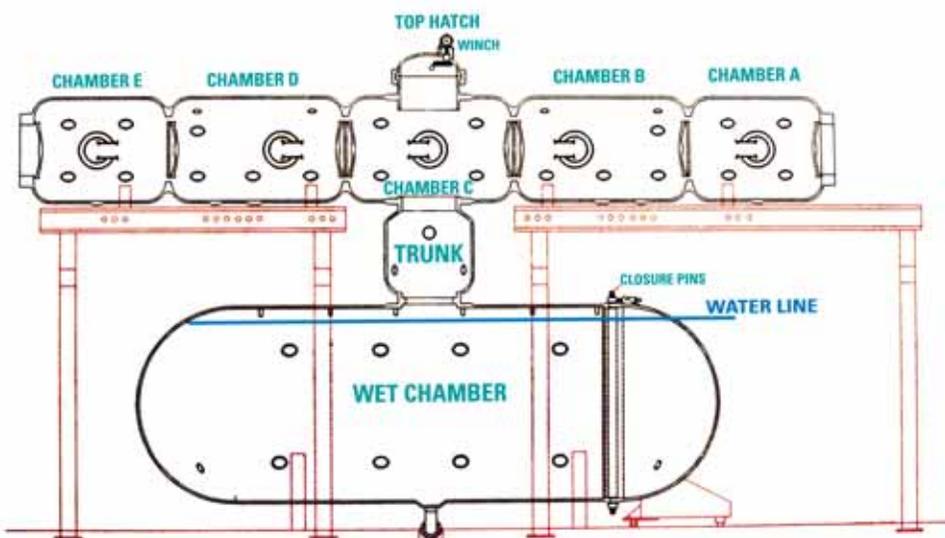


▲ **LT John Melton**, a research psychologist, gives memory tests to each diver at different depths to test the effects of pressure and gases on brain functions.



▲ **To keep oil and dirt out**, street shoes cannot be worn inside the chambers. If you wish to enter, you must don a pair of “chamber shoes,” commonly known as Vans.

### ▼ **Diagram of the Ocean Simulation Facility Chamber Complex.**



serious problems.

“The environment in the simulator is warm, humid and oxygen-rich, compared to conditions on the surface. This can lead to different kinds of infections, including fungal and bacterial infections,” said LT Jeffery Chao, one of the diving medical officers. “This makes hygiene extremely important. Common problems like athlete’s foot can spread much faster while in the complex.”

As the pressure increases, the oxygen used by the divers has to be thinned out. If they were to breathe the same amount of oxygen at a depth of 700 ft. that they did at sea level, it would be lethal. To compensate for this, helium is added to the oxygen to thin it out. Voices then become as squeaky as if you inhaled helium from a balloon.

It’s amusing at first, but the deeper they go, more helium needs to be added to

the mix, making it difficult to understand the simplest of sentences.

“It makes it hard to communicate with people outside the chamber,” said Guillen. “Even inside where we could understand each other at 60 ft., when we got to 700 ft., we had to use hand signals and even write things down on occasion.”

To enable tenders outside the chamber to understand the helium-distorted voices, a voice modulator is used. Divers may still sound a bit like Mickey Mouse, but without the modulator, communication would not be possible. Some simple phrases are modified while in the chamber. For example, “Yes” is changed to “Yes, Yes” because a high-pitched “Yes” can sound like a “No.”

During the decompression phase of the dive, every morning at 6 a.m., the divers were awakened with a little music pumped in from the control room. They did some cleaning before breakfast to help minimize

bacteria in the chamber. The rest of the day was spent on the three ‘M’s.

“It gets a little boring,” says Guillen. “The three ‘M’s are ‘mattresses’, ‘meals’ and ‘movies’, and that’s about all you have to do all day. We would rather be doing some work, diving or anything that would make the time go by faster. Doing two weeks in the chamber is easily like doing a six-month cruise.”

This year’s deep dive, to test a diving backpack—the Secondary Life Support System (SLS)—might help save the lives of future Navy SAT divers.

Civilian divers have used the SLS for several years as an emergency means of returning to the diving bell if there is a problem with oxygen hoses. If the SLS is put into use by the Navy, it will give the divers close to 30 minutes to return to safety.

“What they want to simulate during this testing is that you lost your umbilical, that it

▼ **Divers are monitored** by camera 24 hours a day. With cameras placed directly above showers and toilets, privacy is non-existent.





▲ Only the living chambers of the complex can be seen from the top floor. Two stories worth of dive pod is below.



▲ **LT Jeffery Chao** one of NEDU's medical diving officers, conducts sick call with the divers inside the chamber. Sick call is held twice a day using monitors and telephones.



▲ **CS2 Antonio Spain** has been temporarily assigned to work in the Ocean Simulation Facility galley for the full two-week dive. Meals are prepared, loaded in a circular container, placed in an air lock and sent to depth for the divers.

was cut or something happened where you were getting nothing from the bell,” explains Nelson. “You have no hot water and no gas supply, so you go on the back-pack. It is designed to give you enough breathing gas and time to allow you to work your way back to the dive bell, where you are safe and can get warm.”

To simulate the effort it would take to find your way back to the bell, divers ride a bike in the wet pod of the complex. Everything on them is monitored and recorded: heart rate, gas in, gas out and core body temperature. All data is used to evaluate the SLS and determine if it meets the Navy’s requirements.

Today’s Navy has dive lockers all over the world keeping our ships floating. They might dive on a downed plane, work on a pier or do underwater construction. But in the entire Defense

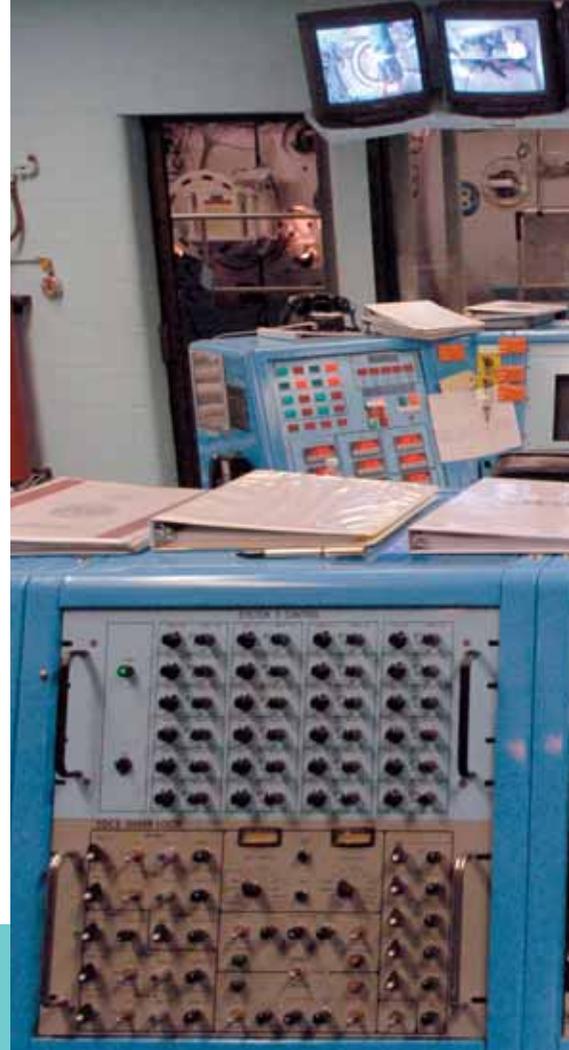
Department, NEDU is the only command where a Navy diver will be able to experience saturation diving.

“This command is definitely different than any other dive command in the Navy,” said Guillen. “At other dive commands, you know what you will be doing day to day, but here we are always guinea pigs. One week we are on a deep dive, and the next we are testing the effects of 100 percent oxygen on the body at different depths. Any diver who gets the chance to come here should take it.”

*McCoy is a photojournalist assigned to All Hands.*

**Website Exclusive**

Find more photos online at [www.news.navy.mil/media/allhands/flash/ah200406/feature\\_3/](http://www.news.navy.mil/media/allhands/flash/ah200406/feature_3/)



▼ **DC1(DSW) Buddy King** reads a magazine to help pass the time during decompression. This dive required more than a week to decompress after working four days.





◀ **ENCS(MDV) Lyle Becker** and HTC(DSW) **Joe Schlagenhaft** stand watch at the dive watch supervisor console. The console is manned 24 hours a day while the divers are in the complex.

▼ **Leaving the chamber** is similar to a welcome home for the dive team. After they finish the line of hand shakes and photos, they are required to have a post-dive physical.



► **Emergency deep!** Members of the USS *Maine* (SSBN 741) Blue crew react to an emergency deep drill generated by the ship's commanding officer, CDR Robert Palisin. Periscope depth is a very dangerous evolution for a submarine because all of the submarine, minus the tip of a periscope remains underwater so oncoming ships can't see the boat.

# The Silent Service

Story and photos by JO1 (SCW/SS) James Pinsky

**M**eet Machinist's Mate 3rd Class Trevor Kopp and his 154 brothers.

Kopp and his family live in King's Bay, Ga., a fitting place to raise a family of 155 men with its low cost of living and traditional southern hospitality.

But, unlike most families, what binds these men together isn't their last name. After all, each one of Kopp's brothers comes from a different set of parents. No, what makes these men brothers is what they call home – a 560 foot-long steel boat with no windows, no fantail, and in the event of a casualty – no easy escape.

These brothers are submariners.

"The difference in damage control philosophies between us and a surface ship is that if we start sinking because of a casualty, there's nowhere to escape," said Chief Electronics Technician (SS) William Murtha, USS *Maine's* (SSBN 741) Blue Crew 3M and drill simulator coordinator. "We can't jump on any life boats, abandon the ship or parachute out of a plane to avoid the fire, flooding or catastrophic mechanical failure."

Every submariner is familiar with what hundreds of feet of overhead seawater can do to a submarine if it found its way

into the boat. They know that a fire anywhere in the enclosed steel tube can fill the boat with smoke in about 10 minutes; or that the tubular design of a submarine, meant to aid its smooth swim through the ocean, when faced with a fire, turns the boat into a super-sized convection oven.

But they go to sea anyway, cruising below the ocean's cloak. Most people, many Sailors included, think they're crazy. But like any family, when nobody else understands them, they understand each other.

"To be a submariner you have to be



A black and white photograph of the USS Maine (SSBN 741) on the surface of the ocean. The submarine's conning tower and various masts are visible on the left side of the frame. The water is choppy with small waves. The sky is clear and dark.

◀ **USS Maine (SSBN 741)** is the third and most survivable of America's nuclear triad. Here, the boat transits the surface prior to submerging.



▲ **During night surface** or periscope operations, submarines rig the control room for red to help maximize their night vision.

different,” said Murtha. “It takes a unique mindset to handle being isolated from people, the sun and fresh air as long as we are. Most people just can’t handle the thought of being underwater, but submariners never really think about it. We try to tell people that being submerged at 400 feet is just like sitting on your couch in the living room, but I guess they just can’t get past having that much water above their heads.”

Murtha’s words go a long way in understanding why the submarine warfare qualification process, the one and only passage into the “Dolphin”-wearing brotherhood, has always been mandatory.

“Earning your Dolphins is what signifies to the rest of the crew that you can and will be trusted with our lives,” said Electronics Technician 2nd Class (SS) Joseph Brugeman. “I know everyone aboard personally, and that level of familiarity allows me to trust them in a

casualty situation. I couldn’t imagine trusting my life and the life of the boat with anyone I didn’t know personally. If you’re on my boat and you’re wearing Dolphins, then I trust you, period. I don’t care if you’re a yeoman, cook, missile technician or mechanic – I know you’ve got my back. It doesn’t get any more intimate than that.”

When a new Sailor reports aboard any submarine and gets his boat’s submarine warfare qualification card, he’ll find blocks for pneumatics, hydraulics, sonar and even the weapons systems. What he won’t find any signatures for is the very thing that wearing Dolphins is all about – trust. But once you’re wearing them, trust is the one thing that rank and rating knowledge can’t compare to.

“Wearing Dolphins means much more than knowing how to draw all of the boat’s hydraulic, steam, electronic and air systems,” said Culinary Specialist 3rd

Class (SS) Jeff Smith, the Blue Crew’s night baker. “It means more than being able to explain how a drop of seawater outside the boat makes it into your cup in the galley. No, wearing Dolphins means that the crew trusts you to know how to save the boat regardless of the casualty, and regardless of your rating or rank. Earning that trust makes you much more than a professional Sailor, it makes you a member of the submarine family.”

Having a cook comment on the aspects of damage control may not be the quote of choice on most Navy ships, but on submarines, wearing Dolphins is all that matters.

“On my boat,” said CDR Robert Palisin, *Maine’s* Blue Crew commanding officer, “everyone is expected to know how to save the boat. We don’t discriminate based on what your rating or even your rank is. My cooks should and do know how to fight a fire in the engine



room, just like my nuclear trained mechanics are expected to know how to isolate a power supply if smoke comes from the sonar shack. Everyone on a submarine is the damage control party – everyone.”

Palisin was careful to explain that damage control is much more than just knowing what to do if something bad happens. It’s being confident enough in your knowledge of the boat’s systems to speak up if someone else on the crew is about to make a mistake that affects ship’s safety.

“In the submarine force, we put an emphasis on being right more than what a Sailor’s rank might be, because everyone aboard a submarine is expected to be a backup to his shipmate,” said Palisin. “Even I, as the captain of this boat, would expect the most junior Sailor to jump up and down screaming his head

*continued on page 38*



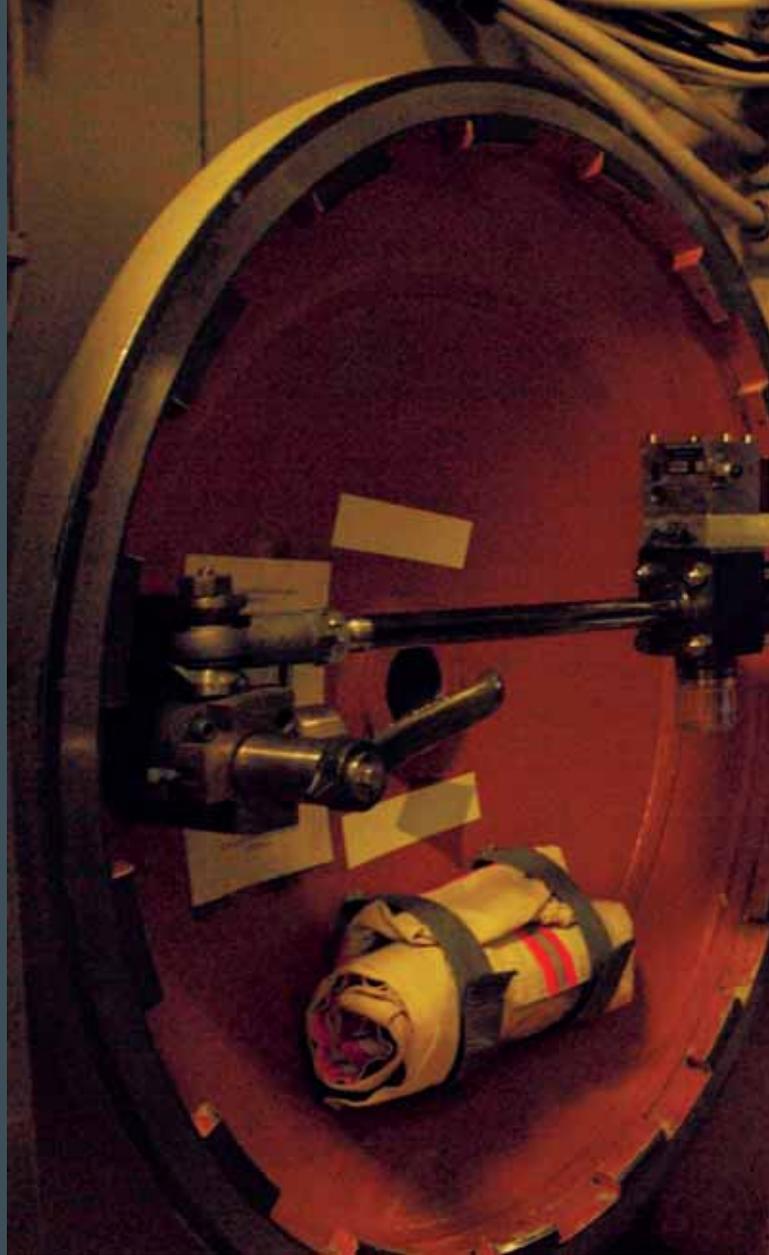
▲ **MT3 Colin Costello and MT3 Richard Mullins** get some help on understanding missile tube radiation monitoring panels from the missile compartment roving patrol, MT3 Johnathan Pierce. Like all Navy jobs, qualifying for watchstations is a never-ending process.

◀ **Oxygen breathing apparatuses**, or OBAs, are still used in the submarine fleet to fight casualties. Submarines, by nature of their watertight design, don't take long to fill up with smoke in the event of a fire, so providing alternate ways to breathe are paramount to fighting any casualty that affects the boat's internal atmosphere.

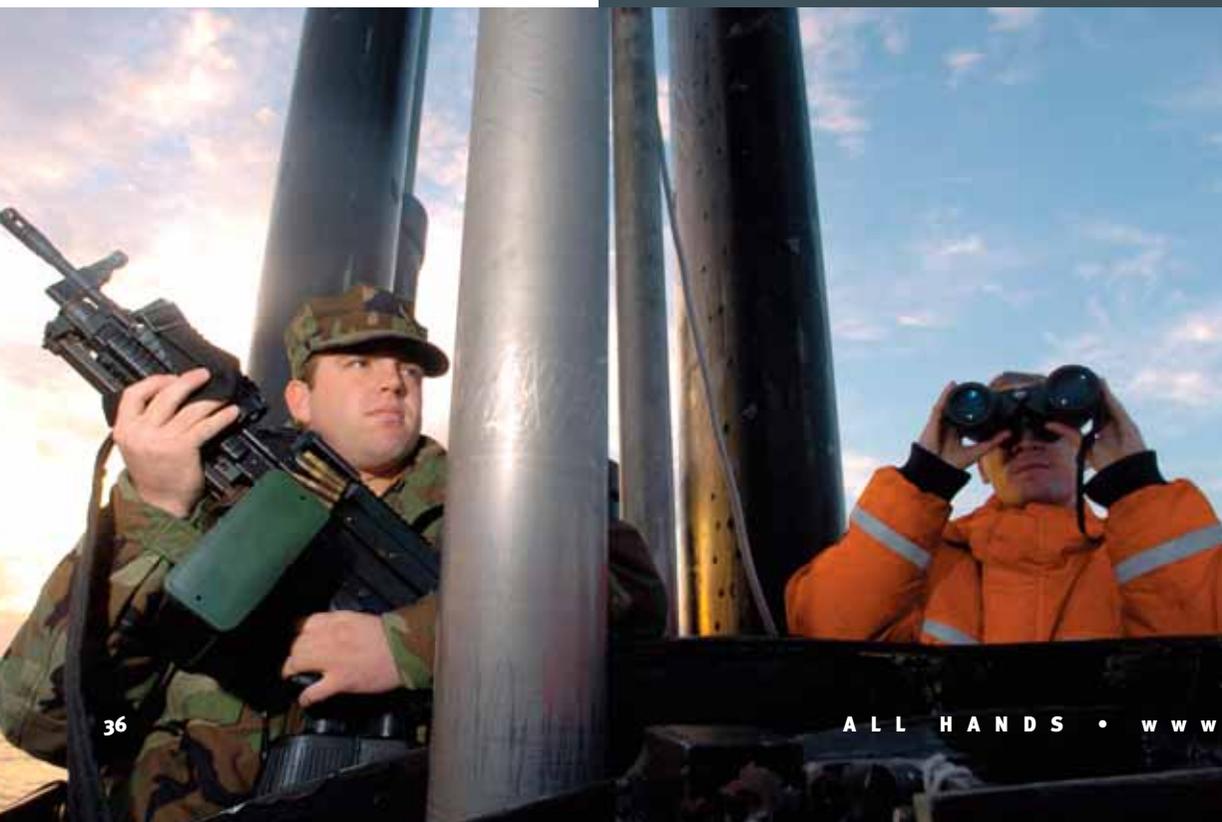
▼ **Surface transits** and periscope operations are some of the most dangerous evolutions a submarine completes. The control room, pictured here, is the busiest place on the boat, with both periscopes manned by the ship's control party and constant communications between crew members on the watch team, including members on top of the sail, or fairwater.



◀ **In the submarine force**, respect rests almost solely on whether or not a Sailor has earned his "Dolphins" – an outward sign that he is capable of fighting shipboard casualties and helping to preserve the lives of his shipmates.



▼ **The terrorists attacks** of Sept. 11, 2001, also affected the elusive submarine fleet. Now when surfaced, submarines have armed lookouts positioned in the sail of the boat to thwart any would-be surface-borne attackers.





◀ **Water-tight hatches** separate the forward compartment from the missile compartment. Here, oncoming watch standers wait their turn for lunch, which is served in the galley, just forward of the water-tight door pictured here.

▶ **For years the only “secrets”** that escaped from the submarine force were the ones about the great meals they ate. Contrary to rumors, the submarine force uses the same food supplies as the rest of the fleet.



# Focus on Service

Story by JO2 Charles L. Ludwig, photo by PH3 Todd Frantom

## TOUR GUIDE

**T**he last thing a submariner wishes is to be noticed. In fact, as a member of the “Silent Service” it is their job to go about their business completely undetected.

Well, Electronics Technician 1st Class (SS) *Gregory Migliore* may be a submariner, but his current duty at the U.S. Navy Submarine Museum in Groton, Conn., has him striving to be on everyone’s radar. In fact, as a tour guide assigned to the submarine-turned-museum, ex-USS *Nautilus* (SSN 571), he has an obligation to be noticed by tourists year round.

In serving out his shore rotation on *Nautilus*, the first nuclear-powered submarine, *Migliore* is responsible for duties ranging from making sure the museum is open on time to making sure tourists’ questions can be answered.

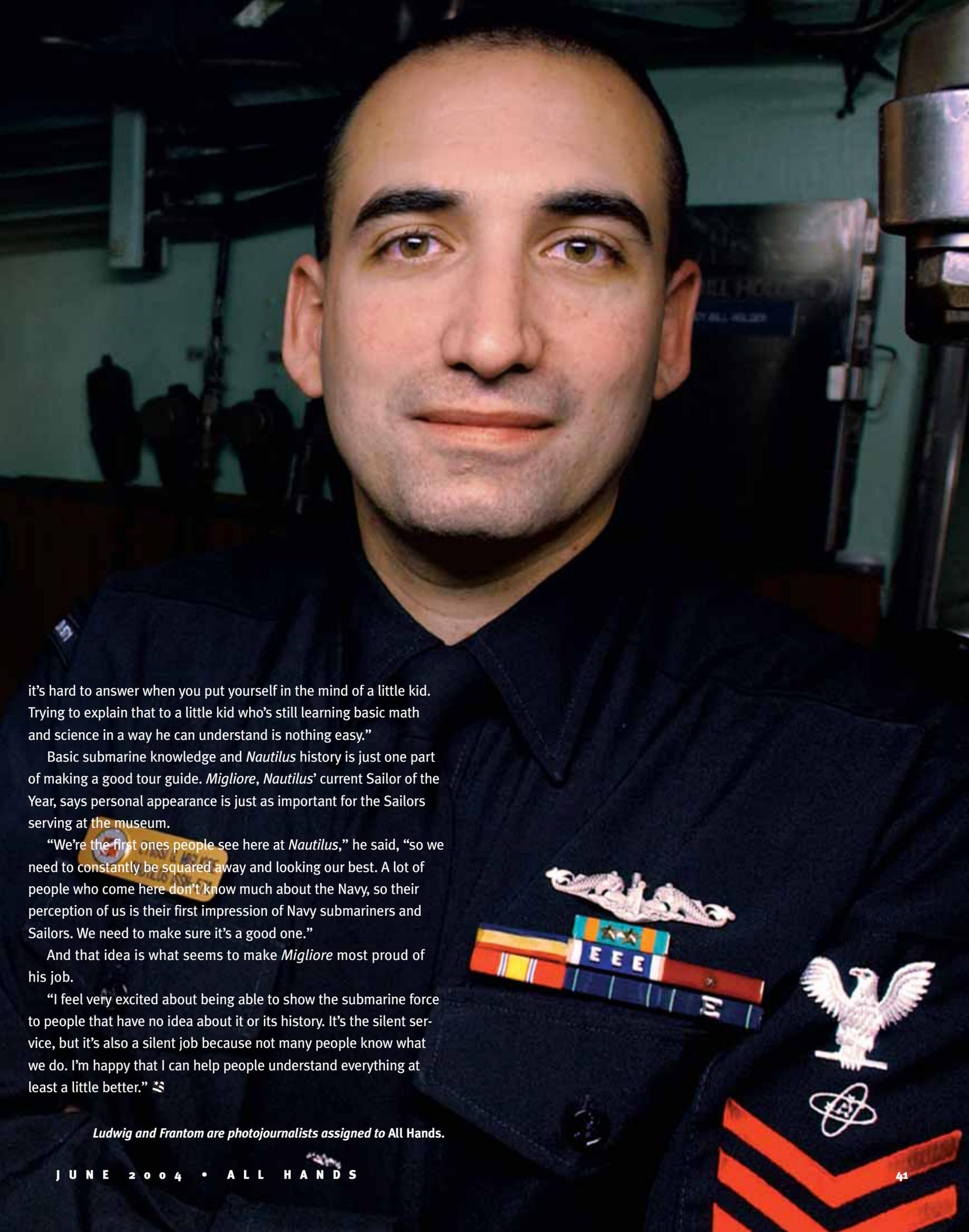
*Migliore* recognizes his latest mission has an ironic twist. “When most of us were on boats, we would never deal with the public. Our whole job was to make sure we were never seen,” he said. “Then we come here and we have to deal with the public on a daily basis. It’s a weird switch for me.”

But the change in task doesn’t go unaided. When a Sailor arrives at the museum, he is inundated with public relations training. After the first several weeks, a new tour guide should be able to answer any tourist’s question without hesitation.

“We obviously want to make sure we represent the Navy well when tourists are here,” *Migliore* said. “[Our officers] make sure we get all the training we need in courtesy and Navy heritage. We are schooled in answering the basic Navy questions people always ask.”

But, the training can’t save them every time.

“It gets tough sometimes, like when a little kid asks how nuclear propulsion works,” said *Migliore*. “It’s not a strange question, but



it's hard to answer when you put yourself in the mind of a little kid. Trying to explain that to a little kid who's still learning basic math and science in a way he can understand is nothing easy."

Basic submarine knowledge and *Nautilus* history is just one part of making a good tour guide. *Migliore*, *Nautilus*' current Sailor of the Year, says personal appearance is just as important for the Sailors serving at the museum.

"We're the first ones people see here at *Nautilus*," he said, "so we need to constantly be squared away and looking our best. A lot of people who come here don't know much about the Navy, so their perception of us is their first impression of Navy submariners and Sailors. We need to make sure it's a good one."

And that idea is what seems to make *Migliore* most proud of his job.

"I feel very excited about being able to show the submarine force to people that have no idea about it or its history. It's the silent service, but it's also a silent job because not many people know what we do. I'm happy that I can help people understand everything at least a little better." ❧

*Ludwig and Frantom are photojournalists assigned to All Hands.*



▲ **“Running boat casualty** drills helps identify training deficiencies,” said USS *Maine* Commanding Officer CMD Robert Palisin. “It’s also one of the most dangerous things we do on board so we use drill monitors to both maximize the training during the drills and ensure the safety of the ship.”

*continued from page 34*

off if I made a mistake that endangered the ship. Our lives depend on knowing that we can count on each other to watch our backs, to make sure the safety of the ship is placed well ahead of rank or rate.”

Palisin, like all boat captains, makes sure his crew knows how to fight any casualty by constantly running casualty drills throughout the boat’s deployment. After all, practice makes perfect, and when you have only yourselves to count on, being perfect is the only standard good enough to keep you alive.

“We practice responding to casualties so much that we do it instinctively,” said MM2(SS) Jim Crowson. “Our training has to be instinctive. Otherwise, we might get scared first instead of responding if the real thing ever goes down. At 400 feet, there’s no time to be scared. I’m not trying to sound macho—it’s just the reality of how to survive when all you may have are seconds before the boat

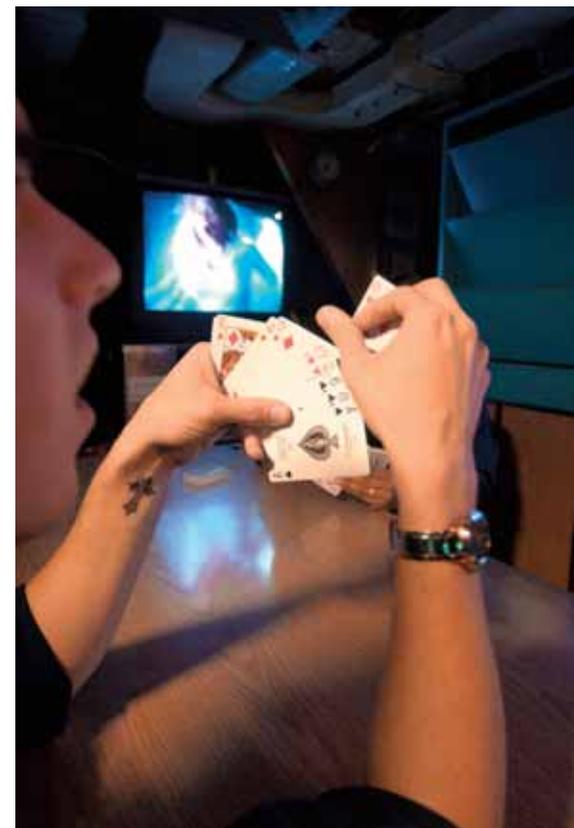
sinks below crush depth.”

Despite going to sea on a boat with no windows, no fantail, no helipad or even a hatch to allow in some tension-breaking fresh salt air, submariners are still Sailors at heart. These brothers all volunteer for submarine duty, and their commitment is no different than the Sailors on aircraft carriers, cruisers or even tugboats. They just make a few extra bucks (submarine special duty pay) doing it, which comes in handy when you have 154 brothers’ birthdays to buy for.

They love their country, uphold the Navy’s Core Values of honor, courage and commitment and want to make it back safely from every deployment. As the silent service, though, they’d just rather you didn’t talk about it. ♣

*Pinsky is a photojournalist assigned to All Hands.*

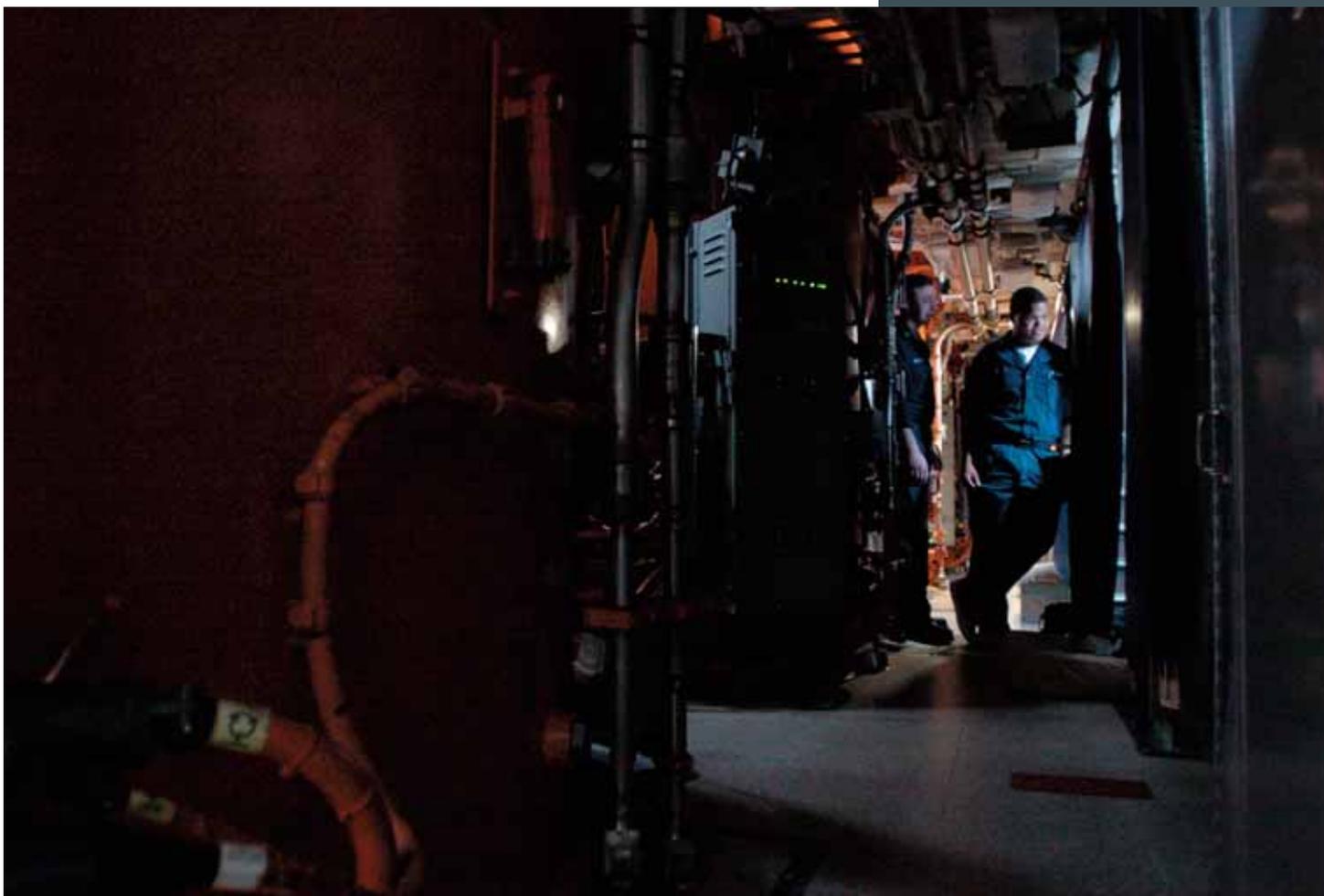
▼ **Submariners, like all Sailors,** enjoy their leisure time when they have it. Playing cards and watching movies is a favorite pastime on USS *Maine*.



► **While underway**, submariners wear sneakers instead of hard-soled shoes to reduce noise levels that could alert an adversary to the ship's location.



▼ **As roomy as a Trident** submarine is compared to smaller attack boats – and the even smaller diesel boats of yesteryear – space is still at a premium. Here, SN Cedric Bennett studies ship's qualification notes with CS2 Travanti Johnson at his rack. Johnson sleeps on a make-shift rack set between supply lockers on the missile compartment's second level because the ship's standard berthing isn't big enough to accommodate the entire crew.



# Eye on the Fleet

**Eye on the Fleet** is a monthly photo feature sponsored by the Chief of Information Navy Visual News Service. We are looking for **high impact**, quality photography from **Sailors** in the fleet to showcase the American Sailor in **action**.

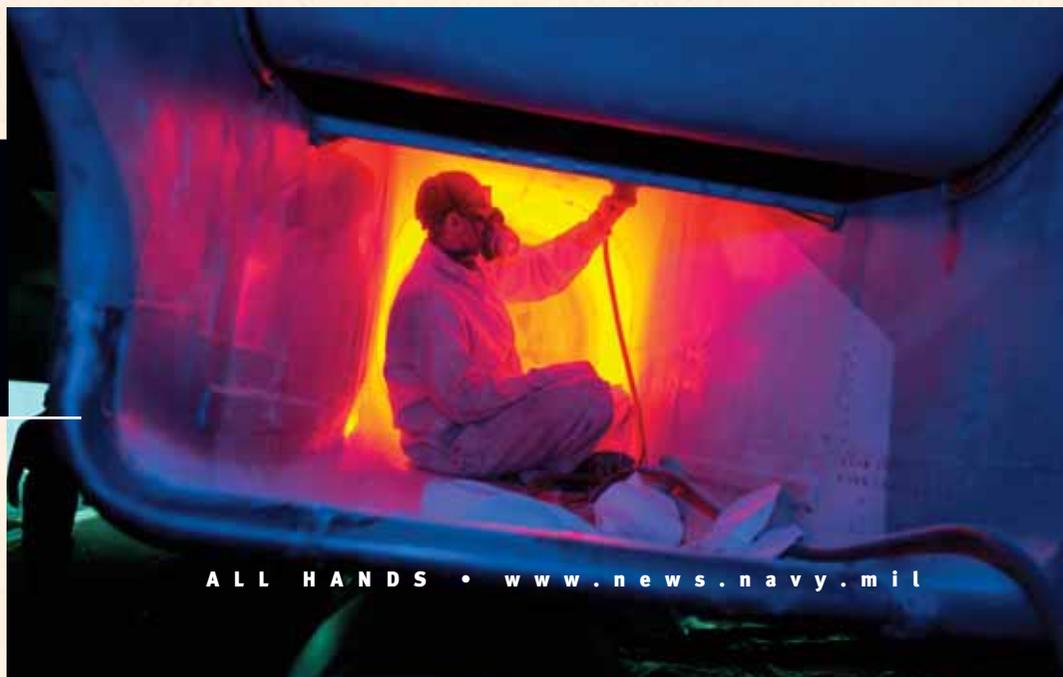


◀ A Sailor assigned to the guided-missile cruiser USS *Port Royal* (CG 73) hugs his wife and son after a six-and-a-half month deployment as part of Expeditionary Strike Group (ESG) 1. *Port Royal* returned following Operations *Enduring Freedom* and *Iraqi Freedom*.

Photo by J0SN Ryan McGinley

▶ AM3 Hezekiah Crandall uses an air-powered sander on the intake of an F-14B *Tomcat* assigned to Fighter Squadron (VF) 143 in the hangar bay of USS *George Washington* (CVN 73).

Photo by PH1 Brien Aho





▼ The color guard assigned to the guided-missile destroyer USS *Pinckney* (DDG 91) stands at attention during a memorial service honoring three *Pinckney* Sailors who were killed in a bus accident March 12. More than 40 other Sailors were injured when the bus in which they were traveling collided with a truck about 20 miles north of Beaufort, S.C.

Photo by JO2 Christal Bailey

◀ A Sailor assigned to the *Arleigh Burke*-class destroyer USS *Roosevelt* (DDG 80) tosses a forward line to Sailors aboard the fast-attack submarine USS *Toledo* (SSN 769) during a small boat transfer evolution using a Rigid Hull Inflatable Boat (RHIB).

Photo by PH2 Michael Sandberg



◀ Lee Kinsey, a mechanic and jackman for the Fitz-Bradshaw Racing Team, demonstrates the proper use of force prior to the pit stop scenario competition. The Navy NASCAR Team visited Naval Station Great Lakes, Ill., to experience recruit training and to attend a recent graduation review.

Photo by PH1 Michael Worner

**To be considered**, forward your **high resolution (5" x 7" at 300 dpi)** images with full credit and cutline information, including **full name, rank and duty station**. Name all identifiable people within the photo and include important information about what is happening, where the photo was taken and the date. Commands with digital photo capability can send attached .jpg files to: [navyvisualnews@hq.navy.mil](mailto:navyvisualnews@hq.navy.mil)

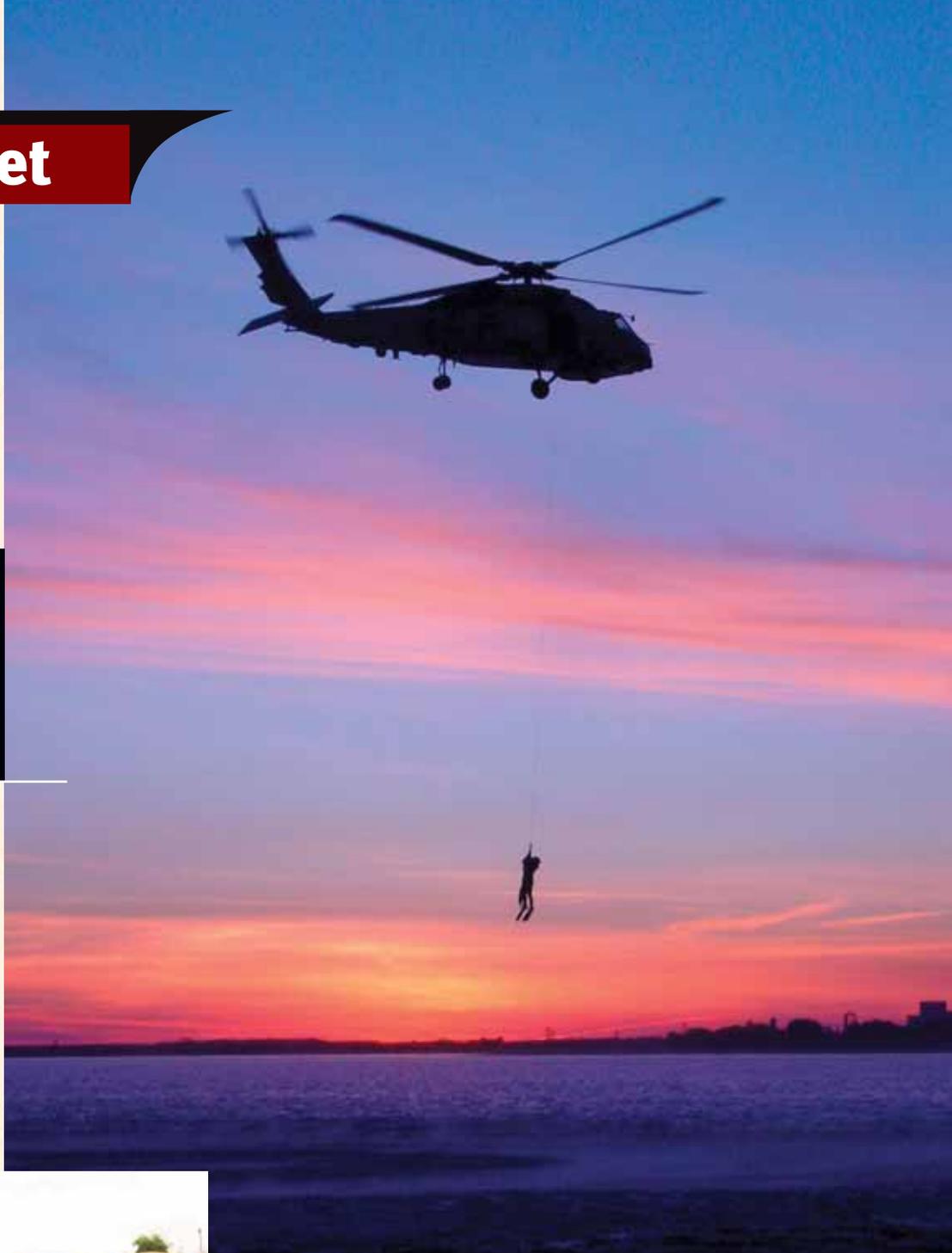
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# Eye on the Fleet

▶ AW2 Zane Morton is hoisted up to an SH-60B *Seahawk* assigned to Helicopter Anti-Submarine Squadron Light (HSL) 45 during a late afternoon training operation.

Photo by LTJG Jeff Valdes



◀ A member of Mobile Security Squadron 7 mans an M-60, 7.62mm machine gun during urban terrorism training in Barrigada, Guam. Mobile Security Squadron 7 personnel are trained to protect designated DOD high-value assets against terrorist attacks in locations where U.S force protection infrastructure does not exist or requires augmentation.

Photo by PH2 Nathanael Miller

▼ Two members of the U.S. Navy's "Leap Frogs" parachute team descend into San Diego's Petco Park as part of opening ceremonies for the San Diego Padres' Military Appreciation Day.

Photo by PHAN Melissa Vanderwyst



▲ ABH2 Reuben Nicholson watches an F/A-18C *Hornet* assigned to Strike Fighter Squadron (VFA) 131 as it comes in for an arrested landing aboard USS *George Washington* (CVN 73).

Photo by PHAN Jessica Davis

▶ HM3 Keith Griffin rappels from a UH-3H *Sea King* during a simulated Search and Rescue (SAR) exercise. Griffin's mission, as part of a SAR unit, is to locate stranded victims and bring them to safety.

Photo by PHAN Chris Otsen



**Eye on History** is a monthly photo feature sponsored by the Naval Historical Center.

For more photos pertaining to naval history, go to [www.history.navy.mil](http://www.history.navy.mil).

## We Are Getting Into a Fight

"We of the Western Naval Task Force are going to land in France. From the battleships to landing craft, ours is in the main, an American Force. We all have the same mission – to smash our way onto the beaches and through the coastal defenses, into the heart of the enemy's fortress.

"In two ways the coming battle differs from any that we have undertaken before: It demands more seamanship and more fighting. We must operate in the waters of the English Channel and the French coast, in strong currents and 20-foot tides. We must destroy an enemy defensive system that has been four years in the making, and our enemy will throw his whole remaining strength.

"These are not beaches held by an apathetic enemy or defended by hasty fortifications. These are prepared positions held by Germans, who have learned from past failures. They have coastal batteries and minefields; they have bombers and E-boats and submarines. They will try to use them all. We are getting into a fight.

"But, it is not we who have to fear the outcome. As the German has learned from failure, we have learned from success. To this battle we bring our tested methods, with many new weapons and overwhelming strength. Tides and currents present a challenge which, forewarned we know how to meet. It is the enemy who is afraid.

"In this force there are battleships, cruisers and destroyers. There are hundreds of landing ships and craft, scores of patrol and escort vessels, dozens of special assault craft. Every man in every ship has his job. And these tens of thousands of men and jobs add up to one task only – to land and support and supply and reinforce the finest Army ever sent to battle by the United States.

"In that task we shall not fail. I await with confidence the further proof, in this, the greatest battle of them all, that this, that American Sailors and seamen and fighting men are second to none."

RADM Alan G. Kirk, commander of U.S. Naval Assault Forces,  
issued this statement to his command, June 5 1944.

U.S. Navy Photos Courtesy of  
the Naval Historical Center

▶ June 6, 1944

Troops crouch inside an LCVP just before landing on  
“Omaha” beach on “D-Day.”



**Editor's Note:** At midnight, June 5, 1944, 6,000 ships and 13,000 aircraft participating in Operation *Overlord* began moving toward their targets, the beaches along the Normandy Coast of France. By 1 a.m. the first air-borne and glider-borne troops reached Normandy. At approximately 6:30 a.m., 14,000 rockets were fired to provide cover for the Allied tanks and personnel that came ashore on D-Day, June 6, 1944.

▶ June 10, 1944

Ferry RHF-14 lands vehicles on “O” Beach.  
In the background are USS *LST* 502 and  
HMS *LCT* 562.



▼ June 6, 1944

“D-Day” beach traffic, photographed from  
a 9th Air Force bomber.



▼ June 10, 1944

LCVPs operate off the Normandy coast.  
USS *LCI*-321 is at left.



## This Is Not a Drill

Story by J02 Charles L. Ludwig

I admit it. I was wrong. When I was a kid, I was always told to “practice the way you play.”

As a child, I, like many others my age, was passed this time-honored cornerstone of work ethic while I was playing for various youth-league sports teams. I can still hear all my sports coaches attempting to hammer it into my then-tiny head.

One problem – I never believed it. Maybe I was a little hard-headed, or maybe just a slight bit more dim-witted than most, but I would always move at near half-speed when I wasn't working on the “real thing.”

It's a good thing I wasn't one of the emergency responders participating in a Navy Medicine Office of Homeland Security-led disaster training exercise at Naval Hospital (NH) Charleston March 12. There was no room for half-speed that day, as practice quickly turned into a real-life crisis.

The exercise, part of the two-year-old Disaster Preparedness, Vulnerability Analysis, Training and Exercise program, was only an hour old when the group's undertakings were interrupted by a new assignment from CAPT Susan Widhalm, NH Charleston's commanding officer.

The mission: to support NH Beaufort's response to a bus accident that killed three Sailors and injured more than 40 others.

“This is not a drill,” Widhalm announced to the 55 exercise participants. After explaining the situation involving personnel from PCU *Pinckney* (DDG 91), the exercise halted, allowing responders to place calls and/or depart for response activities.

*Pinckney's* Sailors, more than 200 of them, were on their way to a wreath-laying ceremony at Beaufort National Cemetery in honor of their ship's namesake when the bus collided with an oncoming truck.

Now, it's at this point that I would have been in trouble. My half-speed sensibilities would have been too much to overcome. Confused and disoriented, I think I would have been completely lost at that point.

But the emergency responders weren't lost. After receiving the call for assistance, a handful of the exercise's personnel started applying the very skills they were training up on just moments before.



For NH Charleston, this meant a rush to provide support by shifting available blood products to NH Beaufort, along with mobilizing disaster mental health services and planning to assist in caring for the deceased. Services were immediately mobilized to provide assistance to the family members of the victims. They were prepared where many others, including myself, would have been at a loss.

After 13 of the 55 emergency workers set out for assistance, Widhalm and the remaining training group completed the training.

“Their level of readiness was remarkable,” said CDR Mary Chaffee, director, Navy Medicine Office of Homeland Security. “The hospital's ability to proceed with the exercise, while also providing support to an actual event, demonstrated the exceptional capability of the hospital and community team. We were there to evaluate their emergency response plans, and our team was very impressed.”

In all, their efforts helped more than 40 Sailors start traveling on their personal road to recovery. And it led at least one Navy journalist to look within himself to find a few words of regret for things he hadn't learned in the past.

Sorry, coach, you were right. ❧

*Ludwig is a photojournalist assigned to All Hands.*



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