

Independent Duty Corpsmen

To The Battlefield

From

Deckplates

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Articles must be between 600-1,000 words.

All articles must be present tense/active voice.

Photos must be minimum 300 dpi.

Photos showing action are preferred.

All photos must be accompanied by a caption and photo credit information.

Subjects considered:

Round Up: Stories about activities at MTFs and the field. Photo Album: Action shots from across Navy Medicine. Feature Articles: Stories featuring interesting contributions of Navy Medicine to military operations including everything from combat support to Humanitarian Relief/Disaster Response will be considered. Please contact Capt. Cappy Surette (cappy.surette@med.navy.mil) for current theme of issue in progress.

R & D and Innovations: Any new processes and/or research and development news.

Quality Care: Anything that improves the quality of care for our patients.

IT, QA: Any articles showing how Navy Medicine is utilizing the electronic age.

Shipmates: Anything interesting about our shipmates working in the healthcare field in the Department of the Navy.

All submissions must be accompanied by complete contact information for author.

In the event there is more than one author please assign one author to be primary correspondent.

Feedback Welcome

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Charter

NAVY MEDICINE is the professional magazine of the Navy Medical Department community. Its purpose is to educate its readers on Navy Medicine missions and programs. This magazine will also draw upon the medical department's rich historical legacy to instill a sense of pride and professionalism among the Navy Medical Department community and to enhance reader awareness of the increasing relevance of Navy Medicine in and for our nation's defense.

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The Mission of USS Kirk Revealed in New Documentary

KINGS BAY, Ga. – Chief Hospital Corpsman (SS) Westley M. Durnell from Lorain, Ohio, stands in front of USS Georgia (SSGN-729) while in dry dock at Naval Submarine Station Kings Bay, Ga. Georgia is a nuclear-powered, guided-missile submarine capable of launching Tomahawk missiles. Durnell is one of two Independent Duty Corpsmen assigned to Georgia, which is manned by two rotating crews, Blue and Gold, that rotate between patrols. Photo by Mass Communication Specialist 1st Class (SW) Arthur N. De La Cruz

Admiral's Call

Navy Medicine from the Deckplates to the Battlefield

Every day around the world, the 59,000 personnel of the Navy Medicine community are making a tremendous difference in the lives of Sailors and Marines, from the deckplates to the battlefield. We are truly a readiness platform for our men and women who go into harm's way. That platform includes support to our sea-faring Sailors and Marines and the over 14,000 Navy and Marine Corps Individual Augmentees deployed since the start of combat operations. Additionally we deploy hundreds of corpsmen, nurses, medical service corps officers and physicians to the battlefield every year.

The corpsmen and other medical assets are really at the "pointy end of the spear" in making sure we can give the trauma and health care benefits to those men and women who are fighting our nation's wars. We conduct expeditionary medicine while simultaneously providing needed assurance to our deployed Sailors and Marines that their families back home will be well cared for in their absence.

This comprehensive care model is Navy Medicine's number one priority – caring for those in and supporting the fight. Our forces must be trained and ready to fight and defend our nation's security and vital interests. Navy Medicine is a key component to maintaining readiness for those who will deploy in defense of our nation. We must also be prepared to provide world class patient and family centered care here at home. This is why we have comprehensive teams of medical professionals in place, from physicians and nurses to occupational therapists and chaplains, assigned to monitor the progress of each patient.

We must also provide hope for those we care for-whether in a military treatment facility or on the battlefield-to ensure that our service men and women and their families will always have their health care needs met. We have the ultimate responsibility to ensure the medical readiness of our warfighters and to make sure that our medical forces are prepared, trained, and deployed with the right capabilities to support our warriors. The readiness piece includes our ability to provide expeditionary care including combat casualty care on the battlefield. As our men and women come back from the war with injuries and traumatic experiences, we need to be prepared to care for them not only acutely, but also over the entire duration of whatever injuries they may have sustained and whatever those injuries are. In some instances that means continued care for the duration of their life. Navy Medicine, partnering with the Army, Air Force and Military Health System, and the Department of Veterans Affairs, is committed to making this happen.

Our challenge is to make sure that we maintain the cadre of professional men and women in the Hospital Corps, Nurse Corps, Medical Service Corps, Medical Corps and Dental Corps. This "full up round" cadre of medical professionals must not only be able to do the garrison care mission to ensure



we take care of our patients families, they must be ready to be in the fight if necessary.

Our Research and Development community continues to distinguish itself through advancements in a host of areas. Technological advancements are improving hand, extremity, and even face transplantation. There has also been some very exciting new work in retinal and visual rehabilitation. Vision has been restored through cutting edge electrical and physiologic means. We are at the beginning of some exciting new technologies that will actually, over the course of this century, experience some dynamic medical breakthroughs. This is important because medical advancements discovered through a vibrant research base will better help our wounded warriors recover and give them a much higher quality of life for the future.

Wherever I go, people always ask me "how can you be thinking about research and development? – you need to be providing that front line medical care to our people." Well, that front line care comes from R&D. We get things like wound management and other advancements that are saving lives on the battlefield and improving their livelihoods once they recover, from restored vision and hearing, to innovative TBI treatments underway at the new National Intrepid Center of Excellence on our Bethesda campus.

A Global Force For Good

There are a myriad of interesting, challenging, and rewarding jobs out there in the world of Navy Medicine. This issue will profile some of them, from corpsmen supporting our Seabees in the field, to profiles of medical departments on a destroyer and a submarine. From the deckplates to the battlefield, you are all making a difference. Your experiences are providing you with tremendous professional and personal development that you will take with you wherever you go.

The pace and demand for Navy Medicine personnel is only expected to increase in the coming years as we balance the dual mission of expeditionary medicine in support of those deployed in conflict zones with patient and family centered care for Sailors, Marines and their families. Despite all our success, many service members are returning home from a war zone, some of whom are injured physically, and many of whom are suffering psychologically from mild to severe TBI or PTSD. How military medicine takes on this challenge will set the stage for decades to come, especially with respect to the quality, accessibility, and reliability of support veterans and their families will receive.

One of the major initiatives to build and sustain this support is the ongoing transition to the Walter Reed National Military Medical Center onboard the campus of the National Naval Medical Center, Bethesda, Md. We are working with the lead Department of Defense organization, Joint Task Force – National Capital Region Medical, to ensure that this significant and ambitious project is executed properly and without disruption of services to wounded warriors, joint service members, their families, and other beneficiaries.

Looking to the future, I am very encouraged that women will soon begin their integration into our submarine community. There are extremely capable women who have the motivation, talent and desire to succeed in the submarine force, just as they have in our surface and aviation communities for decades. As women have increased their percentage of the active duty population, it behooves us to draw on the full range of the talent pool. Integrating women into the submarine force is not only feasible and safe, it is in the best interest of our Navy and our nation.

Thank you for everything you do and thank you for your service. It is my honor and privilege to represent you as your Surgeon General. \mathcal{J}

Vice Adm. Adam M. Robinson, Jr.



BREMERTON, Wa. - Navy Surgeon General Vice Adm. Adam M. Robinson Jr. answers questions from the staff at Naval Hospital Bremerton (NHB) at an admiral's call in the hospital's Ross Auditorium while on tour of Navy medical facilities and capabilities in the Pacific Northwest region. Photo coutesy of U.S. Navy.

Force Notes



Our history is filled with details of compassion and valor that have forged our identity as Hospital Corpsmen. As this issue of Navy Medicine outlines the operational support our collective Corps supplies the line Navy, the role of the Hospital Corpsman in this mission cannot be underestimated. Recent events have increased the role of the Navy Hospital Corpsman as vital members of the healthcare delivery team. Your responsibilities and roles are ever-expanding as are the demands based on the collective expertise of your entire rate.

Whether performing routine sick call or responding to bonafide emergencies, the Hospital Corpsman is responsive, professional, and often independent. At sea, shore, or deployed overseas your capacity to provide care in even the most austere circumstances is noteworthy beyond praise. Our mission requires that we operate and excel in a multi-service environment and we have done so with amazing results! Hospital Corpsmen serve with distinction in virtually every theater, and with every branch of military.

August marked the beginning of one of the most important transitions in the history of the Hospital Corps. As much of Navy medical training begins it's migration into a tri-service environment, our future radiographers have already arrived at Ft. Sam Houston, Texas, for instruction side by side with members of three other services. Within the next two years, 85 percent of all Navy enlisted medical training will be collocated within the confines of San Antonio. While this presents a great number of challenges, I am absolutely confident in the professionalism of our Hospital Corps and its ability to adapt to any environment.

As the line separating our services becomes less distinct, it has never been more important to embrace the culture and heritage of the Hospital Corps. Our diversity and flexibility as a global force for good is unmatched and cannot be forgotten. The valorous heroes of our past have established a precedent we must steadfastly



preserve. Because of our excellent leadership in the schoolhouse, fleet, and in medical treatment facilities, I am sure the entire Hospital Corps will continue forging its legacy of courage and awe inspiring devotion to duty for many years to come. \mathcal{J}

Force Master Chief Laura Martinez



PUERTO BARRIOS, Guatemala - Hospital Corpsman 1st Class Charles Givens, an independent duty corpsman, assigned to Task Group (TG) 40.9, instructs members of the Guatemalan navy and marines on the proper procedures for inserting an IV during Combat Medical Lifesavers course aboard the High Speed Vessel (HSV) 2 Swift. Photo by Mass Communication Specialist 1st Class David Hoffman.



A Global Force For Good

were very pleased to read the Spring 2010 issue of Navy Medicine, entitled "Destination: Haiti. Saving Lives and Providing Hope in Haiti." From our perspective as senior members of a team of emergency physicians and nurses from Stanford that traveled to Haiti under the auspices of the International Medical Corps soon after the earthquake, the contribution of the Navy was enormous and mission critical. When the USNS Comfort first arrived, we were overwhelmed attempting to manage all the critically injured and ill victims at the University Hospital in Port-au-Prince. Having just been through a second earthquake and faced with growing numbers of patients with heatstroke, gangrenous wounds, renal failure, tetanus and other serious problems, our spirits lifted when we realized that we could begin to transfer the sickest patients to a fully operational hospital. In our roles coordinating the activities of all the nongovernmental organizations, hospital administrators, university volunteers, military and other entities attempting to establish a functional medical center, and triage/transfer, we couldn't say "thank you" often enough to the brave and strong U.S. military personnel from all services who worked side by side with us to help the Haitian people.

Paul S. Auerbach, MD. Robert L. Norris, MD Professors of Surgery, Division of Emergency Medicine Stanford University School of Medicine





Being an independent duty corpsman at Naval Support Facility Thurmont, Md., more commonly known as Camp David, provides unparalleled professional development and challenging training opportunities with billets that are designated as Presidential Support Duty. Experiencing first hand our naval heritage and national history while performing a vital mission in direct support of the commander-inchief only enhances the unique working environment.

Camp David provides quality healthcare and medical services to the President, First Family and their guests. It was originally named "Shangri-La" and was established by President Franklin Delano Roosevelt on July 5, 1942. Its present name was given by President Dwight D. Eisenhower, who renamed the retreat in honor

of his grandson, David. The camp is located atop Maryland's picturesque Catoctin Mountains and is a beautiful sanctuary for privacy and relaxation, as well as an ideal location to host visiting foreign leaders and dignitaries.

Camp David is always searching for highly motivated Sailors who desire a challenging and diverse career opportunity. To work at Camp David all Sailors must pass an extensive background check and be granted a top secret security clearance. Anyone interested should contact Camp David 12 - 18 months before their projected rotation date since the screening and selection process can be lengthy.

If you are ready for a truly unique assignment for both you and your family, and would like to experience history in the making, volunteer to join the Camp David team. For additional information, contact COMM: 301-271-1460, DSN: 376-9000 ext. 4-1400, or the special Programs Detailer at 901-874-3571, DSN: 882-3571.

Thank you, Jeremy L. Simon HMC (FMF/SW/AW)

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Panamanian President Visits Continuing Promise Team

Panamanian President Ricardo Martinelli, Vice President Juan Carlos Varela, U.S. Ambassador to Panama Phyllis M. Powers, and Minister of Health Franklin Vergara, visited medical and dental professionals of Continuing Promise 2010 (CP10) providing humanitarian aid to Panamanian citizens at the Punta Pena school before touring the large deck, amphibious ship anchored off the coast of Chiriqui Grande, Panama.

"From the bottom of my heart, there are no words to thank you for this lifechanging magical operation," said Martinelli. "We're thankful for everyone here who has helped improve the daily lives of the people in Panama with medical and humanitarian assistance. There are many nations in the world with armies and businesses, but very few offer the type of help the U.S. does."

Service members arrived off the coast of Chiriqui Grande, Sept. 27, 2010, to provide medical, dental, engineering and veterinarian assistance into the green lands of Panama. During their time in Panama, mission personnel went ashore and established three medical sites, three community relations events, two engineering sites and provided a roving preventative medicine and veterinarian team.

"I'm very excited to be here to observe in person all the hard work that Continuing Promise 2010 has been doing," said Powers. "I'm impressed with the number of people we've been able to help, and I'm moved by what I've seen today. I won't forget the image of the members of our armed forces."

CP10 provided medical and dental assistance to more than 4,000 Panamanian citizens, immunized more than 800 animals and continued work on construction projects in local schools and community parks. The CP10 team completed the ten-day mission, Oct. 7, 2010.

"Continuing Promise came to the beautiful shores of Chiriqui Grande, and I pledged to you then the work of our heads, our hands and our hearts as a true demonstration of the strength of our commitment to [Panama]," said Navy Capt. Thomas M. Negus, commodore of CP10.

Before his departure, the president and distinguished visitors walked throughout the medical site, shaking hands of service members and observing current medical and dental operations. Shortly after, they geared up and flew in CH-46 Sea Knight helicopters to the USS Iwo Jima (LHD 7) and toured the ship, continuing to learn about the CP10 mission.

"Our international and multi-organizational team has formed great partnerships with Panama," said Negus. "For it is through our partnership that we best experience the magic of Continuing Promise that turns knowledge into understanding, neighbors into friends, and sweat and effort into hopes and dreams. Thank you for allowing us to serve with you and continuing our promise."



CHIRIQUI GRANDE, Panama - Lt. Cmdr. Catherine Hagan, embarked aboard the multipurpose amphibious assault ship USS Iwo Jima (LHD 7), greets the President of Panama Ricardo Martinelli during his tour through the medical department. Iwo Jima conducted a Continuing Promise 2010 humanitarian civic assistance (HCA) mission. The assigned medical and engineering staff embarked aboard Iwo Jima worked with partner nation teams to provide medical, dental, veterinary and engineering assistance to eight different nations. Photo by Mass Communication Specialist 2nd Class Jonathen E. Davis.

Pacific Partnership 2010 Ends with Many Firsts

Pacific Partnership 2010 came to a successful conclusion in Rabaul, Papua New Guinea on Sept. 13, after visiting six countries throughout Southeast Asia over a span of five months, strengthening relationships and improving disaster response skills while providing humanitarian and civic assistance along the way.

The fifth in a series of annual U.S. Pacific Fleet sponsored deployments to the Western Pacific region, Pacific Partnership 2010 (PP10) built upon previous missions with numerous innovations veterinary patients. designed to enhance the partnership and provide assistance to remote areas.

This year's effort saw an increase in the number of ships from other countries participating, brought aboard large numbers of non-governmental organization (NGO) volunteers, and creatively used helicopters and landing craft to insert medical and dental teams to set up health care clinics in remote locations. a key priority for several of the U.S. ambassadors involved with the mission. Additionally, PP10 greatly expanded the

projects by using advance fly-in teams of U.S. Navy Seabees.

Combined, the Pacific Partnership 2010 team-made up of professionals from all four U.S. military services, 10 partner nations, seven embarked NGOs, and 10 supporting NGOs-treated 109,754 patients, performed 859 surgeries, issued 60,883 glasses, completed 22 engineering projects, participated in 86 community service projects (COM-SERV), and treated more than 2,800

"It is fitting that we bring Pacific Partnership 2010 to a close here in Rabaul, as the sight of Tavurvur smoldering above the harbor and the ash covering our boots every day are visible reminders of the importance of this mission and of preparing in the calm of a nice sunny day like today to respond in the dark days of crisis following a natural disaster," said Pacific Partnership 2010 Mission Commander, Capt. Lisa M. Franchetti, at the mission's closing ceremony, referring to the twin volcanic



TERNATE, Indonesia - The Military Sealift Command hospital ship USNS Mercy (T-AH 19) is at anchor in Ternate, Indonesia. Mercy is in the North Maluku Islands conducting Pacific Partnership 2010, the fifth in a series of annual U.S. Pacific Fleet endeavors conducted in Indonesia to strengthen regional partnerships. Photo by Mass Communication Specialist 2nd Class Eddie Harrison.

scope of Pacific Partnership engineering eruptions of Tavurvur and Vulcan that destroyed the capital city of Rabaul in 1994.

> The Military Sealift Command hospital ship USNS Mercy (T-AH 19), operated by a crew of 65 civilian mariners visited four of the six PP10 countries. Mercy provided extensive surgical capabilities and, combined with her "Band-Aid" utility boats and two embarked MH-60S helicopters from Helicopter Sea Combat Squadron 23 Detachment 4, supported a large cadre of medical and engineering professionals moving to and from their work sites ashore each day.

> Several ships from other nations joined Mercy during PP10. While in Vietnam and Cambodia, Mercy operated with the Japan Maritime Self Defense Force ship JDS Kunisaki (LST 4003), which hosted an embarked medical team and Japanese NGOs. Medical professionals from Kunisaki joined with those from Medical Treatment Facility (MTF) Mercy at medical and dental civic action programs (MED/DENCAPs), while her Sailors enjoyed participating in COM-SERVs alongside personnel from Mercy.

> While conducting a disaster relief exercise which lasted 22 days and visited three separate areas during the Indonesia phase of PP10, Mercy was joined by KRI Dr Soeharso, Indonesia's hospital ship, RSS Endeavour, with its own embarked medical team, as well as two Royal Australian Navy heavy landing craft (LCHs) which provided logistic support to Mercy and her teams.

> In addition to moving supplies to and from the shore, HMAS Labuan (L128) and HMAS Tarakan (L129) were used in a new and innovative way as afloat staging bases for distant MED/ DENCAP teams. Each ship embarked 21 medical and dental providers, veterinarians, assistants, and translators.

The vessels transported medical teams to remote areas, where they would work ashore during the day and come back to the ships each night to sleep on the open vehicle decks on cots with mosquito netting. This unique concept significantly expanded the reach of the PP10 mission to 13,000 patients seen on remote islands and villages that have very little access to professional medical care.

After demonstrating the success of this effort in Indonesia, the Australian ships were called upon to support two similar teams during the mission to Timor-Leste, visiting the isolated Oecussi enclave and the distant coastal town of Lautem.

Unique to this year's mission was the addition of two stops supported by other ships under the Pacific Partnership umbrella. While Mercy provided care in Indonesia, USS Blue Ridge (LCC 19) visited Palau, providing medical services and enhanced COMSERV projects to the island nation.

Then on Aug. 24, over 60 people from Mercy, including Destroyer Squadron 21 staff, Amphibious Construction Battalion (ACB) 1 Seabees, MTF Mercy, and the U.S. Pacific Fleet Band transferred to HMAS Tobruk (L50) and set off for the final mission port of 2010: Rabaul, Papua New Guinea.

This transfer marked the first time that a partner nation's vessel was utilized as a flagship for a Pacific Partnership mission. Tobruk, which embarked additional Australian Defence Force personnel and members of the Papua New Guinea Defense Force on the way to Rabaul, was joined in Papua New Guinea by USS Vandegrift (FFG 48).

Throughout the mission, PP10 coordinated with host nation officials and U.S. embassy teams to identify the areas that would benefit most from assistance. Often, these areas were very isolated. Using a combination of cargo aircraft, helicopters, landing craft, and good oldfashioned driving, PP10's medical teams were able to successfully reach these remote locations. In a key example of partnership, a U.S. Marine C-130 landed a MED/DENCAP team onto a dirt runway in Ratanakiri, Cambodia, 320 miles from where Mercy was anchored.

"Landing in Ratanakiri, I knew that this mission was unique," said Lt. Cmdr. Sandy Kimmer, physician officer in charge of the Cambodian MED/ DENCAPs in Ratanakiri and Kampong Cham. "We lived and worked alongside the RCAF (Royal Cambodian Armed Forces) and other Cambodian physicians, allowing for host nation referrals and continuity of patient care. This fostered relationships and helped to build the capacity of the Cambodian medical system."

Cambodia also benefited from the unwavering commitment of the RCAF engineers, U.S. Navy Seabees from Naval Mobile Construction Battalion 11 and Amphibious Construction Battalion 1 (ACB1), and Australian engineers from the Second Combat Engineer Regiment based in Queensland, who drilled three water wells that are now bringing clean and safe water to local communities.

Despite the environmental challenges faced in Southeast Asia, the engineers

"Having to stand in the smoldering heat is challenging enough for anyone visiting any of these countries."

Capt. Scott R. Lister Commanding Officer, ACB1

were able to use their unique skills to complete useful engineering projects and, perhaps more importantly, build the capacity of the host-nation engineers to complete similar projects on their own in the future.

"Having to stand in the smoldering heat is challenging enough for anyone visiting any of these countries. Now, imagine having to work under these conditions in many cases outdoors, and the times you may find yourself indoors there is no air conditioning," said ACB 1 commanding officer, Capt. Scott R. Lister. "That's exactly the endurance and commitment every single engineer from host nation military engineers and civilian volunteers to Australian Sappers—brought to the sites." During a ribbon-cutting ceremony earlier this week celebrating the completion of repairs to a health clinic that had been damaged by fire at the University of Natural Resources and Environment (UNRE) in Vudal, Papua New Guinea, UNRE's Vice Chancellor, Professor Phillip Siaguru, summarized what Pacific Partnership represents.

"Pacific Partnership 2010 has truly changed my childhood impression of soldiers and armies, and I am sure many others of my age or older...who also had the impressions that soldiers cannot take up saws and hammers or needles and medicines...only guns," said Siaguru.

"[These efforts] will leave a lasting impression on East New Britain, certainly this University and indeed, for me personally. I also know the army can play soccer, volleyball, and yes, they have a jazz band and can play music and dance as well as pose for a photograph with my daughter."

Siaguru's observations were echoed in Timor-Leste, where the PP10 team was augmented by soldiers from the Timor-Leste Defence Force, or F-FDTL. Using PP10 as an opportunity to participate and to learn the mechanics of setting up and running a MED/DENCAP, the Australian Defence Cooperation Program is working with the F-FDTL to plan and run their own MED/DENCAP later this year.

As P10 comes to a successful conclusion, preparations are already well underway to build on the relationships and achievements of the previous five missions. Planners, host and partner nation representatives, and NGO leaders will meet in San Diego, Calif., later this month to refine plans for Pacific Partnership 2011.

"The formative stage of Pacific Partnership 2011 has already begun," said Franchetti. "I wish everyone who will participate in that mission much success, as they will be part of something really special.

Navy Medicine Outfits NATO Hospital in Kandahar

It takes a lot of planning, organizing, ingenuity and patience to equip a new state-of-the-art hospital. When that new hospital is in Kandahar, Afghanistan, the challenges increase exponentially. That's what Navy Medicine accomplished when the responsibility for the NATO Role 3 field hospital was transferred from America's Canadian allies to the U.S. military in October 2009.

Navy Medicine tasked Naval Medical Logistics Command (NMLC) at Fort Detrick, Md., and Navy Expeditionary Medical Support Command (NEM-SCOM) at Cheatham Annex, Va., to outfit a new brick and mortar Role 3 hospital at Kandahar airbase in southern Afghanistan.

When an Expeditionary Medical Facility (EMF) is established, every aspect of the hospital is supplied except fuel and water. This includes the medical facilities such as operating rooms, radiology units,

and recovery areas. It also includes the mess and kitchen tents to prepare and feed patients and staff, latrine facilities, septic trucks, water trucks, housing for patients and staff, electrical and plumbing hook-ups, lighting, generators, ambulances, buses and other vehicles to move patients and personnel around, and all construction and grading equipment to prepare the site. Different sized EMF's can be erected and staffed for patients numbering from 10 to 273.

While not as extensive, outfitting a brick and mortar hospital provided a challenge in converting and utilizing existing EMF designs and equipment into a permanent facility for long term use.

Kandahar became a priority to meet this critical operational mission for both NMLC and NEMSCOM.

"There were language issues at first," said Bill Hartmann, Program Manager, Fleet Hospital Expeditionary Medical Logistics Program, who headed up the effort for NMLC. "The [architect] designs were not in English. When they were translated, there were unique designations for some of the spaces."

Usually responsible for the design and procurement of EMF's, the Expeditionary Medical Logistics Program collaborated with numerous directorates within NMLC for expertise in the purchase and supply of equipment for established Navy medical treatment facilities and design of ship's medical spaces.

The result is a cutting edge trauma center, one of the most advanced centers in Afghanistan.

"Usually, it's hard for a hospital to specialize in one type of care, but this hospital is able to specialize in trauma because it's providing immediate care, immediate surgery and immediate transfer of patients to other facilities," said Hartmann.



KANDAHAR, Afghanistan - Trauma operating room set up and ready for patients in the new brick and mortar NATO Role 3 hospital in Kandahar, Afghanistan. Photo from the NMLC archive gallery.



KANDAHAR, Afghanistan – Members from the NMLC and NEMSCOM joint team that traveled to Afghanistan in April 2010 to unpack and set up the equipment for the new brick and mortar NATO Role 3 hospital in Kandahar, (L – R) Senior Chief HMCS David Ludwig, HM2 Kimberly Abrecht, Senior Chief BUCS Jeffrey Ayres, and HM3 Cole. The team is assessing the pallets and equipment that were color coded prior to shipment for ease in unpacking and setting up. Photo from the NEMSCOM archive gallery.

A Role 3 hospital is designed primarily to provide short-term critical care for coalition military. Stays from five to seven days are the norm unless immediate evacuation is required. In addition to coalition military forces, the hospital also serves civilian contract personnel, and Afghan soldiers, police and civilians. "Medicine doesn't select who they are or aren't going to treat," said Hartmann. "Everyone who comes to that door who is in need of care is treated the same.

As NMLC was working on equipment purchases, a team from NEMSCOM, led by Medical design department Head, Lt. j.g. LaMont Simmons, traveled to Kandahar to meet with the hospital commander and his directors to analyze each hospital function to better identify equivalent assemblages from the current EMF designs that could be utilized. "Because we do EMF's, it wasn't what the doctors were used to," said Simmons. "We had to be creative to mix and match what we had available to what they needed."

Simmons and his team design the medical facilities for the EMFs, integrating operating rooms, radiology units, intensive and acute care wards, laboratories and pharmacies into shipping containers that can be loaded aboard ships and sent anywhere in the world.

Because of limited staging areas at the site, as well as a mission-critical timeline to establish the new hospital, all the equipment ordered was received, identified, marked by location where it would be installed in the new facility, packaged, prepared for shipment and placed aboard one of the 15 aircraft used to transport this hospital to its current location. NEMSCOM and NMLC sent an eight-person team to Kandahar in April 2010 to meet up with the initial materiel shipments, unpack them, assemble them in their assigned location and ensure that everything was working.

Of the original requirements identified for the hospital, 99.5 percent were shipped with the initial order. There have been constant additions, and NEM-SCOM is still shipping items to meet emerging requirements.

The hospital in Kandahar is open and seeing patients. The hospital will transition from its initial outfitting phase to a steadier sustainment phase of operations within the next month.

On May 24, 2010, approximately one month after the hospital opened its doors to receive patients there was an attack on the Kandahar airbase. "Timing is everything," said Simmons.

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reventative medicine specialist, emergency medical technician, nurse, lab technician, radiation health officer – it sounds like the list of personnel on the staff of a hospital. Those who serve on submarines know that these jobs only begin to describe the one person on board known simply as "Doc," the submarine independent duty corpsman (IDC).

Aboard USS Santa Fe (SSN 763), Chief Hospital Corpsman Robert Lazarin, from El Paso, Texas, thrives on all of the responsibilities he has as the submarine's sole medical provider.

"You are basically the gap between first aid and emergency care at a higher echelon, at a hospital. You have to fill in the gap between all of that – from anything a nurse or EMT will do to what a doctor's going to do. You are the course of instruction to ensure they are first line of treatment and you have to stabilize a patient for sometimes up to four or five days until you can get him to a hospital trauma center or treatment center."

IDCs are directly responsible to the submarine commanding officer for the health and wellness of every Sailor on board. Depending on the type of submarine, that crew can range from 140 to 160 Sailors.

"The workspace is quite confined. There's not a whole lot of room," said Lazarin of the small office he has aboard Santa Fe which he shares the countermeasures launchers and numerous pipes rine IDCs. and valves. "I'd probably compare it to a broom closet at best."

Take the scope of responsibility, the number of Sailors an IDC cares for and add to it a confined, industrial work environment and you have what Lazarin calls a challenge.

"I knew being assigned to a submarine would be a challenging job. That's what I wanted," said Lazarin. "On a submarine you are independent of any other medical professional on board. It really pushes you to learn as much as you can about medicine."

While much of what is learned by IDCs is learned on the job, before ever setting foot on a submarine a corpsman will go through an extensive fully qualified to serve their shipmates. The Naval Undersea Medical Institute (NUMI) in Groton, Conn., offers a 58week course of instruction for eligible

corpsmen who want to become subma-

"The course NUMI teaches equips corpsmen from a variety of backgrounds with the medical and administrative knowledge and skills required to administer all aspects of the medical mission aboard an operational submarine," said Master Chief Hospital Corpsman Kevin Boyce, Force Medical Master Chief for Commander Submarine Force, U.S. Pacific Fleet.

Students in this course of instruction attend Basic Enlisted Submarine School followed by training in radiation health, medical administration, gas free engineering/atmosphere control, clinical medicine and clinical rotations. Approximately 25 corpsmen become submarine IDCs through NUMI each year.

In the 12 years he has been in the Navy, Lazarin has qualified in surface warfare, air warfare and submarine warfare. For the last three years, he has served as an IDC on submarines.



JOINT BASE PEARL HARBOR-HICKAM, Hawaii - While serving as an independent duty corpsman (IDC) onboard USS Santa Fe (SSN 763), Chief Hospital Corpsman Robert Lazarin, from El Paso, Texas, reviews patient's medical records, verifying all of the information is correct and up to date. IDCs are responsible to the submarine commanding officer for the health and wellness of a crew that can range from around 140 to 160 Sailors. (U.S. Navy photo by Mass Communication Specialist 2nd Class Ronald Gutridge / Released)

"When I came into the Navy as a junior corpsman I really looked up to IDCs and I wanted to be one because for a corpsman, that is the pinnacle of your Navy career – being an IDC on a boat," said Lazarin.

The reputation of the submarine hospital corpsmen, "Doc" to those they serve with, goes back decades.

"Corpsmen have served with distinction on submarines in every major war, conflict or patrol since World War I," Boyce points out. "And these corpsmen aren't just 'Doc,' they are submariners. They are qualifying watch stations and teaching junior crewmembers how to stand those watches."

On board Santa Fe, Lazarin is qualified Chief of the Watch, ensuring he is contributing above and beyond his duties as IDC.

"As Chief of the Watch, I work with the Diving Officer of the Watch. The Diving Officer makes the boat go up and down, and the Chief of the Watch ensures the trim system, the air systems, and everything the Diving Officer needs to make sure the boat goes where it is supposed to go is in operation. It's a huge responsibility."

Those who serve in the Navy say a Sailor needs to take care of his shipmates. For the submarine IDC, that can mean anything from standing a watch, offering to listen or caring for a shipmate in an emergency.

Just such an emergency arose on Sante Fe's last deployment when a 23 year old submariner came to Lazarin complaining of chest palpitations.

"When you are out of contact with other medical professionals you really have to make the right decision at the right time," said Lazarin. "I monitored his heart rhythm and saw that it was an arrhythmia. I was pretty scared about that. I didn't know why it was happening, especially with someone so young. That really required me to dig through my books and make sure I was doing the right thing. I got him stabilized, got a message off [to higher headquarters] and got him off the boat in two days."

Today IDC and patient are still shipmates. "He's back on the boat now... he's really grateful. I see it on his face every day," said Lazarin. "That's payment for taking care of people – seeing that you can make a difference."

Hospital Corpsmen in pay grade E5 and above interested in one of the most unique and challenging duty assignments in Navy Medicine are encouraged to contact their Command Career Counselor for information on application requirements and incentives available to submarine IDCs.



JOINT BASE PEARL HARBOR-HICKAM, Hawaii - While serving as an independent duty corpsman (IDC) onboard USS Santa Fe (SSN 763), Chief Hospital Corpsman Robert Lazarin, from El Paso, Texas, is responsible to the submarine commanding officer for the health and wellness of a crew of approximately 140 Sailors. Photo by Mass Communication Specialist 2nd Class Ronald Gutridge.

NMRC Tackles Unique Undersea Medical Challenges

The Undersea Medicine Department (UMD) at the Naval Medical Research Center (NMRC), Silver Spring, Md., focuses on ways to improve performance and reduce injury in deployed sailors who work in undersea occupations.

The UMD has the capability to perform advanced undersea medicine research in a laboratory designed for scenarios directly related to U.S. Navy diving and submarine escape. Researchers thereare developing cutting-edge technologies to prevent and treat decompression sickness as well as pulmonary and central nervous system toxicity associated with hyperbaric oxygen exposure.

"This unique laboratory design allows for research specific to decompression sickness, disabled submarine rescue and hyperbaric oxygen toxicity," said, Capt. Richard T. Mahon. "UMD maintains a staff of three Undersea Medical Officers, three Ph.D. scientists and a support staff of 17 that includes certified chamber operators and skilled research technicians. This team has more than 15 hyperbaric chambers and 2,400 square feet of unrivaled laboratory space."

According to Mahon, while the internal pressure of an operational submarine is maintained at surface pressure, a disabled vessel will likely experience increased pressure due to flooding or use of air-banks. This exposes survivors to gas accumulation in their tissue, putting them at risk for decompression sickness (DCS).

DCS results when accumulated gas exits tissue forming bubbles that can obstruct blood flow or cause inflammation. Standard decompression schedules allow this gas to be safely exhaled before bubbles form. However, Mahon emphasized a disabled submarine scenario would not likely accommodate standard decompression. Additionally, a disabled submarine event would likely take place in remote locations at extreme depths that pose a logistical challenge that demands flexibility.

One research project is examining the paradoxical role hyperbaric oxygen

(HBO) plays in undersea medicine. HBO has demonstrable benefits in the treatment of DCS and shows promise as a biomedical strategy to support the rescue of survivors in the event of a disabled submarine. However, HBO for extended periods can also compromise the pulmonary system or even induce seizures. Both the therapeutic and toxic effects are currently under study at the laboratory.

Mahon points out that oxygen breathing accelerates the wash out of accumulated gas. The department's research has demonstrated that breathing oxygen in a hyperbaric environment for just 45 minutes can prevent severe DCS. In a disabled submarine with a large number of survivors, this can significantly improve rescue operations. Although these findings are exciting, it is not without a downside. Oxygen breathing at high pressure is toxic to the central nervous and pulmonary systems creating a high risk of seizure; therefore its use is limited to three times normal pressure.

If the internal submarine pressure is greater than three times normal pressure, survivors will need to undergo onerous decompression. Pressure at five atmospheres requires decompression in excess of 30 hours, clearly unacceptable, especially if the situation is deteriorating, Mahon went on to explain. To address this, UMD developed emergency operating decompression schedules reducing standard decompression time to just four hours. This has the potential to hasten survivor recovery and save lives.

The Undersea Medicine Department continues to investigate ways to improve the operational capabilities of submariners as well as the Explosive Ordnance Detachment; salvage and husbandry divers, and U.S. Navy SEALs.



FORT DETRICK, Md. - Chamber technicians Pratik Patel and Jennifer Dorsey prepare for multiple hyperbaric exposure procedures at the Undersea medicine Department at the U.S. Naval medical Research Center (NMRC). Photo by Phil Collins.

JS Bush:

ircraft have Aviation Boatswain's vide care ranging from preventative to Mates and reactors have nuclear engineers. Both play critical roles on an aircraft carrier, but who do these Sailors consult when medical issues arise that could prevent them from cian, physician's assistant, physical doing their jobs?

USS George H. W. Bush (CVN 77) has the unique experience of practicing medicine on Sailors at sea. The department is medically equipped for everything needed to provide basic care and has equipment to run an operating room and an intensive care unit with a ventilator. This allows the staff to pro-

ambulatory, including treating limited trauma and performing some surgery.

George H.W. Bush employs a senior medical officer, family physitherapist, psychologist, medical ad-The medical department staff aboard ministrative officer, radiation health independent duty corpsman, x-ray technician, pharmacy technician, psychological technician, radiation health corpsman, and general corpsmen while in port, and two additional some cases are disqualifying for shipflight surgeons, a general surgeon, and a nurse anesthetist at sea, offering injured Sailor until he or she can return

this experience to a variety of medical professionals.

The medical department is run by Senior Medical Officer Capt. Lee Mandel, whose job is to make sure the crew is capable of fighting the war.

His responsibilities allow him to see a variety of cases. As the senior medical officer, industrial health officer, nurse, officer, Mandel explained that he sees everything ranging from general preventative medicine to more serious cases such as heart attacks, pneumonia, trauma, and the onset of diabetes. Although board duty, the department stabilizes the

A Community Hospital for a City at Sea

from deployment, as the carrier is often the best medical facility around.

There is also a very active aviation medicine department on board. While only one flight surgeon is assigned to the ship, the embarked squadrons will provide two more during pre-deployment work-ups and deployment. The flight surgeons have the opportunity to take their practice from their shore-

based clinics to sea while watching the fruits of their labors pay off in the form of flight operations.

Having flight surgeons on board is critical to mission accomplishment as it allows the aviators to keep their annual flight physicals current and provide them with specialized care required to stay physically qualified for flight status, crew. We are the community hospital according to Mandel.

The medical officers are also tasked with the responsibility of keeping the crew healthy while making port calls, especially in underdeveloped areas of the world.

"The potential for an outbreak of disease is high," Mandel said. "It is amazing how healthy we can keep the for the ship."

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Lt. Kelly Koren, the ship's family physician, explained how the other medical professionals on the ship provide care to the crew in areas that are more specialized, allowing a new level of care to be brought to the patients.

"My job is to keep Sailors healthy or to bring them back to health so they can do their jobs and fulfill our mission," said Koren. "We can take better care of our patients with added skills. We are the stand-alone clinic. We try to provide comprehensive medical care to the best of our ability."

Koren said it is interesting to work in an environment that allows medical professionals of different specialties to work together in the same spaces, providing specialized to Sailors care with less time needed for referrals. In addition to the more common medical programs, a radiation health program to reduce the risk of cancer due to an increased exposure to radiation protects personnel working around radiation.

We monitor radiation exposure in personnel working in propulsion and the radiation plant using a Thermo Luminescent Dosimeter," said Lt. Don Ordinario, radiation health officer. "We have expected levels, but if their monitors show they exceed those levels, we do an investigation."

Being a community hospital at sea has challenges and rewards that are not experienced by medical professionals on shore.

"The patient population is different," Koren says. "I see primarily 18- to 30year-old patients, relatively healthy men and women, but we also see cases from our senior leadership." Sea duty is also a new environment for most of the medical professionals on board. In many cases this is their first sea tour, giving them insight into what Sailors go through on a day-to-day basis.

"It will make me a better physician in the long run by experiencing what my patients are going through," said Koren. "All I see is military, my Sailors. I'm a lot closer to my patients here. We are all part of the same crew."

With all of the challenges of supporting the mission of a carrier, having a capable medical department is key to a successful mission. While maintaining the health of a variety of Sailors. ranging from pilots to nuclear engineers is not an easy task, the medical department aboard Bush is equipped and trained to take it on.



ATLANTIC OCEAN — Sailors from USS George H.W. Bush's (CVN 77) Medical Response Team carry a mannequin during a medical emergency drill April 20. George H.W. Bush is conducting carrier qualifications in the Atlantic Ocean. Photo by Mass Communication Specialist 3rd Class Brent Thacker.

Bush Senior Medical Officer Answers the Navy's Call ... Twice

At 59 years of age, USS George H.W. Bush (CVN 77) Senior Medical Officer (SMO), Capt. Lee Mandel, is not only the oldest member of the aircraft carrier's 3,000-member crew, but a strong contender for the ship's most intriguing personality.

Born in Queens, N.Y., Mandel graduated from Washington and Jefferson College before earning his medical degree from the University of Miami School of Medicine in 1976.

After completing his Internal Medicine internship and residency at the Medical University of South Carolina Hospitals, Mandel reported for active duty in July 1979.

Mandel said his patients have been the sources of the most interesting moments of his career. After his initial tour at the Naval Regional Medical Center in Philadelphia, Penn., Mandel became a staff internist at the Office of the Attending Physician, United States Congress from 1979-'81 and again from '85-'86. There he took care of members of the House and Senate.

His favorite patient was then Rear Adm. John D. Bulkeley; the cantankerous, brutally-honest Medal of Honor



ATLANTIC OCEAN - Capt. Lee Mandel, (left), USS George H.W. Bush (CVN 77) Senior Med cal Officer, discusses triage procedures with Hospital Corpsman 3rd Class (SW) Derek Gaudin during a mass casualty drill. Photo by Mass Communication Specialist Seaman Betsy Lynn Knapper

recipient whose World War II exploits served as the inspiration for the book and later film *They Were Expendable*.

In December 1988, Mandel left the Navy to start his own practice. After nine-and-a-half years in the private sector, which Mandel recalls as sometimes "boring" and often "unfulfilling," he left his job as a physician executive and with returned to the Navy in July 1998—a move he doesn't regret.

"A lot of the doctors I was working with in private practice spent all their time complaining about Medicare and decreasing reimbursement rates," explained Mandel about why he decided to rejoin the Navy. "But they said they couldn't leave because they were trapped in 'golden handcuffs.' I just got to the point where I felt I needed to belong to something bigger than myself again, and I already knew that existed in the Navy."

After receiving his Masters of Public Health degree from the University of Pittsburgh and completing his aerospace residency in Pensacola, Fla., Mandel became the SMO aboard USS Harry S. Truman (CVN 75) in July 2000, where he said he belonged.

Aside from his duties as SMO, Mandel's gregarious personality was a perfect fit for escorting celebrities during their visits aboard Truman. "Celine Dion was an absolute angel," Mandel recalls. "And I was there when FOX Sports produced their NFL show on Truman's flight deck." He was even chosen to play the role of the ambassador in the Bruce Willis flick, *Tears of the Sun.*

Mandel says one of the neatest aspects about practicing Navy medicine is that it's chock full of new opportunities, and meeting and serving great men and women each and every day.

"I tell everyone my practice is like any other doctor's, except that I have two reactors below my feet and 85 aircraft on my roof. And getting to play an active role in the wellness of our Sailors and ultimately our nation's security interests is pretty amazing, too." &

Rapid Medical Response Keeps Carrier Aviator Flying

t was a night like any other in Main Medical aboard USS George Washington (CVN-73) when shipboard, air wing, undersea medical and flight surgeons were called to action to provide urgent state of the art medical care to underway operational forces.

In the midst of flight operations, Main Medical was notified that a pilot currently in the air was having difficulty speaking and may require aid. After being guided aboard the carrier by a wingman and Landing Signal Officer, the 33 year-old male F/A-18C pilot was conversant, ambulatory, and was escorted to Main Medical.

An assessment was conducted and it was found that he had been performing a routine intercept mission at an altitude of 30,000 feet when he noticed a sudden surge of air in the cockpit and "popping" in his ears. Within seconds he started experiencing tingling in his extremities, difficulty concentrating and an inability to speak coherently. Attributing these symptoms to hypoxia during his flight, the pilot activated his emergency oxygen system and descended to 20,000 feet and then to 8,000 feet where his symptoms persisted. At 8,000 feet the pilot confirmed his cabin pressure was 4,000 feet (appropriate for that altitude).

Throughout the medical assessment, the pilot turned patient complained of persistent "grogginess" and mental slowness, but was ambulating and talking. The patient did note that his



PACIFIC OCEAN - Sailors fight a simulated fire on the nose of an F/A-18F Super Hornet during a mass casualty drill aboard the aircraft carrier USS George Washington (CVN 73). George Washington, the Navy's only permanently forward-deployed aircraft carrier, is underway helping to ensure security and stability in the western Pacific Ocean. Photo by Mass Communication Specialist 3rd Class David A. Cox.

symptoms seemed to worsen with ambulation.

The patient's blood pressure, pulse, and respirations were within normal limits; he was mildly diaphoretic and pale; oxygen saturation was 98 percent. He was fully alert and fully oriented. Mini mental status exam was grossly normal except for difficulty in performing serial sevens, which is completed by subtracting seven from 100, serially. The remainder of his neurological exam was normal. An arterial blood gas analysis demonstrated mild respiratory alkalosis but normal PaO2 and PaCO2.

Following a review of the case by carrier medical staff and a remote consult with an Undersea Medical Officer (UMO), it was determined that decompression sickness (DCS) was the likely diagnosis and an emergent medical evacuation for recompression therapy at U.S. Naval Ship Repair Facility and Japan Regional Maintenance Center (SRF-JRMC) in Yokosuka, Japan was authorized. The patient was evacuated from the carrier via helicopter whose low altitude flight was beneficial to transporting a patient with DCS.

During the flight, the patient received continuous intravenous rehydration and oxygen from the escorting flight surgeon and Hospital Corpsman.

The helicopter was met by a waiting U.S. Naval Hospital Yokosuka ambulance and UMO. The patient reported no additional symptoms following the flight, however, he remained abnormally fatigued and continued to report grogginess and difficulty concentrating.

U.S. Navy Treatment Table Six Recompression Profile was ordered and completed in the SRF-JRMC hyperbaric chamber without complications. After two cycles of treatment, the patient reported complete resolution of his symptoms and reported feeling "great!"

The patient was observed for one hour and demonstrated no residual effects or recurrence of symptoms. Per the U.S. Navy Aeromedical Reference

and Waiver Guide he was released and returned to flight duty 14 days later.

Pilots are required to wear face masks providing supplemental oxygen air from time a person moves through an atmoengine start to shut down. The oxygen is provided by an On Board Oxygen Generating System (OBOGS). The pressure in the cockpit is maintained above ambient atmospheric pressure by the Environmental Control System. The risk of decompression injury increases as the pressure in the cockpit drops, especially when the pressure drops rapidly.

dropped precipitously as the relative cab-

in altitude went from 10,000 feet to his actual altitude of 30,000 feet in seconds.

Type I and II DCS can result any spheric pressure gradient. While more common during underwater diving, DCS can occur at high altitude as well. If recognized and treated appropriately, DCS usually resolves completely and is seen as an occupational hazard for people without other risk factors such as age.

In this case, the patient was successfully treated utilizing all available In this case the pressure in the cockpit resources and was returned to full flight status in short order.



PACIFIC OCEAN - Hospital Corpsman 1st Class Salvador Lopez, from Coachella Valley, Calif., organizes surgical tools before an oral surgery in a dental department operating room aboard the aircraft carrier USS George Washington (CVN 73). Photo by Mass Communication Specialist 3rd Class Jacob D. Moore.

NAVY HOSPITAL CORPSMEN

SERVE WITH THE FIGHTING SEABLES

e build, we fight," has been the motto of the Navy Seabees, the Navy's deployable engineer force, since World War II. At any given time, about 3,500 Seabees are deployed to more than 30 different countries around the globe building bridges, drilling water wells, paving roads, or building shelters.

Seabees support a myriad of missions including combat operations, humanitarian assistance, disaster relief, and infrastructure improvement training for other nations. Navy Hospital Corpsmen attached to Seabee units serve right alongside them, continually ensuring that they are medically fit to accomplish the mission.

Navy Hospital Corpsmen serve at every level of the Seabee organization. They deploy with Naval Mobile Construction Battalions (NMCBs) and Naval Construction Regiments (NCRs). They man, train and equip Seabee units at the Seabee Readiness Groups (SRGs)

and provide oversight of these units the First Naval Construction Division level.

The First Naval Construction Division oversees about 16,500 Seabees worldwide. Nine active duty Naval Mobile Construction Battalions deploy regularly around the globe to support combatant commanders. Twelve reserve battalions are geographically dispersed throughout the U.S. Seven Naval Construction Regiments exercise command and control over the 21 total battalions and other specialized units, including two Underwater Construction Teams and two Construction Battalion Maintenance Units.

Serving with the Seabees is a unique experience. It is a highly demanding and career enhancing assignment that requires versatility and commitment from its medical personnel. The varied job assignments cover diverse aspects of the operation effort. They include Convoy Security Elements, Air Dets, Bridge Dets, and Chemical/Biologi-



(left) HELMAND PROVINCE, Afghanistan - Seabees assigned to Naval Mobile Construction Battalion (NMCB) 74 bury two kilometers of fiber optic cable for their new camp in the expansion area of Camp Leatherneck, Afghanistan. NMCB-74 is deployed to Afghanistan supporting the NATO International Security Assistance Force and U.S. Forces-Afghanistan. Photo by Mass Communication Specialist 2nd Class Michael Lindsey.

(above) CAMP LEATHERNECK, AFGHANISTAN - Hospitalman Lance Hagge, a Seabee attached to Naval Mobile Construction Battalion (NMCB) 5's Medical Department, numbs a patient for an ingrown toenail removal operation on August 31, 2010. NMCB 5 "The Professionals" are currently deployed to Afghanistan executing general engineering, infrastructure construction and project management in support of Operation Enduring Freedom. Photo by Mass Communication Specialist 2nd Class Ace Rheaume.

cal Response (CBR) teams. Thorough training is provided to help Corpsmen grasp the concepts of each element and excel in performance. Medical person-nel may also qualify in Seabee Combat Warfare. NMCBs are made up of about 580 Seabees. The Medical Department of an

NMCB consists of a doctor, a dentist, three independent duty corpsmen, and 11 corpsmen. When a Seabee battalion deploys, it normally splits up into numerous Detachments, or Dets, which may be spread across a wide region. Medical personnel are normally assigned to these Dets to help ensure their of health and safety. In the U.S. African Command

(AFRICOM) region, Seabee battalions have recently had Dets in places like Kenya, Djibouti, Cameroon, Comoros, Ethiopia, Liberia, and Senegal. In the Pacific, Seabees have had Dets in Cambodia, Vietnam, Philippines, Timor Leste, Guam, Korea and Japan. Seabees have also had Dets recently in Europe in places like Romania, Montenegro, Poland and Spain.

Since the start of the troop surge early this year, four Seabee battalions have been deployed to Afghanistan. NMCB 18 is a reserve battalion based in Seattle, Wash. and currently deployed there. Their deployment is typical of a normal Seabee evolution to that region.

HMCS(SCW/FMF) Tammy Schusted of NMCB 18 explained that during the battalion training evolution, the Medical Department screened and built 583 battle records, performed five shot call exercises and provided all required medical training (including TCCC, C4 and Title 10 requirements). During that same time frame, 274 Combat Life Savers were trained and qualified in basic and advanced life saving techniques.

While on deployment to Afghanistan, the NMCB 18 Medical Officer assisted the Role 3 medical facility at Kandahar Air Field in the treatment of several complex orthopedic surgical cases. "The Battalion's Medical team simultaneously supported seven detachment sites and one Convoy Security



CAMP LEATHERNECK, Afghanistan - Seabees attached to Naval Mobile Construction Battalion (NMCB) 5's Medical Department unload medical supplies on August 31, 2010. NMCB 5 "The Professionals" are currently deployed to Afghanistan executing general engineering, infrastructure construction and project management in support of Operation Enduring Freedom. Photo by Mass Communication Specialist 2nd Class Ace Rheaume.

Element team, while integrating with the NMCB 40 Air Det, utilizing an additional IDC and two HMs to support detachment sites and projects," said Schusted.

These detachment sites were inbuilding of a Combat Outpost (COP) to expanding pre-existing Forward Operating Bases (FOBs), all in support of enhancing and improving areas for coalition forces.

Seabee efforts in Afghanistan are never without a degree of danger. While injured, she took the initiative to help supporting the expansion of a COP, HM2 Rodney White sustained minor shrapnel injuries during a rocket attack. Despite his own wounds, he continued to treat six Joint Forces patients. With the air quality conditions in the area not favorable for air medical evacua-

tion, HM2 White assisted in treating and stabilizing these patients for five hours. He was later treated for his own wounds and returned to duty.

HM2 (SCW) Catherine Jacobsen recently deployed to Helmand Province volved in missions that ranged from the Afghanistan with NMCB 74, where she HMC (SCW/FMF) (Sel.) James served as the Corpsman for 18 Seabees who were tasked with placing 2,200 meters of triple strand concertina wire, which served as an exterior barrier for Camp Leatherneck. Along with her daily duties of caring for the sick and the Seabees with their assignment. Her efforts helped the job to be completed two weeks ahead of schedule. For her outstanding teamwork and professionalism she selected for early promotion by her command.

As an IDC, the opportunities in the Seabees are endless. During the course of a typical deployment, the Seabee IDC can expect to serve as the Senior Medical Department Representative (SMDR) for a forward detachment. Burnett served as SMDR in homeport and while deployed with members of NMCB 74 to Ghana, Africa as part of AFRICOM. During the deployment, his battalion built a medical clinic with the local military engineers in an effort to win the hearts and minds of the locals. He also qualified as a Seabee Combat Warfare Specialist, which enhanced his chances of being selected to HMC.

The role of the Medical Department at a Naval Construction Regiment is also challenging and rewarding. HMCS Daniel Smith is a Mobilized Reserve stationed with the 3rd NCR in Afghanistan. He explained that their role is command and control of a joint service engineering task force, Task Force Keystone. It is made up of four Seabee Battalions, five Army units and two Air Force Units. Keystone supports NATO Army Division and MEF Operations to include kinetic operations. The total manpower responsibility is approximately 5,700 members.

"We track all the injured or sick personnel during the medevac process," said Smith.

They also fill in trackers that serve to update Battalions Medical officers and provide the commodores with valuable information on the status of their personnel. They conduct sick call, transport patients to the Role 3 medi-



MAZAR-E-SHARIF, Afghanistan - HM2(SCW)/FMF) Domingo Duke sprays uniforms with Permethrin, an insect repellant that when dry, will protect the wearer without harm. The Seabees of NMCB 4 are performing construction operations in support of the Force Expansion in Afghanistan. (U.S. Navy photo by Mass Communication Specialist 1st Class Russell Stewart)

cal facility as needed, and offer medical support to any unit that does not have medical capabilities of its own.

The Seabee Readiness Group (SRG) has three corpsmen — one IDC, one Dental Corpsman and a Preventive Medicine Technician. They are responsible for the manning, training and equipping the active and reserve battalions.

Located in Gulfport, Miss. and Port Hueneme, Calif., the SRGs provide administrative control and training to active duty and reserve Seabee battalions. They provide basic and tactical field medical training to include Basic Life Support and Instructor, Combat Life Saver, and Live Tissue basic and advanced.

They also provide extensive training and oversight during the battalions' Field Training Exercise and Field Evaluation Problem (FTX/FEP), in which the battalions conduct a wide range of combat operational scenarios to include casualty response and assistance, battalion aid station construction and operations, mass casualty events and medical evacuation procedures. This includes training and evaluation of the first responders and the patient course through the medical pipeline. The culmination of the training and exercises is the certification of readiness to deploy.

While stationed at the 20th SRG in Gulfport, HM1 Joseph Puckett advanced to HMC and assumed the role of leading chief petty officer. He described his most recent FTX/FEP as, "a great feeling. You assist the battalion piece together with all of the medical programs, train the Seabees in Combat Life saver and Basic First Aid, and then you watch it all come together at FTX/ FEP."

The Seabees also have Underwater Construction Teams (UCTs) in Little Creek, Va., and Port Hueneme, Calif. The UCTs require Dive IDCs to assist in missions around the world.

The Seabees provide the opportunity to be in the middle of the action and Navy Hospital Corpsmen are right there with them. "We heal, We Fight." &

Navy Corpsmen Keep Lejeune Marines in the Fight

ut on foot patrol from Camp Lejeune, N.C., a Marine squad gets ambushed in the outskirts of the Helmand Province, Afghanistan. In an instant a blast goes off with shots flying above the Marines' heads from a direction they could not determine. With limited visibility from dust generated by a mechanically detonated improvised explosive device, a corporal directs his squad to take cover in the nearby corn field. There is yelling, shouting, and confusion; making it hard to comprehend anything. Cpl. Alejandro Rodriguez and the corpsman examine the squad as quickly as they can. Two Marines took fire to lower extremities, one seriously wounded and hemorrhaging profusely. Medical evacuation and air support are called to the rescue. After what seems like an eternity, the injured Marines arrive at the nearest echelon of immediate medical care. The leading caregiver is not a medical officer but a Navy independent duty corpsman (IDC), a right hand man to the Medical Officer.

"Camp Lejeune Marines have come to understand the importance of an IDC and what we can do for them," says Chief Petty Officer Thomas Nagy, an IDC from French Creek Group Aid Station, CLR 27. Camp Lejeune Marines have done exceptionally well in combat during both Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF). During both these conflicts the Marines experienced casualties and each time there was a Corpsman around; patrolling side-byside with them, day and night.



CAMP LEJEUNE, N.C. - HM1(FMF) IDC Terry Gray attends the medical needs of a Marine at French Creek Group Aid Station. Photo by HM3(FMF) Thato Manyothwane.

Also known as "DOC," the Corpsman has been the first line of defense for Marines. He truly saves lives, and his expertise is the difference between life and death in the battlefield. DOC gets his battlefield training from the IDC who often goes on patrols.

IDC's receive unique training that makes them assignable worldwide in any operational environment. Their training is vital during these times of battle. Camp Lejeune IDC's are among the Sailors and Marines experiencing multiple deployments. They are constantly training corpsmen and preparing them to provide care under stressful situations.

HM1(FMF) Jordan L. Brown, an IDC attached to 8th Communications Battalion, Camp Lejeune, is preparing her battalion and corpsmen for a deployment to Afghanistan. She is one of nine corpsmen in a battalion of six companies and over 1,300 Marines and Sailors. "As an IDC it is my duty to train corpsmen to perform more tasks with confidence and the highest level of expertise," said Brown.

She emphasizes her training on giving IVs, sutures and suture removals, cricothyroidotomy and needle thoracentesis. These are just a few of the skills that are essential on the battlefield. Needle thoracentesis is a procedure where a needle and catheter are inserted through the chest wall into the pleural space to release accumulated pressure within the chest cavity. This procedure is performed on patients with gunshot wounds or trauma to the chest to help breathing and circulation, often saving the patient's life.

In garrison where all the deployment preparation work is done, it is vital to get all Marines in a medically deployable status. To optimize her work load, training her corpsmen to perform multiple tasks is vital. It allows for greater performance output, desired results and overall success of the battalion. Through the IDC Association annual meetings, and independent duty corpsmen Association Facebook page,

Camp Lejeune IDC's share vital information in preparation for deployments.

As an IDC she possesses the knowledge and ability to make life saving decisions for Sailors and Marines and bears the responsibility for their total healthcare, both in garrison and in theater.

Responding to why she became an IDC, Brown says, "I enjoy helping people, making them feel better overall, and I wanted to do something more than just administration work, therefore I chose to go for further training and stepped in to the role of patient care. It is the ultimate way to get Marines as healthy as they can possibly be".

Nagy had the opportunity to deploy several times with the 24th Marine Expeditionary Unit (MEU), where he treated patients during the response to hurricane Katrina in 2005, followed by the Beirut evacuation in 2006 and a deployment to Afghanistan in 2008. Nagy says he focuses his training on making sure that he passes all his knowledge and experience to junior corpsmen to ensure the success of every mission they have exceeded expectations.

are tasked with. His training is divided is three phases:

Combat trauma—Making sure his corpsmen provide the best care in combat.

Dealing with stress—Ways to deal with seeing trauma, battle injuries, pain, and bloody situations.

Combat guilt—How to handle the feelings of loss and possibly guilt if their efforts could not save a life.

Nagy counsels and prepares corpsmen and Marines on what they might encounter while in a combat area; including losing close friends, losing limbs and recognizing signs of PTSD. Camp Lejeune IDCs have seen multiple deployments partly because of their field expertise in advanced patient care, the ability to work independent of a Medical Officer, and the guidance they give to corpsmen as they take care of Marines.

The success of Camp Lejeune deployments have been attributed to the outstanding work of the medical team. The corpsmen are often limited and stretched out between units; but with the IDC's guidance and training, they



CAMP LEJEUNE, N.C. - HM1(FMF) IDC Terry Gray attends the medical needs of a Marine at French Creek Group Aid Station. IDCs possesses the knowledge and ability to make life saving decisions for Sailors and Marines and bear the responsibility for their total healthcare, Photo by HM3(FMF) Thato Manyothwane.

ARABIAN SEA-Senior Chief Hospital Corpsman Jeffery Dell directs a damage control team during a drill onboard Amphibious Assault Ship USS Pelelieu (LHA 5). Dell is an independent duty corpsman on Pelelieu.

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A Global Force For Good



PACIFIC OCEAN – Hospital Corpsman 1st Class Timothy Bickerton, an independant duty corpsman from Reno, Nev., begins applying an ulnar gutter splint to protect broken knuckles at the medical department's treatment room on board USS George Washington (CVN 73).

PACIFIC OCEAN –Hospital Corpsmen 3rd Class Andrew Turner and James McCoy aid Senior Chief Hospital Corpsman Darrell Timpa as he tries to save the fingers of a Sailor after their partial amputation in an accident aboard USS Lassen (DDG 82).



"IDC school is not a walk in the park. It's a difficult training program. It takes a motivated, dedicated person to graduate. "-Vice Adm. Adam M. Robinson, Jr.

Navy Medicine is looking for a few good men and women to shore up the numbers in the ranks of the independent duty corpsmen (IDC). IDCs are needed in all specialties - submarine, surface, Fleet Marine Force and dive.

"This is an issue for all of Navy Medicine, not just the Hospital Corps rating, because we exist to support the fleet," said (FMF) Laura Martinez, Force Master Chief for the Bureau of Medicine and Surgery. "We provide this support daily when we execute our mission of providing and maintaining a fit and healthy force."

Navy Medicine is experiencing a shortage of IDCs due in large part to low enrollment rates into the IDC training program. The shortage is also impacted by the graduation rate.

"IDC school is not a walk in the park," said Vice Adm. Adam M. Robinson, Navy Surgeon General. "It's a difficult training program. It takes a motivated, dedicated person to graduate from IDC school. But, I believe the benefits are worth the hard work."

Some of those benefits include a myriad of jobs not typically performed by an individual corpsman - direct patient care, surgical procedures, pharmaceutical prescriptions, preventive and occupational medicine, industrial hygiene, and more. For Tia Johns, Command Master Chief, Navy Medicine Support Command (NMSC), the autonomy and professional challenges make the IDC job unlike any other.

"I enjoy the independence and the responsibility," said Johns. "As an IDC on a small ship, I ran the medical department, and I reported directly to the Commanding Officer. IDCs as a whole enjoy some of the broadest varieties of assignments, work environments and skill sets in the Hospital Corps rating, ranging from ships and submarines to hospitals and clinics in the U.S. and overseas."

Navy Medicine will be working over the next year to tell the IDC story and to share the experiences of IDCs like Johns, said Rear Adm. Eleanor Valentin, commander of the Navy Medicine Support Command.

"IDCs have enormous responsibilities, stellar reputations, and they are trusted by the fleet," Valentin said. "We need to ensure our corpsmen and the leaders, counselors, coworkers and friends who impact the careers of the corpsmen hear about the countless opportunities available for IDCs."

Six of the nealy 1,200 independent duty corpsmen scattered throughout the Navy and Marines describe their profession in their own words in the following pages.



"I wanted to be the ultimate corpsman. An IDC must be cool, calm and collected. The crew looks to t in times of chaos, tragedy and crisis. The most important part of the job, patient care, is only a fraction

HMCS (SW/AW) Jeffery Dell serves as an IDC aboard the Amphibious Assault Ship USS Pelelieu (LHA 5), home ported in San Diego; Calif. Dell is a native of Waycross, Georgia and graduated from Waycross High School in 1986. He attended boot camp and corpsman "A" school in 1988 and has spent nearly 23 years on active duty.

"I want to be the ultimate corpsman. An IDC must be cool, calm and collected. The crew looks to the 'Doc' for leadership and comfort in times of chaos, tragedy and crisis. The most important part of the job, patient care, is only a fraction of what is expected of a true IDC. Your intellect, resolve, commitment and courage will be tested. You should be an IDC if you thrive on pressure. IDCs can be stationed in a lot of places. IDCs work on and below the high seas aboard ships and in submarines. They work in jungles, inland waters and in deserts with the Fleet Marine Force, riverine units and with the 'Can Do' SeaBees. IDCs are embedded with Special Warfare units including the Marine Corps' Force Recon and the Navy SEALS. IDCs, with their leadership abilities and broad skill sets, are sought after by Army, Coast Guard and Air Force units.

I like being in the mix of it all. As an IDC working on your own, you are in charge of your department. You are the combatant commander's most trusted advisor and the entire mission of that warship of the line can be changed based on your recommendation. That is an awesome responsibility, but if you are an IDC, you are ready. I can think of no higher honor than being called 'Doc.'"

HMC(SS) Westley M. Durnell serves as the IDC for the Blue crew of USS Georgia (SSGN-729). Durnell graduated from Lorain High School in Lorain, Ohio in 1993. That same year he attended boot camp and HM "A" school.

He has been a member of the submarine community for eight years. An SSGN is a guided-missile submarine - submarines that were SSBNs and converted to SSGN. Instead of carrying Trident missiles, SSGNs carry tomahawks. The Georgia has a crew of approximately 160, 20 of whom are officers and the rest of whom are enlisted. There are 23 chiefs on board.

"I chose to become an IDC because I had trouble geting to a sea-going



HE 'DOC' FOR LEADERSHIP AND COMFORT V OF WHAT IS EXPECTED..."

command, and this was a guaranteed sea-going billet. What sets a 'sub' IDC apart from other IDCs is you run your own show. You are a department head. You run the medical department. You answer directly to the commanding officer when you're stationed on board a submarine. I'm overall responsible for the health and welfare of the crew.

I do everything from minor surgeries to training my emergency medical assistance team. I'm a basic life support instructor, and I manage the smoking cessation facilitator program. As a sub-IDC we also run the radiation health program. Most general or service IDCs them answer to a higher authority, or work under someone.

When sub IDCs go to sea, we treat our own patients, we manage our own programs and we take care of the crew





completely, independently of a medical officer or anyone else for that matter; and you just don't get that kind of experience from anywhere else."

HM1 (SW/FMF) Christy Hood serves as an IDC aboard the aircraft carrier USS George Washington (CVN 73) out of Yokosuka, Japan. Hood is a native of Beach Bottom, Pa. and has spent the last 13 years on active duty. George Washington maintains a full service medical treatment facility.

"I became an IDC because I wanted to gain more knowledge and experience in patient care. It is something that I have been doing my entire Navy ARABIAN SEA–Senior Chief Hospital Corpsman Jeffery Dell directs Sailors as they prepare to medically evacuate a simulated injury aboard Amphibious Assault Ship USS Pelelieu (LHA 5).

PACIFIC OCEAN– Hospital Corpsman 1st Class Christy Hood from Peach Bottom, Pa., uses a black light to examine a fluorescent dye in a patient's eye while checking for abrasions or ulcers.

PACIFIC OCEAN – Hospital Corpsman 1st Class Christy Hood conducts an ophthalmic exam on board USS George Washington (CVN 73). George Washington, the Navy's only permanently forward-deployed aircraft carrier, is currently underway helping to ensure security and stability in the western Pacific Ocean.



career, and I have really enjoyed it. If c orpsmen enjoy taking care of patients, being an IDC allows them to work more independently, giving them the knowledge and experience to be on their own and increase their professional growth in the field.

When it comes to being an IDC, I like everything about the job - taking care of patients, teaching Sailors how to take care of their fellow Sailors and Marines, and establishing the rapport with our patients so they can trust us with their medical care. If Sailors want that type of experience working out on their own, this is the NEC that they need to get into."



PACIFIC OCEAN –HMCS Darrell Timpa, then an IDC aboard USS Lassen (DDG 82), works to save the fingers of a Sailor after their partial amputation in an accident. Timpa is now a master chief and the program director at the independent duty corpsman School.

PACIFIC OCEAN –Hospital Corpsman 1st Class Timothy Bickerton excises a cyst on a patient at the medical department's treatment room on board USS George Washington (CVN 73), which is currently underway helping to ensure security and stability in the western Pacific Ocean.



HM1(SW) Ioana Champagne is an independent duty corpsman originally from Stockton, Calif. She has spent nine years on active duty and one year as an IDC.

"I've been stationed at the Marine Corps Recruit Depot since November 2009, after graduating from IDC School in San Diego. At the 1st Battalion Aid Station, I see an average of 80 recruits a day. I became an IDC for the challenge and for the independence. I wanted to be part of an elite group.

It takes a special person to be an IDC. You have to be able to stand alone. I love the respect I get as a blue shirt, and I love the sink or swim approach. I love the idea of being able to work directly for the CO of a Navy ship, and being able to train my junior sailors the things I learned during IDC school."



PARRIS ISLAND, SC –Hospital Corpsman 1st Class Ioana Champagne examines a patient's chest x-rays at the 1st Battalion aid station at Marine Corps Recruit Depot on Parris Island. S.C. Champagne sees an average of 80 patients a day.

"...YOU ARE THE COMBATANT COMMANDER'S MOST TRUSTED ADVISOR AND THE ENTIRE MISSION OF THAT WARSHIP OF THE LINE CAN BE CHANGED BASED ON YOUR RECOMMENDATION. THAT IS AN AWESOME RESPONSIBILITY, BUT IF YOU ARE AN IDC, YOU ARE READY. I CAN THINK OF NO HIGHER HONOR THAN BEING CALLED 'DOC." -HMCS JEFFERY DELL

HM1(SW/FMF) Tim Bickerton is a native of Reno, Nevada with 11 years in the Navy. He currently serves as an IDC aboard the aircraft carrier USS George Washington out of Yokosuka, Japan.

"I chose to be an independent duty corpsman because I enjoy taking care of patients, and I believe this is a stepping stone toward medical school. I get a sense of accomplishment from taking care of someone, and gaining the medical knowledge and training that comes with being an IDC is some of the rewarding aspects of our work.

When patients truly need help, and you are able to take care of them, you hold yourself a little bit higher knowing that you are doing them a service. It is definitely the patient care that I enjoy the most. I had to have mentors to get me here, and each of my mentors was an IDC. They trained and pushed me along the way. I do believe that this is the right job for me. For junior corpsmen who are interested in becoming an IDC, they should know that we are always looking for our replacements. If they are up to the challenge, they should step up. It is a very rewarding field."

HMCM (SW/NAC) Darrell Timpa is the IDC School Program Director, Surface Warfare Medicine Institute, San Diego, CA. He is a native of Dallas, Texas, and graduated from Justin F. Kimball High School in 1987. He attended boot camp and HM "A" School in 1988, has spent the last 19 years on active duty. The last 8 years have been as an IDC. He recounts how he helped to save a young Sailor's hand after a partial finger amputation:

"It was a few years back when I was on USS Lassen (DDG 82). It happened to one of our air crewman. We had left port in South Korea and were socked in by fog and inclement weather, making it impossible to fly him off the ship back to the Air Force Hospital in South Korea. We were two weeks away from home port and had no other option but to suture both the fingers involved in the accident and begin antibiotics due to the the amount of dirt in the wound when he came into medical.

Once we were close enough to Atsugi, we flew him off for further evaluation and X-Rays. The suturing took, and we did not lose any tissue, but he did have some bone fractures, which we suspected but were unable to verify until getting him back to shore. Based on that suspicion we splinted the fingers involved in the position of function, and the outcome was positive and did not keep him from being accepted to an aviation program. The last I heard he is still flying helicopters for the Navy today."

More information about the IDC Program is available from Command Career Counselors.
Innovations/R & D

Suicide Prevention Training Creates Awareness at Naval Air Station Jacksonville

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The Naval Air Station Jacksonville (NAS Jax) Fleet and Family Support Center (FFSC) hosted several suicide awareness training sessions July 22 to give base personnel information that may someday save someone's life.

The training was mandated throughout Navy Region Southeast (NRSE) after three Sailors within the region recently committed suicide.

"We have had three suicides and 30 reports of possible contemplations within the region within the last week. So we've been working with all the FFSCs to get this training out to the troops and make them aware of the situation and to watch for those who may be struggling with suicidal thoughts," said NRSE Deployment and Family Readiness Coordinator Dianne Parker.

The training was kicked off by base chaplains and featured a short film comprised of Sailors and family members who have been personally affected by the suicide of a loved one or shipmate. It discussed how suicide affects not only those who commit the act, but those left behind.

"The people who know each other best, day in and day out, on the deckplate, are fellow Sailors. So what we want to do is reaffirm that suicide prevention is everyone's responsibility by looking for warning signs and knowing the resources available and to intervene," said Lt. Tom Bingol, NAS Jax chaplain. "Sometimes people dealing with economic stress, relationship issues, job situations just don't know how to deal with them. They become overwhelmed. It's up to you to establish and keep establishing that first line of defense and be aware of the signs."

Erica Schneider of the NAS Jax FFSC also discussed some of the statistics of suicides and warning signs. "Every year, nearly 33,000 people commit suicide in the United States. More males are successful than females, but females try it more often. If someone is talking about committing suicide – it is usually a cry for

help so take the time to listen to them," she said.

"The three factors in dealing with those considering suicide is ask, care, treat or ACT. Ask means find out what is bothering them and take the time to listen. Don't judge and be persistent. Then let them know you care by offering hope," said Schneider. "Finally, help them get the treatment they need – take them to someone specializing in crisis intervention and suicide prevention like an FFSC counselor or chaplain. And, make sure you follow up on them."

Schneider shared the importance of warning signs – withdrawal, depression, anger, anxiety, mood changes or talk of suicide and getting involved. "It takes five minutes to pull someone aside and ask everything is okay," said Schneider.

"This was a really great training session," said Culinary Specialist 1st Class (SW) Ronnie Robinson of the NAS Jax Flight Line Café. "I learned about what warning signs to watch for which helped a lot because I know someone who was recently contemplating suicide. Fortunately, they didn't follow through with it."

For more information about suicide awareness, contact the National Suicide Prevention Lifeline at 1-800-273-8255.

For more news from Naval Air Station Jacksonville, visit www.navy.mil/local/nasjax/.&



Navy Seeks Advances in Biomedical Research

Tavy researchers are supporting today's warfighter with new advances in biomedical research and development.

"Medical research and development activity provides the inspiration for discovery and further development of new ideas, new concepts, new drugs or surgical interventions," said Dr. Wayman Cheatham, special assistant for medical research to the Navy surgeon general and director of the Navy Bureau of Medicine and Surgery's Navy Medicine Research and Development Center, during a "DoD Live" bloggers roundtable.

Cheatham said Navy Surgeon General Vice Adm. Adam M. Robinson Ir. has established five areas of priority in terms of strategic research to support the DoD as a whole as well as those under the care of Navy Health. Those priorities are traumatic brain injury and psychological health, medical system support for maritime and expeditionary operations, wound and injury management throughout the continuum of care, hearing restoration and protection and undersea medicine.

The overall research the Navy does to support these areas includes surveillance for emerging disease, drug and vaccine development, researching environmental toxins, and medical research and development supporting force protection. To support these efforts, the Navy has medical research and clinical investigation operations on five continents, as well as among the islands of the Pacific Ocean.

Cheatham said one of the Navy's latest developments in research has been trying to determine the best agent to stop bleeding in people wounded on the battlefield. Through a collaborative effort with the Army, researchers developed QuikClot combat gauze, a wrap for wounds that seems to be more effective in controlling bleeding.

He said the latest technologies in wound and injury management are providing the greatest degree of survival and return of individuals to functionality following injury in any conflict.

"Greater than 95 percent of individuals now who are injured on the battlefield, when reached and found to be alive, survive their injuries through a long tion in vaccine development. continuum of care," he said, calling that survival rate "astounding and historical."

The Navy is also researching the use of hyperbaric oxygen chambers in treating traumatic brain injury and post-traumatic stress, he said.

"We have been involved in a number of very significant research projects," he added. "It's important that the question of hyperbaric oxygen utilization for treatment of traumatic brain injury or post-traumatic stress disorder be investigated in a very, very rigorous and ethical fashion."

Monitoring the long-term effects of service on submarines to determine whether unanticipated situations develop or health concerns emerge is another area of ongoing research, said Cheatham, and Navy researchers also are working with agencies such as the Centers for Disease

Control and the World Health Organiza-

"Navy laboratories have been integral to the process of investigation and vaccine development by means of their being deployed around the world," he said. "They have an opportunity to actually be first on hand to sample outbreaks of infection or illness and determine the actual type of virus that might be involved. So Navy serves as a very, very important link in the worldwide surveillance and intervention process."

Citing concerns about using resources to the fullest extent possible, Cheatham said he can assure the public that the Navy is carrying out its commitment to the highest caliber of research and medical education, and that those two areas are being maintained as strategic priorities for the Navy.

Cheatham said,"New linkages between research and development and our clinical activities at our medical treatment facilities are evidence of this type of commitment."



PENSACOLA, Fla. - Navy Surgeon General Vice Adm. Adam M. Robinson, Jr., inspects the hypobaric oxygen chamber at the Naval Survival Training Institute (NSTI), a component of the Naval Operational Medicine Institute (NOMI). In addition to being used during training of naval aviators, the chamber will also be used as part of Navy biomedical research to determine its possible effect on patients with traumatic brain injury. Hypobaric oxygen therapy has proven to be effective for a number of specific medical and surgical conditions for which sufficient evaluation and outcome monitoring has been performed. In these situations, it has been used either as a primary treatment or in addition to other medical treatments such as antibiotics or surgery. Photo by Capt. Cappy Surette.

Navy Opens New Aerospace Research Laboratory

On Oct. 6, 2010, Naval Medical Research Unit-Dayton (NAMRU-Dayton) was activated in a ceremony on Wright Patterson Air Force Base (WPAFB), Ohio.

NAMRU-Dayton is being formed by the combination of Naval Aerospace Medical Research Laboratory (NAMRL) and Environmental Health Effects Laboratory (EHEL). The merging of these two groups is happening at a time of significant growth and change for EHEL, where capabilities are being expanded rapidly in multiple directions in support of ambitious, high impact projects.

One of EHEL's most unique capabilities is its inhalation toxicology program. Since its founding EHEL has studied health risks of atmospheres encountered in military occupational and deployed settings, using both whole-body and nose only exposure systems. Test materials investigated with these systems have included fuels, submarine atmosphere contaminants, lubricant breakdown products, and gases.

However, in response to new Navy and DoD needs, EHEL is expanding and diversifying its expertise and capabilities for inhalation research. The introduction of female crew members into the submarine community is one impetus for a major study of submariner health currently getting underway. In preparation for that program, EHEL has expanded its capacity for whole-body exposures, and added systems to support 24-hour continuous inhalation exposure as would occur on a deployed submarine.

A second new inhalation toxicology capability coming online at EHEL is nanomaterial inhalation exposure. Military applications of nanomaterials exploit their unique chemical and physical properties. However, these novel applications also present unknown potential health risks following human exposure. To test these possible risks, EHEL is adding the capacity to generate and monitor respirable nanomaterial aerosols delivered to inhalation exposure test systems. The fate and transport of the materials in biological systems will be monitored, as will any biological reactions to the materials.

There are other new or recently added strengths in EHEL's inhalation toxicology program. Plethysmographs will support measurement of air movement in and out

of lungs, a sensitive indicator of the critical toxic effect of pulmonary irritation. A hyperbaric chamber permits investigation of both therapeutic and harmful effects of elevated air pressure. A new aerosol generation system is currently used in the study of health effects of elevated dust exposure. Finally, the novel combination of a sound generation system with inhalation chambers is being used in the study of chemical exposures and hearing loss.

A second major toxicological capability at EHEL is an in-vitro toxicology core lab, based on the idea of conducting experiments in dishes rather than whole organisms. Using a panel of assays, including cultured cells to assess cell damage, lung and skin tissue models to detect effects on organs, and microbial and cellular assays to measure genetic damage, allows EHEL to quickly and economically make first-pass estimates of the toxicity of new materials. EHEL has applied this approach to novel alternative fuels and biofuels in development by Navy and Air Force, and to Middle East particulate matters that may be a respiratory hazard to deployed troops.

EHEL has had a longstanding program for assessing neurological and behavioral effects of environmental risks. One powerful instrument for this work is the Med64 multi-electrode array. This system allows brain tissue slices to be studied over the course of hours to days, with monitoring of electrical activity across different brain regions. This is particularly powerful for characterizing specialized effects of chemicals that specifically impact localized regions of the brain.

In addition to the physiological data generated by the Med64 array, EHEL uses behavior assays to assess learning and memory, reflexive behavior, reaction times, and hearing function. All these systems together will be applied to the submariner health study, to see if fetal development of the brain shows any adverse effects from submarine conditions.

With these initiatives and others, EHEL will be entering the NAMRU-Dayton era engaged in an active and intense portfolio of highly relevant projects. The momentum of this work and growth sets the stage for investigators at EHEL to explore new Navy research directions in collaboration with their counterparts in the Navy aerospace medicine group.



WRIGHT PATTERSON AIR FORCE BASE, Ohio - (L-R) Capt. Richard Haberberger, commanding officer, Naval Medical Research Center (NMRC), Silver Spring, Md., Rear Adm. Eleanor Valentin, commander, Navy Medicine Support Command, Naval Air Station Jacksonville, Fla., Capt. Keith Syring, Naval Medical Research Unit-Dayton (NAMRU-D) commanding officer, and Cmdr. Rita Simmons, NAMRU-D executive officer, cut the ceremonial cake following the NAMRU-D activation ceremony at Wright Patterson. Syring is NAMRU-D's first commanding officer, and Simmons is NAMRU-D's first executive office. Photo by Larry Coffey.

NMLC Provides PACS System for the NICoE

request for a Picture Archiving and Communication System (PACS) in March 2009 brought Naval Medical Logistics Command (NMLC) at Fort Detrick, Md., together with the most advanced center for traumatic brain injury and psychological health in the world, the National Intrepid Center of Excellence (NICoE) for Traumatic Brain Injury and Psychological Health in Bethesda, Md.

Located on the campus of the National Naval Medical Center, NICoE required a PACS sophisticated enough to handle the clinical and research image management of the Center. The NMLC PACS office took on this task, overseeing the installation of a 16 terabyte PACS with capacity to expand.

PACS is a combination of hardware and software dedicated to short- and long-term storage, retrieval, management, distribution and presentation of images.

NMLC PACS Office Program Manager, Ed Doorn, said working with new systems in a new building contributed positively to the effort.

"A lot of times we have to fumble with older systems to get them to integrate with the PACS," Doorn said. "In this case, these are all brand new systems, so the integration was very smooth. We had no experience with the new MEG scanner; we had to do some research to see how it would integrate with the PACS."

The Elekta Neuromag [®] MEG (magnetoencephalography) scanner-provides real-time mapping of brain activity and is one of only nine in clinical use in the United States today.

An unusual aspect of the PACS installation was the patient scheduling system. NICoE uses a holistic approach and treats the entire family, not just the patient. A system that could provide a concierge-type service to schedule the family was needed. The PACS vendor supporting the NICoE mission found a porate it into the installation.

One challenge was the need for clinical and research collection data. Doorn explained that research data is shared between research partners and remains anonymous while clinical data, along with patient demographics, is needed to follow a patient through lifelong treatment. The system had to be able to split deadline we had for this system and we and route the data in two directions while maintaining the integrity of each.

The final acceptance testing of the equipment will be conducted by the PACS Team in September.

"We do this in several phases," said Doorn. "We do the initial connection and testing and have all the different systems send images. We make sure the PACS handles the data correctly and

way to support such a service and incor- can be viewed in a good clinical format. As we add external connections, we go back and test again."

> Besides the digital images, the PACS Team tests the calibration of the monitors for accuracy and that the demographic data that is associated with each patient is transferring properly.

"Our goal was to meet every single did that," said Doorn.

The 72,000 square foot center was built entirely with private donations by the Intrepid Fallen Heroes Fund and is dedicated to the research, diagnosis and treatment of military personnel and veteran's suffering from traumatic brain injury (TBI) and psychological health issues.



(L-R, standing) Naval Medical Logistics Command(NMLC) Picture Archiving and Communication System Team members Walter Sandman, Mike Fortier, Ed Doorn, Senior Chief David Ludwig, and (seated) Greg Moser, working on the functionality aspect of acceptance testing at the National Intrepid Center of Excellence (NICoE). In the background is the new, 64-slice, state-of-the-art, PET/CT scanner, located in the NICoE on the campus of the National Navel Medical Center, Bethesda, Md. Photo by Sheila A. Gorman, NMLC Public Affairs Officer.

Quality Care



Military Progresses in Identifying and Treating **Brain**, Mental Injuries

Nine years of conflict has revo-lutionized the way the military treats its combat wounded, Vice Adm. Adam M. Robinson Jr., the Navy surgeon general, told American Forces Press Service.

The past years of conflict have witnessed improved battlefield care and welloiled medical evacuation and trauma-care networks that are saving lives that in past wars would have been lost. There have also been huge advances in treating amputations and spinal-cord injuries.

Just as dramatic, Robinson said, are the cutting-edge developments in identifying and treating brain injuries, including the mental and psychological effects of war.

"We have finally, as a military and as a medical service—Army, Navy and Air Force—come to grips with the fact that war creates injuries that are not seen, injuries that are just as life-changing and as devastating as amputations and other physical injuries that come back," Robinson said in a sun-lit conference room at his Navy Bureau of Medicine and Surgery headquarters.

"And we have done tremendous work in assessing, treating and giving stability and a context to men and women who have been injured in the war and suffered these unseen injuries-the ones you can't make out, the ones the X-rays don't show, the ones for which the blood work doesn't chological and neural cognitive pathways show the differences, but that certainly are there," he said.

Exposure to roadside bombs and other blasts causes physical changes in the brain, and as a result, how it functions, Robinson said.

"When you are in a blast, there are actually neuron-cognitive changes that occur in how the brain and the synapses and the brain connections-the wiring of the brain-actually work," he explained.

Robinson said hormone and chemical levels fluctuate as well, often resulting in emotional and behavioral changes.

"This is not just about being disoriented," he said. "You are not just disoriented from the blast. You are disoriented because you are in the blast, and then the blast causes a change in how your brain functions. People have been very, very slow to come to that conclusion, but it's true."

Except in the case of severe traumatic brain injury—defined as a penetrating head wound-these wounds can be difficult to diagnose, and symptoms often aren't immediate.

"When you break your arm, I can do an X-ray and can show you the break," Robinson said. But for troops with moderate or mild TBI, "we are finding that

"If you train brain systems that are only partially functioning, you can build up their strength and efficiency just like a weakened arm ectomies, surgical procedures to remove if you do weight training on it."

Dr. David Williamson

there may be changes in the neural psythat we are just beginning to learn and understand."

Robinson touted tremendous strides in addressing severe TBIs, with life-saving physiological, chemical and operative advancements. "All of that has come together...[so that] many of the severe traumatic brain-injured patients who heretofore we did not think were capable of surviving have, in fact, come back and are now leading productive lives," he said.

Dr. David Williamson is on the frontline of these advances as director of the psychological heath and traumatic brain

injury team at the National Naval Medical Center in Bethesda, Md.

"This is a dedicated team of professionals who have a mission to serve just one category of medical disorder," he said. "Instead of breaking the staff up by medical specialties, we are a team broken into the category of a clinical problem: the psychological health and brain-injury effects of combat."

Operating from within a wing of the National Naval Medical Center known as "7 East," the team includes a combination of brain specialists: Williamson, a neuropsychiatrist; as well as a neuropsychologist who conducts highly detailed memory, speech, calculation, concentration and other cognitive tests.

Specialists in psychology and social work round out the team, which works hand-in-hand with trauma surgeons to assess every single wounded warrior treated at the hospital, and intervene immediately when they diagnose brain injuries or mental-health complications.

Williamson cited the increase in cranipart or all of the skull to allow the brain room to swell without being squeezed, as one of the biggest game-changers in treating traumatic brain injuries.

Historically, many people with brain injuries ended up dying because their brain got squeezed when it swelled, ultimately killing the brain tissue, he explained. Now, forward-deployed surgical services often can prevent this through life-saving craniectomies.

"That means we have more severe brain injury patients that are surviving," said Williamson. "So the challenge for us is treating more severely brain-injured patients through rehabilitation and later phases of care.'

As it works with the hospital's trauma team to identify brain injuries in combat casualties and determine their severity, the Public Health (PH) TBI team increasingly relies on vestibular testing to flag

problems within the part of the inner ear that controls balance, Williamson said.

This semi-circular canal system, made of three fluid-filled donut-shaped voids of bone, can get damaged by blast waves, he explained. "Nothing physically hits your head, but a pressure wave through the skull can rupture these fluid-filled sacs inside bones in the skull," he said. "It causes dizziness, coordination and balance problems and sometimes, double vision. And all that leads to headache and slows rehabilitation."

Patients diagnosed with vestibular problems work closely with physical therapists to "reset the equilibrium of those systems and get them working properly" through exercises focused on head movements, balance and hand-eye coordination, Williamson said.

"That's an injury that's frequently been missed," he said. "This therapy has proven very helpful."

Meanwhile cognitive rehabilitation is helping patients restore brain function. "If you train brain systems that are only partially functioning, you can build up their strength and efficiency just like a weakened arm if you do weight training on it," Williamson explained.

Cognitive therapy consists of a series of drills – memory tasks, reading tasks, analytical reasoning tasks – all focused on retraining the brain, he said.

"In addition, brain injury treatment programs are using the virtual environment to extend what we can challenge brains with," Williamson said. Specialized video games and other computer-based programs provide visual, spatial, language and coordination tasks. A driving simulator enables them to hone their driving skills under the watchful eyes of a trained therapist.

The PHTBI team also uses specialized equipment to monitor electrical activity within the brain and identify a frequent complication of brain injuries: seizures.

"Everyone recognizes when seizures make you go unconscious or you are convulsing," Williamson said. "But you can have partial seizures where you have changes in your ability to think or your emotional regulation or your general level of alertness, caused by a little area of electrical abnormality."

So the team conducts electroencephalography, continuously over the course of five days, to test for those abnormalities. Patients who exhibit them typically are treated through medication.

But the PHTBI team hasn't limited its efforts to drugs and conventional medicine. "Our physical medicine rehabilitation team is open to all holistic therapies and alternative therapies as well," he said. "We refer people for acupuncture for pain management. We do various types of non-medical pain interventions, nerve stimulation, nerve blocks and so on."

The biggest challenge in treating moderate and mild TBI, Robinson said, is that there's typically no outward sign of injury, making it difficult to identify.

"With mild TBI, you know you are different. You feel different, but you look absolutely the same to those around you," he said. "You may act differently to those who know you really well, but you can take tests and do all sorts of different objective instruments and you don't necessarily see the differences." Often it's a family member or loved one who picks up on personality or behavioral changes and sends up the red flag. "We've had spouses come in and say, 'The person I sent to Iraq or Afghanistan is not the person who came back,'" Robinson said.

Robinson said he believes that nobody returns home from combat without at least some degree of post-traumatic stress.

"If you are involved in combat and combat operations, you have post-traumatic stress," he said.

Even those not physically involved in combat, but operating within the combat theater, are at risk, he said. "If you are exposed to the tension and to the stress of a deployment, you are a candidate to develop post-traumatic stress," he said.

"I did not say you have a disorder," Robinson emphasized. "So when I talk about PTS, I don't add the 'D' for 'disorder.' Because we know that if we treat it and treat it effectively, we can actually obviate the disorder. If we can stave off the 'D,' we are ahead of the game." &



BETHESDA Md. - Dr. David Williamson, medical director for the Inpatient Psychological Heath and Traumatic Brain Injury program at the National Naval Medical Center in Bethesda, Md., and his staff are breaking new ground in identifying and treating traumatic brain injuries and mental-health issues. Photo by Seaman Alexandra Snow.

Collaborations, Partnerships and Commitment: Navy Medicine's Project FOCUS and the Naval **Special Warfare Community**

s was said by Humphrey Bogart in the beginning of a beautiful friendship."

As was the development of the partnership between the Navy Bureau of Medicine and Surgery (BUMED) and Naval Special Warfare (NSW) in serving the needs of war fighters and their families. It all began on a cold, rainy October morning in 2007, when the Navy Surgeon General, Vice Adm. Adam Robinson was paid a visit by NSW's commanding Officer, Vice Adm. Joe Kernan and his wife, Janet. By 2007, NSW warriors had been in high-gear with intense operational tempo and multiple deployments under their belts - stressful to say the least. But it was the concerns to help the children and spouses of the NSW community that drove Kernan and his wife to speak to the Surgeon General that day. The wars were taking their toll on the families.

"Our goal was to find a way to strengthen communication within the families," explained Cmdr. Dave Barnes, the family and community support program manager for NSW. "We should not leave our families with the 'bill' from our community being at war for essentially nine years."

In the U.S. today, about 1.2 million children have an active duty military parent, and within NSW, about 40 percent of service members have at least one dependent child under the age of 18. And the community was essential," according since 2001, nearly every child has been affected by a recent or current deployment of a parent to the combat zones of Iraq or Afghanistan, or sometimes worse, location unknown.

Wartime deployment takes a toll on both the service member and family members on the homefront, with multiple deployments often causing additional stress. To date, thousands of military service members, their children and families are at risk and stand to benefit from fam-

ily-centered resiliency training. The grow- nature of NSW missions, FOCUS staff Athe movie Casablanca, "I think this is ing awareness of the significant impact of deployments on military family life and child and family well-being prompted a new initiative from the Bureau of Medicine and Surgery of the Department of the Navy and the Marine Corps.

> In 2007, the Defense Health Board Task Force on Mental Health identified a critical need for prevention and intervention services to foster resiliency within military families and initiated with UCLA Project FOCUS. FOCUS (Families Over Coming Under Stress) for the Navy Bureau of Medicine and Surgery's (BUMED) is a psychological health resiliency building program designed for military families facing the psychological challenges of combat operational stress during wartime. FOCUS is based on leading evidenced-based family intervention models for at-risk families and has been shown to have positive emotional, behavioral and adaptive outcomes for families. FOCUS services augment existing Navy Medicine and Navy and Marine Corps community support programs in order to provide a comprehensive system of care that supports family readiness and wellness.

The program saw early success and in 2008, was brought to NSW to fill Kernan's, and the community's, need for a family resiliency program.

"Customization of the program for to Kirsten Woodward, BUMED's director of Family Programs. "The FOCUS providers at NSW needed not only to be subject matter experts in resilience building and increasing well-being for families, but they [FOCUS staff] needed to be knowledgeable and sensitive of the needs for NSW families."

The implementation of Project FO-CUS for NSW was characterized by finely tuned, gear-tight collaboration and teamwork. Because of the unique

work closely with family members to understand and adjust services in order to provide a highly customized level of family support. Working with the existing teams of dedicated military family services personnel, FOCUS staff assists families in understanding how combat operational stress affects them and the service family member, how to manage stress, and how to strengthen their family.

"FOCUS supports the mission of NSW by providing support to service and family members in the form of resiliency training," explained Dr. Mia Bartoletti, the Naval Amphibious Base (NAB) Coronado site director for Project FOCUS. "This includes working with parents and children to prepare for upcoming missions, trips and trainings, as well as to assist families throughout the deployment."

FOCUS uses a structured approach to facilitate engagement and skill building across the family. Initial sessions focus on preparing family members to identify and share their concerns and understanding of family members' deployment reactions. In separate sessions with parents and children, family members are taught emotional regulation, problem solving, goal setting and communication skills. Families then meet together to share their experiences using these skills and tools



to enhance family communication and support.

Using some of the project's core components, like parent and child skill building, dealing with deployment stress, and goal stressing, families can receive a variety of assistance to meet their specific needs.

"Family members are provided with an opportunity to get trained and practice on core resiliency skills, including active communication, effective problem solving, setting and maintaining goal achievement strategies and successful family emotion regulation," said Bartoletti. "Results of FOCUS program evaluation suggests that military family members benefit from higher levels of overall satisfaction and lower distress and difficulties as a result of participation in the program."

"Communication between a child and a parent is so critical in life – especially when you are living and dealing with multiple deployments in a time of war," said Barnes. "We are very grateful to have Project FO-CUS here in the NSW community."

Since that cold day in 2007, Project FOCUS has been well established



SAN DIEGO, Calif. - Naval Special Warfare Command established a dedicated center for its personnel and families to participate in Project FOCUS sessions to help build family resiliency and be better able to cope with the stress associated with frequent deployments."

within the NSW community and is now part of the cadre of services NSW offers to its families. To date, there have been more than 14,350 NSW community member attendees in the program. \mathcal{J}

Enhanced FOCUS World Web site Offers More Robust Support to Navy Families

The Bureau of Medicine and Surgery (BUMED) redesigned the Web site for Project FOCUS (Families OverComing Under Stress) Sept. 17 to better serve military families by building resiliency and coping mechanisms to deal with stress associated with multiple overseas deployments.

The FOCUS Web site now includes both a public section with open access, and a new "FOCUS World," which is a secure section, accessible only to military families.

According to Kirsten Woodward, BUMED Family Programs Division director, FOCUS World is an interactive website that teaches families resiliency training skills.

"In FOCUS World, parents will be able to create a family account that allows all members of their family to share memories, create family goals and chat in their own private chat room," said Woodward. "In addition, there are a variety of downloadable handouts that provide helpful education and activities for military families, and brief videos that demonstrate helpful techniques used to talk about common family challenges."

FOCUS World provides parents and children with training in key resiliency skills, including communication, emotional regulation, problem solving, goal setting, and managing deployment reminders. Such skills are taught through a number of interactive features, including the Family Narrative Timeline, Future Family, and the Feeling Thermometer, all of which are designed to provide instruction and practice in the key FOCUS skills.

Family members are able to upload photos in order to share important events, and in order to help families maintain cohesion during deployments. An 'i-chat' feature has been developed to allow service members to remain involved in parenting at a distance and to facilitate effective co-parenting. Modeling videos have also been created to provide guidance for parents around common challenges faced by military families experiencing multiple deployments.

"It is through technology and innovation that allows Navy Medicine to continue to serve the needs of families, both at the installation level, and the most geographically isolated locations," said Navy Surgeon General Vice Adm. Adam M. Robinson Jr.

For more information on Project Focus, visit www.focusproject.org

Shipmates

Navy Medical Service Corps Captain Competes in **Duathlon World Championships**

apt. Sue Hite is a Medical Service Corps (MSC) Officer and dietitian by trade, but a long-time runner and cyclist at heart. In September, despite a nagging Achilles tendon injury, she came in 25th at the World Duathlon Championships in Edinburgh, Scotland.

Currently assigned as a career planner at the Navy Bureau of Medicine and Surgery, Hite chairs the MSC Professional Review Board that screens applications for potential MSC Officers. In addtion, she counsels officers on future career tracks and training. Outside the office, she "shreds" 50 miles on a typical weekend bike ride and pounds the pavement

during the week with long distance and speed runs, weight training and yoga.

Capt. Hite has been biking and running for 30-years but it wasn't until about 10 years ago, that she decided to participate in her first triathlon. Camp Lejeune, where she was stationed at the time, was hosting an olympic-distance race which is a 1,500 meter swim, followed by a 40km bike ride, and concluding with a 10K run. Despite being a slow swimmer, she decided to give it a shot and was hooked, but after ten years of doing triathlons, she said she "was always playing catch-up in the bike and run" portions of the race and decided to focus on duathlons instead.



EDINBURGH, Scotland - Capt. Sue Hite, a career planner at Bureau of Medicine and Surgery, competes in the World Duathlon Championship, Edinburgh, Scotland in September 2010. Despite a nagging Achilles tendon injury, she placed 25th overall. Photo courtesy of Capt. Sue Hite.

Currently duathlons are less popular than triathlons but are ideal for those who prefer to stay out of the water. A typical duathlon is a 10km run, followed by a 40 km bike ride, and concluding with 5km run to the finish line.

Her first opportunity came a few years ago at Kadena Air Force base in Okinawa, Japan where they hosted a duathlon. Much to her surprise and delight, she won 1st place overall for women across all ages.

In 2009, she decided to compete in the Duathlon National Championships in Richmond, Va. She needed to place in the top 18 to qualify for the World Championships, but she came in 24th. This only encouraged her to train harder by ramping up her workouts and "eating more salmon, green vegetables, and calcium," said Hite, who holds a Master's degree in Nutrition from the University of Alabama at Birmingham. "In fact," she said, "I've been nicknamed the Queen of Calcium."

Her intense and disciplined training and nutrition regimen paid off. Earlier this year, she placed 16th at Nationals which earned her a spot at the World Championship in Edinburgh, Scotland. Turning 54 the very day she flew to Scotland and still recovering from injury, she admitted to being a bit nervous. Not to mention, this was also her first race competing at such an elite level and expected fierce competition from her European competitors.

She finished 25th despite having run a total of only about 12 miles in the past 6 months. "It was really a thrill to qualify for the U.S. team. One particular highlight was marching in the Parade of Nations just like in the Olympics," said Hite.

So what did Captain Hite do to celebrate her victory upon her return stateside? "I competed in the Nation's Triathlon here in D.C. just for fun." She already has her eyes set on the 2011 National Duathlon Championship in Tuscon, Ariz. If she stays injury free, she hopes to qualify for Worlds once again, but only if she continues to eat her vegetables.



Rear Adm. Elizabeth S. Niemyer was appointed the 23rd director of the Navy Nurse Corps in a ceremony at the Bureau of Medicine and Surgery in Washington, D.C, Aug. 27. She relieved Rear Adm Karen Flaherty.

As well as becoming the new director Niemyer was promoted to rear admiral upper half. Vice Adm. Adam M. Robinson, Jr., the

Navy Nurse Corps Holds Change of Command

Surgeon General of the Navy presided over the ceremony.

Niemyer said there is no greater honor or privilege for her than to serve as the director of the Nurse Corps.

"It is a responsibility that I accept humbly and without reservation knowing the nurses serving Navy Medicine, uniformed and civilian are the very best in the world," said Niemyer. "With your assistance and dedication we will build upon an already impressive record of 102 years of service by collectively raising the bar. Know that I will challenge you to think differently, ensure collaboration with the other services and hone your clinical excellence as we continue to meet Navy Medicine's mission... anytime, anywhere!"

Niemyer a native of Annapolis, Md., attended the University of Maryland receiving a Bachelor of Science in nursing in 1978. She was commissioned into the Navy Nurse Corps in 1981.

Her distinguished career includes duty stations at at National Naval Medical Center Bethesda, Md., Naval Medical Clinic Quantico, Va., and Naval Hospital Camp Pendleton, Calif. While assigned to Naval Hospital, Okinawa, Japan, she earned a Master of Science in human resource management from Chapman University. Following her Okinawa assignment, she was selected to attend graduate school at San Diego State University as a full time student in the Education and Training Management Subspecialty Program.

Niemyer has held executive positions at the National Naval Medical Center, at Naval Hospital Rota, Spain; at TRICARE Area Office—Europe; at the Bureau of Medicine and Surgery; and at the TRICARE Regional Office—West.

Her personal decorations include the Defense Superior Service Medal (Bronze Oak Leaf), Legion of Merit Medal (Gold Star), Meritorious Service Medal (Gold Star), Navy Commendation Medal, Navy Achievement Medal and National Defense Medal (Bronze Star).

Flaherty will continue her responsibilities as the deputy Surgeon General of the Bureau of Medicine and Surgery.

Gintzig Earns Second Star

Rear Adm. Donald Gintzig was promoted to the rank of rear admiral upper half Oct. 4, in a ceremony held at the Bureau of Medicine and Surgery by Vice Adm. Adam M. Robinson Jr., the surgeon general of the Navy.

Gintzig currently serves on active duty as the deputy chief, Bureau of Medicine and Surgery, for Medical Operations and Future Plans.

At the ceremony, Gintzig said "I am so honored and blessed to have the opportunity to serve this nation, the United States Navy and Navy Medicine.

Gintzig is a native of Murfreesboro, Tenn., and earned his bachelor's degree and his master's degree in Business Administration from George Washington University, Washington, DC. He also completed a post master's fellowship in Health Care Administration with George Washington University at South Miami Hospital. Gintzig was commissioned in the Medical Service Corps in Jacksonville, Fla., in 1983.

His distinguished career includes assignments at Naval Reserve (NR) MEDCRU 408, NR NH Corpus Christi 410, NR 4th Marine Division 1/23 Houston, NR NH Corpus Christi 510, 4th Medical Battalion 4 FSSG Surgical Support Company Bravo, Fleet Hospital Fort Dix, Fleet Hospital, Minneapolis, and Operational Health Support Unit, National Naval Medical Center Bethesda, Md.

Hurricanes Katrina, Rita and Wilma, Gintzig was mobilized and served as the deputy commander for Task Force Navy Family, from October 2005 to April 2006.

From Oct. 1, 2007 until the end of 2008, Gintzig assumed the position of vice commander, Navy Reserve Forces Command (the first staff officer to ever hold this position) as well as deputy commander, Navy Medicine East and deputy director for Reserve Affairs, Medical Service Corps. He then served as the deputy commander, Navy Medicine West, as well as special assistant to the deputy surgeon general and deputy director for Reserve Affairs, Medical Service Corps until August 2010.

Gintzig's decorations include the Legion of Merit (two awards), Navy and Marine Corps Commendation Medal (four Awards), Navy and Marine Corps Achievement Medal (three



Awards), Fleet Marine Forces Ribbon, Meritorious Unit Commendation, Armed Forces Service Medal, National Defense Service Medal (with Star) and Armed Forces Reserve Medal (with device).

From Bureau of Medicine and Surgery Public Affairs

A Look Back

The Mission of USS Kirk Revealed in New Documentary

This past July, Navy Bureau of Medicine and Surgery completed its newest history documentary, "The Lucky Few: The Story of USS Kirk." The film tells the story of a small Navy vessel that became both a haven and an escort for more than 30,000 refugees fleeing South Vietnam at the close of the Vietnam War.

USS Kirk's story began in April 1975 as North Vietnamese forces advanced on all fronts, sending the South Vietnamese Army (ARVN) in headlong retreat. With each successive defeat, thousands of refugees either attempted escape by sea or clogged every road south toward the capital. The outcome of the long struggle was now a foregone conclusion. By the last days of April, the enemy was on the outskirts of Saigon and the city was about to fall.

On April 28th and 29th, North Vietnamese rockets and mortars rained down on Tan Son Nhut Airport. Panic and hysteria now ruled the streets Vietnamese Army and Air Force U Huey's—packed with fleeing refugees—were following the American aircraft out to sea. As swarms of he

of South Vietnam's capital as the North Vietnamese army surrounded the city. Those Americans still there and Vietnamese who had worked for them sought refuge on any helicopter heading out to sea where ships of Task Force 76 of the Seventh Fleet awaited them. The helicopter evacuation known as "Operation Frequent Wind" had begun, and the final act of the Vietnam war was at hand.

On Tuesday, the 29th, the 438-foot destroyer escort, USS Kirk (DE-1087), was operating with Task Force 76 off the South Vietnamese coast near the port of Vung Tau as large CH-53 Sea Stallions and CH-46 Sea Knights began shuttling American and Vietnamese evacuees from Saigon. Just as suddenly, hordes of unknown contacts began fogging Kirk's radar screens in her combat information center. South Vietnamese Army and Air Force UH-1 Huey's—packed with fleeing refugees—were following the American aircraft out to sea. As swarms of helicopters flew directly overhead looking for a place to land, Kirk's crew saw the possibilities and began to toy with the idea of having one land on their small flight deck. At very least, the possibility of bringing a helicopter home as a trophy seemed a likely outcome. Moments after "advertising" their flight deck over their radio's emergency frequency, South Vietnamese army and air force Hueys began landing, one after another. As the refugee-packed helos were unloaded, crewmembers shoved them over the side to make room for more. In the next day and a half, 13 helicopters landed on Kirk, and their occupants-men, women, and children-were fed, given medical care by the ship's two hospital corpsmen, and housed beneath awnings on the decks.

As the helicopters ceased arriving, Kirk's commanding officer, Cmdr. Paul Jacobs, received a cryptic message from the task force commander. As per instructions, Kirk dispatched its motor



OFF THE COAST OF SOUTH VIETNAM - A South Vietnamese ship loaded with fleeing refugees following the fall of Saigon in April 1975. Photo courtesy of Hugh Doyle.



OFF THE COAST OF SOUTH VIETNAM - USS Kirk crewmembers push an empty UH-1 Huey over the side to make room on the deck for incoming helicopters with more refugees. Photo courtesy of Craig Compiano.

whaleboat to the Joint Task Force flagship, USS Blue Ridge (LCC-19), to pick up a mysterious civilian passenger. Phase 2 of USS Kirk's adventure was about to begin.

The civilian was Richard Armitage, a special agent working for the DoD, and his orders were straightforward and direct. Kirk would steam immediately to Con Son Island about 50 miles off the coast and rendezvous with the remnants of the South Vietnamese navy. The mission was to escort those vessels across the South China Sea to safety in the Philippines.

The ship proceeded alone and arrived at Con Son's anchorage in the early morning to find the 32 vessels there as planned. What the crew had not counted on were the estimated 30,000 refugees cramming their decks, all in desperate need of food, water, and medical attention. How Kirk and her crew transformed a man-of-war into a humanitarian assistance ship and accomplished this "mission impossible" is what the documentary, "The Lucky Few" is all about.

For more information on Kirk and her mission, you may refer to the National Public Radio home page. NPR recently aired a three-part series on Kirk. www.npr.org Put USS Kirk in the search box. &

Mr. Herman is Historian of the Navy Medical Department and producer of "The Lucky Few."



OFF THE COAST OF SOUTH VIETNAM - A refugee child aboard USS Kirk following the fall of Saigon in April 1975. Photo courtesy of Hugh Doyle.

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