FACEPLATE

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In This Issue...

FACEPLATE

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Editorial Staff

In This Issue

Cover

UCT-ONE's [SCW-DV] Paskevic balances on a friction clamp preparing to drill rebar anchor points overhead. Photo by MC2 Christopher Lussier, NECC Det Combat Camera Norfolk, Dive Locker.

SUPSALV SENDS...CAPT Pat Keenan

My apologies for not being present at the Divers Working Group this Spring. I understand the meeting was a great success, and both hearing directly from the MCPON, and being able to put him in the water were the highlights. I was absent because, since the end of April, a major focus at SUPSALV has been our response to the oil spill that resulted from the explosion and sinking of mobile offshore drilling unit Deepwater Horizon. With 750 skimmers and more than 3 million feet of boom deployed in the region, the SUPSALV contribution of 23 skimming systems and about one hundred thousand feet of boom is relatively minor. However, as I write this article in late July from a trailer in Gulfport, MS, our military, civil service, and contractor team has recovered 23,000 barrels of oil (about one million gallons). A small volume when compared to the total amount that entered the Gulf, but a valuable contribution nonetheless.

Captain Patrick Keenan, USN
Supervisor of Salvage and Diving

Some of you may be wondering why a salvage and diving organization is involved in an oil spill response. Without citing governing laws, regulations and instructions, the reason is that since it is likely in a salvage scenario (such as a ship collision or grounding) that oil pollution will be present, the Navy's responsibility for handling that oil is assigned to SUPSALV.

The loss of Deepwater Horizon had tragic consequences. Eleven people killed, thousands of livelihoods disrupted or lost forever, and a terrible impact on the Gulf of Mexico environment. The exact causes of this accident will come to light in the ensuing months as all aspects of the Macondo 1 Well drilling and completion operation are thoroughly investigated. But I believe I know why the rig exploded and sank. People most likely took shortcuts and did not follow established operational procedures. The $1 million per day operation was behind schedule and thus over budget. You can visualize the situation: pressure was on the operational folks to finish the job quickly and they were doing what they could to comply, including cutting corners in both the equipment installation and testing phases of an inherently hazardous process. The results speak for themselves. An interesting aspect of this tragic accident is that while workers 50 miles offshore were cutting corners in the use of millions of pounds of force to puncture the earth to a depth of three miles under the seabed and a mile below the ocean surface, with the intent of recovering an explosive mixture of hydrocarbons at a temperature of more than 200 degrees F, their counterparts in a headquarters building were being constantly reminded by a multitude of placards about how to safely walk down the stairs. A true culture of safety is not placards and slogans, it is attitude and commitment.

My intent here is not to preach safety to operational units. Fleet Diving Supervisors, Master Divers, and Diving Officers in all diving communities demonstrate daily a superb ability to complete difficult and dangerous missions safely. However, after being directly involved in the aftermath of the Deepwater Horizon accident for three months, I believe it is appropriate to reflect on this tragedy as an example of what can go wrong when people become lax in their approach to conducting dangerous evolutions.

Keep diving. See you around the Fleet.

4000 feet of 26" Navy boom surrounding New Harbor Island, Louisiana.

SUPSALV's Vessel of Opportunity Skimming System (VOSS) oil containment booms deployed.

Master Chief Petty Officer of the Navy Dives with SWRMC Code 360 Dive Division

CWO3 Charles L. Senter

MCPON conducting predive checks with SWRMC Divers.

Southwest Regional Maintenance Center (SWRMC) Dive Division recently arranged for the first ever indoctrination dive for a Master Chief Petty Officer of the Navy(MCPON)(SS/SW) Rick D. West. This familiarization dive was to be conducted with Southwest Regional Maintenance Center "Delta" Divers utilizing the KM-37 helmet on the EX-USS MIDWAY (CV-41).

After the MCPON was successfully screened by a Navy Diving Medical Officer (DMO) to insure he could safely conduct a Navy surface supplied dive, SWRMC Master Diver, NDCM Brian Pratschner routed the dive waiver request through SWRMC Chain of Command and NAVSEA 00C before submitting to OPNAV N87 for final approval. On May 4, 2010, the MCPON addressed Officers and Enlisted from various Navy diving commands at the 2010 NAVSEA sponsored Divers Working Group (DWG). He discussed a wide variety of current Navy related issues and how important the role of U.S. Navy Divers is in supporting critical Navy missions around the world. The MCPON then embarked onboard SWRMC Foxtrot dive boat used for rapid response dive operations for transport to EX-USS MIDWAY.

Once disembarked onto the SWRMC wet weld dive barge, the MCPON was instructed on the operating and emergency procedures for the Navy KM-37 dive helmet. He then dressed out in a full wet suit, safety harness, and ancillary gear before being briefed by the diving supervisor, ND1 Real, on the dive mission for the day. The MCPON donned his dive helmet, stood up for pre-dive checks and followed Red Diver, NDC Halford, and Green Diver, ND2 Gee, in entering the water. After a successful front step entry, in-water checks of all Divers were conducted and the Divers left surface with Red Diver leading the MCPON to the job site.

Upon reaching the bone crushing depth of 30 FSW, the MCPON, safely situated himself as briefed by the dive supervisor, pulled down his weld safety shield and observed the Navy's only certified underwater wet welders (SWRMC "Delta" Divers) perform fillet welds on "Test"-plates for the NAVSEA 00C5 wet weld qualification process.

He was then led under the hull of EX-USS MIDWAY to give him an idea of the work conditions Navy Divers

endure (cold, dark, physically demanding work environment with multiple machinery spaces including suctions and discharges in close proximity to Divers). Soon the MCPON's 30 minute bottom time was up and he had to return to the surface. He climbed up and over the dive ladder back onboard the SWRMC weld barge, sat on his dive bench, was unhatted and he gave the "Diver OK" signal to his Diving Supervisor.

MCPON posing with SWRMC "Delta" dive crew

With a huge smile on his face, MCPON stated that this was one of the highlights of his tour and he could now relate to why his son, ND2(DSW/EXW) West (LITTLEPON), stationed at Mobile Diving and Salvage Unit Two was so proud of his status as a Navy Diver. He had never realized how technically complex and physically demanding the Navy Diving field could be.

MCPON watching ND2 Gee perform underwater welding operations.

MCPON on bottom.

Following his dive, he was transported by boat to the SWRMC Code 360 Dive locker located on NAVBASE, San Diego, Mole Pier and was given a tour of the SWRMC RC 6500 recompression chamber, a brief on the newly established RMC Battle Damage Assessment and Repair (BDA/R) surge capability, and visited SWRMC Divers conducting Underwater Ship Husbandry (UWSH) inspections on USS FREEDOM (LCS-1).

Overall, the MCPON spent six hours with SWRMC Navy Divers and staff. He left the SWRMC Dive compound with a better understanding of the command's UWSH mission and the rigors of the Navy Diving field.

MCPON getting ready to be hatted.

CWO3 Charles L. Senter is the Assistant Division Head at Southwest Regional Maintenance Center, Code 360 Dive Division.

Navy Divers Train on Battle Damage

After the final wave of attacks on Pearl Harbor in December 1941, the Japanese sank or destroyed a good portion of the U.S. Navy's Pacific fleet. Amid the remaining chaos, Sailors immediately began work patching holes, clearing debris, and pumping water out of many of the damaged ships.

Ship Husbandry project rigged with lower module stand attached into the new pool.

After more than 20,000 hours of underwater operations, five battleships and two cruisers were salvaged and put back into service to fight the aggression of the Japanese empire. As a result of that infamous attack, Navy Divers developed salvage techniques that are still in use today, and the Navy recognized the strategic and fiscal importance of salvage and ship husbandry (repair and maintenance) techniques.

The Navy Deep Sea Diving School in Newport, R.I. was created in the early 1900's to train Sailors to work in an unforgiving environment using a variety of tools, techniques, and diving equipment. Once applicants understood how to use the diving gear, they were given projects to test their dexterity, strength, and problem-solving abilities under pressure.

Today, the Naval Diving and Salvage Training Center (NDSTC) in Panama City, Fla., is the primary training facility for Divers from all services. The staff trains approximately 1,300 students per year logging 10,000 dives annually.

Although the dive school facilities include state-of-the-art hyperbaric chambers, watercraft, and equipment, there have been few hands-on training projects the staff could use to train students in waterborne ship repairs. An overhead eight-bolt flange was an example of one of the projects. Dive candidates had to remove the bolts and flange plate, replace a gasket, then re-install the bolts into the flange plate without dropping any tools or material while working underwater.

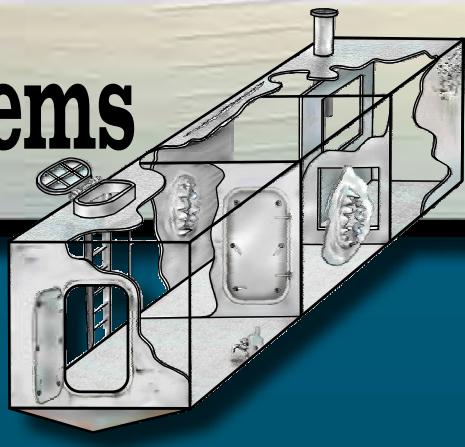
NDSTC currently has three new projects that will increase the amount of time a student spends working underwater on realistic ship husbandry and salvage tasks. The first project was designed by NDC Bart Monroe, currently stationed at Navy Experimental Dive Unit, and will be used to train dive candidates to perform a number of ship repairs required in the fleet. Monroe's Multi-Panel Project (MPP) is made from aluminum and stands 24 feet tall when assembled. The MPP provides numerous attachment points to mount 15 different projects Divers will perform in the fleet. Mini-projects, such as patching, component replacement, and the torque sequence of bolts, will focus on particular skills performed by basic Divers. The project also has an I-beam across the top to teach basic rigging skills.

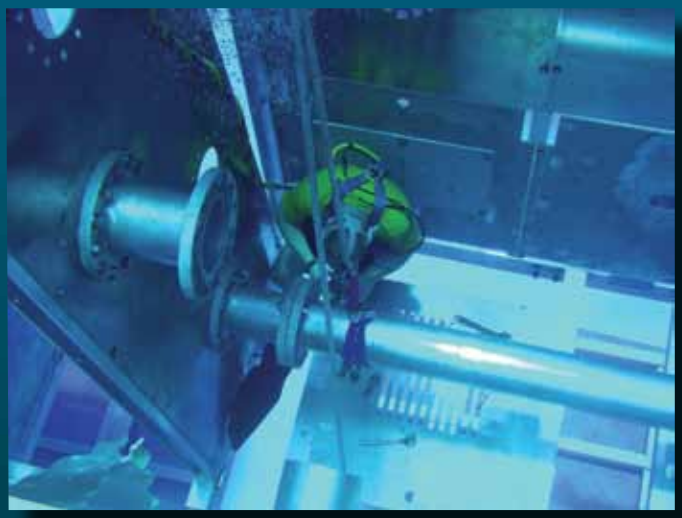
Divers working on submarines will also benefit from the new projects. The Main Ballast Tank project was constructed to simulate a submarine tank or free-flood void. It has a submarine grate at the bottom that will help students prepare for opening and closing the heavy and cumbersome access panels on LOS ANGELES class (SSN 688) submarines. It has a mud-tank style access cover, as well as several places to attach projects that require students to work in the overhead position. At more than 7,200 pounds, the MPP will be craned into the new military aquatic training facility at NDSTC, and will provide students a crystal clear environment to perform graded assignments. The work conducted in the pool will be at depths between 20 and 30 feet simulating the depths attained when working at a ship husbandry command. NDSTC plans to incorporate the ship husbandry modules into the curriculum by November 2010.

For years, NDSTC used the decommissioned ACCOKEEK (ATA 181) auxiliary ocean tug as a salvage project. It was a great salvage trainer. As the years went by, the elements and corrosion finally caught up with her as she was repeatedly sunk and then raised by the students. The project became too hazardous to safely train students and in 2006 the ACCOKEEK was towed out to sea and sunk one last time as a man-made reef. The schoolhouse replaced the

Repair and New Salvage Systems

By NDCM (MDV) Matthew Rotan





Diver working on the pipe flange project, which includes rigging the pipe with line and tackle, removing the bolts, and lowering or raising the pipe to the next flange and re-connecting the pipe with fasteners.

ocean tug with a homemade steel structure dubbed The Mud Monster. Though it had the enclosed space and plenty of holes for patching, it did not completely satisfy the salvage objectives of the fleet.

Chief Warrant Officer Mark Pearson (now retired) was asked to design a new salvage trainer. Nicknamed "The Hulk", the salvage trainer is about the size of a military shipping and storage container. The interior is riddled with problems that must be identified and corrected by dive students in order to refloat it. When the project is resting on the sea bed, the students conduct a series of dive inspections to create a salvage plan for raising the wreck. Inside the wreck, the students find multiple valves that allow isolation of water between the compartments.

New salvage project affectionately nicknamed the 'Hulk' rigged for salvage operations.

The Hulk features several functional or structural problems the students must identify and fix, including a mid-ship bulkhead with a watertight door missing three of the six dog handles, a one-inch hull penetrating valve that is jammed open, and numerous cracks and openings for the Divers to locate, plug, and patch.

The dive students apply the salvage concepts learned using the newest state-of-the-art salvage equipment provided by NAVSEA to refloat The Hulk to the surface. The new salvage trainer not only satisfies the fleet's training objectives but is also practical from a fiscal repair and maintenance aspect. When the salvage trainer is not in use, it will be rinsed and craned onto a skid for storage on the pier. NDSTC plans to incorporate the new salvage trainer into the curriculum by January 2011.

The projects used to train dive students have gone through remarkable changes over the years and have evolved into much more sophisticated training. While these projects capture the basic skills a new Diver needs to operate in an undersea environment, they also provide enriched and flexible training scenarios for future Navy Divers. These projects, fostered by the staff at NDSTC, help ensure dive candidates safely and effectively achieve the objectives required to graduate and serve successfully as United States Navy Deep Sea Divers.

NDC (MDV) Matthew Rotan is the Dive Learning Manager for the Center for Explosive Ordnance Disposal and Diving.

Saturation Fly-Away Diving System (SAT FADS)

By: CDR Scott W. Thomas

The U.S. Navy developed Saturation (SAT) Diving in the 1960's as a safe way to extend bottom time and depth capability to 1,000 feet for deep ocean salvage and submarine rescue/recovery. During the 80's to mid 90's most of the Navy's afloat diving and salvage platforms were decommissioned, including the saturation diving platforms. During 2001-2002 Navy Divers raised the engine, turret, and cannons from the USS MONITOR using a commercially leased SAT system. The commercial system took six months to refurbish before it could be made operational under a temporary CNO waiver. Without the use of a Saturation Diving System, these items would not have been recovered. Today, the U.S. Navy does not have any deployable SAT systems readily available for operations or training thereby accelerating the requirement for this capability.

The Saturation Fly-Away Diving System (SAT FADS) Acquisition Program was initiated in September 2003 at the request of the Submarine Warfare Division (N87), initiated by the Assessment Division (N81), and was approved by the Chief of Naval Operations (CNO). SAT FADS is required to retain an organic saturation diving capability to support the full range of Navy salvage and recovery operations ranging from crisis response from emergent casualties, as well as, planned response in and around the world's littorals and continental shelves.

The Saturation Fly-Away Diving System is designed to provide a mobile and worldwide capability for deep water sustained diving operations to depths of 1,000 FSW. SAT FADS supports 6 saturation Divers for a period of 21 days, with an additional 9 days of decompression. During a 30-day mission profile, topside crews, consisting of two teams working alternating 12-hour shifts, support six (6) saturation Divers working in two shifts. Three saturation Divers can typically accomplish eight hours of work underwater while the other 3 Divers engage in rest periods in the SAT FADS topside chambers. The diving bell runs take place every 10 – 12 hours to coincide with Diver and topside support team turnover.

Control Van - NDCS Mike Wiser, ND2 Jeremiah Ruddell, and ND1 Julius Mcmanus

Living Compartment - ND1 Julius Mcmanus

SAT FADS is composed of five (5) configuration items: 6-Man Deck Decompression Chamber, composed of the Outer Lock and the Living Compartment, a Control Van, Two Auxiliary Support Equipment Vans, 3-Man Diving Bell, and Bell Launch

SAT FADS Dive Team

Dive Bell

& Recovery Handling System. The system is designed for deployment using military aircraft and standard, commercial over-the-road tractor/trailers without special permits. SAT FADS is also designed to be hosted by any commercial vessel of opportunity (VOO). This configuration eliminates dependence on specially configured transportation assets or dedicated host ships.

SAT FADS utilizes a Diving Bell for the transport of 3 saturation Divers to the work site and return. The dive bell mates with the Outer Lock of the Deck Decompression Chamber (DDC) which provides for a lock out between the main habitability space and the dive bell. Additionally the Outer Lock provides for shower and lavatory. The Living Compartment is the primary component of the DDC and it provides for controlled decompression of 6 Divers after mission requirements have been completed.

SAT FADS main Deck Decompression Chamber being assembled on pier next to Naval Experimental Diving Unit.

The Handling System is used for Dive Bell deployment and recovery, utilizing hydraulic controls to actuate an A-frame and raise and lower the bell. The Dive Bell is connected to the surface by an umbilical. The umbilical provides all breathing gas, power requirements, transmission of command and control telemetry, video signals, system parameters and status data, and two-way audio communications to/from Control Van, as well as providing the strength member for deployment and recovery of the Dive Bell. The Control Van houses the communication system, gas management system, electrical distribution system, and gas analysis system.

SAT FADS completed the fabrication phase of the acquisition lifecycle in June 2010 and was subsequently relocated to Navy Experimental Dive Unit (NEDU) in Panama City, Florida where it has been reassembled in preparation for System Integration Testing (unmanned). SAT FADS is scheduled to complete its first manned dive prior to the end of the fiscal year. The system will continue through operational evaluation accomplished through successive manned dives, pier side, until successful conclusion of a 1,000 foot dry saturation dive. Initial Operational Capability will occur shortly after the conclusion of at-sea operational evaluations.

CDR Thomas, SAT FADS Program Manager, will be departing 00C on 1 October 2010 for a 1 year IA tour. Mr. Paul McMurtrie, SAT FADS Deputy Program Manager, is currently taking over the reins as the SAT FADS Program Manager.

CDR Scott W. Thomas is an Engineering Duty Officer at NAVSEA 00C, and the SAT FADS Program Manager.

Photo credits:

HM1 Charassi Gilmore Duff, Navy Experimental Diving Unit, Panama City, Florida

Joint Command Dive Training

By: NDCS (MDV) Stephen Zentz

Navy diving commands continually prioritize their training to support operational and production requirements. The environment that many dive commands operate in is as dynamic as ever, supporting the need for a combined effort to meet both command specific and community (Navy Diver) training obligations.

In October 2009, leaders from Mobile Diving Salvage Unit TWO (MDSU TWO), Expeditionary Support Unit (ESU), Explosive Ordnance Disposal Training and Evaluation Unit TWO (EODTEU TWO), Norfolk Naval Shipyard (NNSY) and Military Sealift Fleet Support Command (MSFSC) met to discuss effectively utilizing regional assets to conduct a Master Diver (MDV) pre-screener in the Spring of 2010. The initiative was prompted by a combination of an extraordinarily high attrition rate at MDV evaluations in 2009, and the west coast regions successful completion of a pre-screener in the Fall of 2009.

In January 2010, key members assigned to a winter Patuxent (PAX) River Dive Supervisor Training availability onboard USNS APACHE (T-ATF 172) were pulled to support relief and salvage operations in Haiti. As a result, members of NNSY's dive locker had to work hand in hand with MDSU TWO and MSFSC to cover the 08 -12 February training.

During the planning process, NDC (DSW/SW) Michael Kenefic and his company were completing a six month deployment on-board USNS GRAPPLE (T-ARS 53), supporting theater security cooperation (TSC) and for Ethiopian Airlines FLT 409 salvage and recovery efforts off the coast of Lebanon. Other MDSU TWO companies were deployed OCONUS to AFRICOM, CENTCOM, and the Republic of Haiti, as well as two separate F-18 aircraft recoveries in South Carolina and one T-34 aircraft recovery off the coast of Louisiana. MDSU TWO Divers would integrate with NNSY and NR NAVSEA 00C Divers to carry out the PAX river pre-screener.

NNSY and MDSU2 Divers enter fridged water in Patuxent River.

With four weeks between their company's return from deployment and APACHE's on-load on 25 April 2010, the commands combined in an expertly choreographed week of introductions, mixed gas training, and equipment staging. The second week was a continuation of the same level of dedication and professionalism, setting up for and completing 25 scenario driven dives to challenge the five candidates in their ability to manage diving casualties.

Although the training was held to increase the level of knowledge of the candidates to improve their chances to successfully complete the rigorous MDV evaluation (MDV EVAL) process, all 24 members, from Diving Officer to Diver benefited from the experience gained throughout the evolution. ND2 (DSW/SW) Jason Young stated, "The MDV pre-screener was a great learning opportunity for me. I was able to see the kind of expectations put on a Master Diver Candidate and get a glimpse of the level of professionalism, knowledge, and leadership skills required to be a Master Diver." MDV Zentz summed it up by pointing out, "This year alone, four of five candidates who participated in Hawaii's pre-screener are now wearing the 'Fat Pin'."

Operational commitments will continue to challenge our ability to properly train Navy Divers throughout the fleet, regardless of their command's mission. Using regional assets to develop creative ways to ensure the future success of all Divers is necessary. While the MDSUs must remain the single constant due to equipment, vessel of opportunity availability and training requirements, they cannot bear the entire burden of this recurring requirement without negatively impacting "real world" assignments. HOOYAH Navy Divers for coming together and making the regional pre-screeners a success on both coasts.

Special thanks to NDCS (MDV) John Coffelt, CAPT Reybold, and the USNS APACHE crew, as well as the following dive team members for their support and professionalism, making the operation a success:

MDSU TWO: CWO2 Toby Turner; NDCM (MDV/EXW/SW); Mike Sonnenberg; NDC (DSW/SW) Mike Kenefic; HMC (EXW/SW/FMF) Randy Groves; NDC (DSW/EXW) Jason Cook; NDC (DSW/EXW/SW) Will Wittman; ND1 (DSW/EXW/SW) Geoffrey Smitman; ND1 (DSW/SW) Jeffrey Whisnant; ND1 (DSW/SW) Taylor Arne; ND2 (DSW/SW) Jason Young; ND2 (DSW) Matthew Trautman; ND2 (SW) Paul Blakely; ND2 (SW) Brett Kirkhart; ND2 (SW) David Morrell; NNSY: NDCS (MDV) Steve Zentz; ND2 (DSW) Andrew Gose; ND2 (DSW) Martin Horan; ND2 (DSW) Sean McConnell; NR NAVSEA OOC ND1 Bobby Crawford.

Congratulations to graduates of 10-30-MDV:

NDCS (MDV) Sean Murray
NDCS (MDV) Dave Jones
NDCS (MDV) Tyson Hoover
NDC (MDV) Tony Pierick

NDCS (MDV) Stephen Zentz, Norfolk Naval Shipyard, Norfolk, VA.

Army Officials Tour CEODD Learning Site in Effort to Streamline Ordnance Disposal Training

U.S. Army officials visited the Center for Explosive Ordnance Disposal and Diving (CEODD) Learning Site at Great Lakes Naval Station, March 23-25, in an effort to streamline their training process and reduce the drop out rate of Soldiers training to become explosive ordnance disposal technicians.

Tour participants included representatives from the Department of Army Headquarters, the Army's 59th Ordnance Brigade, Redstone Arsenal, and the Naval School Explosive Ordnance Disposal (NSEOD).

"By Department of Defense directive, the Navy is the single manager for EOD Technology and Training," said Capt. Adam Guziewicz, Commanding Officer of NSEOD. "We are responsible for all individual common-core basic and advanced EOD training for all the Services. While it is a Navy-managed school, the Services drive our curriculum requirements. NSEOD and our Naval Education and Training Command (NETC) chain of command determine how to deliver that curriculum using NETC-approved processes."

"The Navy's EOD accession program has been successful preparing candidates for the rigors of EOD School," added Guziewicz. "The Army is trying to gain insight on our accession process to improve their success rates. The demand for EOD Technicians from all Services has never been greater, so if Army EOD wins, we all win."

CDR Egan (SUPDIVE) during a visit to RTC Great Lakes, IL at the Indoor Shooting Range, received instruction on the firing line from GM2 Acuna (Small Arms Instructor).

Navy recruiters from the Navy and Dive/Explosive Ordnance Disposal Supply Chain Working Group (SCWG) and CEODD staff members briefed the Army team on the Navy's "cradle-to-grave" concept of training that focuses on how the Navy integrates recruits and the step-by-step path they must follow to become an EOD Technician or Diver.

Master Chief EOD Technician (EWS/FPJ) Tim Mendenhall, officer in charge of the learning site, hosted the visit and briefed attendees about CEODD's EOD/Dive Preparatory Course, and gave a tour of the facilities and barracks to the Army team. The tour included the elite 800 Division barracks, reserved for all Navy Divers, EOD, Special Warfare, and Aircrew recruits, which includes an area set aside to support the rigorous physical fitness training required of these rates.

NDC Diller (Dive Motivator) at RTC Great Lakes, IL discusses with CDR Egan (SUPDIVE) and CAPT Peterson (CO, RTC Great Lakes) how he trains recruits in water survival during Basic Training.

Over the past five years, CEODD has made significant changes to the Navy Dive and EOD training pipelines, including establishing Navy Diver and EOD technician ratings, and shifting from fleet accessions to an off-the-street recruiting program, and establishing the SCWG to target and track Diver/EOD candidates, recruits and students.

"The most positive effect of CEODD's recent changes has been relief to our EOD operating forces," said Mendenhall. "Our forward-deployed operators no longer have to recruit from in-service Sailors or run informal preparatory programs. Recruiting off-the-street, with boot camp and initial training here in Great Lakes, allows the Navy to recruit and train the required number of Divers and EOD technicians our operating forces require."

To earn their basic EOD qualifications, students train extensively for 29 weeks at NSEOD at Eglin Air Force Base, Fla. EOD students learn the essential skills required to combat unexploded ordnance (UXO), improvised explosive devices (IED), weapons of mass destruction (WMD), and for the Navy, underwater mine countermeasures (UMCM).

At the end of the tour, the Army officials agreed that the visit was a success and that they had gained better insight into the entire recruiting and training process.

"I believe we will see great benefits from the information shared at Great Lakes," said Jan Hamilton, director of Army EOD training. "It was a very enjoyable and enlightening experience."

For more information on the Center for Explosive Ordnance Disposal and Diving, visit the CEODD Web page at: https://www.netc.navy.mil/centers/ceneoddive/

For more news on the Naval Education and Training Command, visit the NETC Web site at: https://www.netc.navy.mil. Story by Naval Education and Training Command and Center for Explosive Ordnance and Disposal Public Affairs, USN.

Navy Diver Makes History in Afghanistan Mountains!

By Bobbie Scholley, CAPT(ret), USN and Dr. Darlene Iskra, CDR(ret), USN

The Diving Navy has a strong and illustrious history that goes back to the middle of the nineteenth century. To become more acquainted with this history, you need only follow Master Diver Dave Gove's weekly emails on "This Day in Diving History" or get copies of them from your command Master Diver. These are a fascinating collection of stories from our community's vast and colorful history. But that history has only started to include women Divers since 1973 when Kati Garner became the first woman to graduate from SCUBA school at the 32nd Street Naval Station in San Diego. In 1975, Donna Tobias went on to be the first woman to graduate from Second Class Dive School and in 1979 Sue Trukken became the first woman to graduate from Basic Diving Officer School. It wasn't until 1990 that Mary Bonnin became the first and so far, the only woman to reach the pinnacle within the diving community, Master Diver. However, on August 1st, 2010, in an office 5,900 feet above sea level, in a narrow valley wedged between the Hindu Kushi mountains of Kabul, Afghanistan, another pinnacle was reached. Navy Diver Martha Herb became the first woman Diving Officer, Active or Reserve, to be promoted to Rear Admiral![1] Martha was promoted by VADM Bob Harward, a Navy SEAL and the event was teleconferenced to the EOD Technical Division in Indian Head, Maryland, so that her family could watch and participate, which made it a combined Diving/EOD/SPECWAR Operation.

Being a first is nothing new to Admiral Herb. As a woman in the diving community, it is something that she has done many times during her 31 year career.

RDML Martha Herb receives her star from VADM Bob Harward in Kabul, Afghanistan, while her family watches by teleconference at EOD TECHDIV, Indianhead, MD

Commissioned through Officers Candidate School in July 1979, she was in the first cadre of women to graduate from the Navy School of Diving and Salvage in Washington DC in 1980 and serve as a Special Operations Officer (Diving and Salvage). Being in the first cadre meant that she was a "first" at virtually every command in which she served. Thus she was the first woman Diver at Mobile Diving and Salvage Unit ONE, San Diego, California to direct the Navy's Underwater Hull Cleaning program and to resource and execute the West Coast fleet's underwater hull repair requirements. During this tour she was able to deploy aboard USS SAMUEL GOMPERS (AD 37) and qualify as a Surface Warfare Officer (SWO). One must remember this was a time when women were only allowed to serve on tenders and underway time was limited. Thus Martha was one of the first few women to qualify as a SWO. Her second tour of duty, another first, was as the Officer-in-Charge of the COMNAVSURFLANT Second Class Diving School.

In 1983, she turned her focus to raising a family but remained affiliated with the Navy Reserve, continuing to set high standards for herself and others, while commanding four units. For example, during her command of Mobile Diving Salvage Unit TWO DET 608 in Jacksonville, FL, her unit was awarded the coveted CAPT Rick Jones Award for Diving and Maintenance Excellence. As CO of Afloat Training Group DET 202 in Alameda, CA, her unit was awarded the Coast Guard Meritorious Unit Commendation for excellence in integration and training prior to deployment. As Commanding Officer of Naval Ordnance Safety and Security Activity HQ in Indian Head, Maryland, her command provided Ordnance inspections across the globe. She gained experience

in the inter-agency process as a member of the Joint Staff while serving as the OIC of the Navy Reserve Unit attached to the United States Military Delegation to the NATO Military Committee. During a portion of this assignment, she also served additional duty as the US Fleet Forces Enterprise Director for (NCAGS) Naval Cooperation and Guidance for Shipping, supervising 192 personnel working merchant shipping coordination and partnership with our NATO allies, partners and contact countries.

A native of Atlanta, Georgia, Admiral Herb graduated from Lake Forest College in 1977 with a Bachelor of Arts in English and French. In 1992 she received a Master of Arts in Education and Human Development at George Washington University, and in 1996 earned a Doctorate in Education with a specialty in Counseling and Military Families. She received the International Association of Marriage and Family Counselors Student Research Award for her dissertation work "Navy Deployments: The Relationship of Deployment Stress and Family Environment in Military Families." In her civilian career, Admiral Herb is the Deputy Director of the Christian Counseling Center of Annapolis, a not-for-profit Counseling Center.

Prior to her deployment to Afghanistan, she served as the Deputy Commander Navy Region Southeast, Reserve Component Command, Jacksonville, FL, exercising oversight of 28 Navy Operational Support Centers and 17,000 Selected Reservists geographically located in 7 states and the Commonwealth of Puerto Rico.

Basic Diving Officer School Class in 1980. Ensign Martha Herb is in the second row, first person on the left. Ensign Darlene Iskra is in the second row, middle person. LT Mike Herb is in the fourth row, the first person on the left.

So what does a Navy Diver do in the land-locked country of Afghanistan? Actually, we've had many Divers deployed to Afghanistan over the years. As a matter of fact, Admiral Herb isn't the first woman Diver to deploy there. CAPT Bette Bolivar deployed to Afghanistan for 12 months in 2006. Rumor has it that there was plenty of advice exchanged and some equipment as well before Admiral Herb deployed. Admiral Herb is deployed in Afghanistan for a year as Chief, Joint Coordination Board where she provides oversight of a small branch which works closely with Afghan governmental officials in resolving disputes regarding the Military Technical Agreement.

Martha is married to retired Captain Mike Herb, also a Navy Diver. They met while students at dive school, and according to a reliable source, were dive buddies during SCUBA phase. They rarely dove together during their respective careers, but while Mike was Commanding Officer of the Naval Diving and Salvage Training Center in Panama City, FL, they did a 15-year anniversary vow renewal at 15 fathoms, with CDR Sue Trukken, the first Spec-Ops woman officer and MDV Witunsky attending as Maid of Honor and Best Man. They now have been married for 30 years, have two grown children and a grandson. This of course makes Martha the first Navy diving grandma to deploy to a warzone… But we doubt anyone would dare call the Admiral "Granny"!

Congratulations to Rear Admiral Martha Herb! And thank you to all our Divers serving in Afghanistan, Iraq and around the world.

Ensign Martha Herb training in MK V during Basic Diving Officer Course in 1980. She is one of the few women that trained and qualified in MK V prior to the US Navy discontinuing use of the MK V in 1982.

CAPT Bobbie Scholley is a former CO, USS BOLSTER (ARS 38), CO MDSU TWO and SUPDIVE. She retired to Annapolis, MD after 24 years of service.

Dr. Darlene Iskra, CDR, USN (ret) was a dive school buddy of RADM Herb, and went on to make history herself as the first woman in the Navy to command a ship, the diving and salvage ship OPPORTUNE (ARS 41). She received her doctorate in Military Sociology in 2007. She is currently working on a book about women military Divers. You can contact her at dr.dariskra@gmail.com.

[1]There are two other Special Operations Admirals, both EOD active duty, RADM Mike Tillotson, currently Commander, Navy Expeditionary Combat Command in Little Creek, VA who made history as the first Special Operations Officer to be promoted to Flag Officer, and RDML Frank Morneau, currently OPNAV N85 in Washington, D.C. was the second EOD Officer promoted to Flag Officer.

USS CHEYENNE (SSN 773) Propeller Replacement

By: ND1 Brad Bell

On May 11, 2010, SWRMC Divers (Code 360C) began the MOD 25 propeller waterborne removal and installation procedure on USS CHEYENNE (SSN 773). The fast attack submarine arrived at Naval Base Point Loma for a nine day availability prior to returning to homeport in Pearl Harbor, HI. The complexity of safely removing and reinstalling a 75,000- pound propeller underwater is difficult at best.

This repair work was expertly supervised and managed by NDCS (MDV) Ryan Stewart, NDC (DSW/EXW) Jason Mette, ND1 (DSW/SW) Brad Bell, and ND1 (DSW) Nicholas Atkinson. In addition, Justin Pollack, NAVSEA 00C5 UWSH Project Manager and Scott Heinemann, NAVSEA 00C5 Marine Operations Specialist were on site to provide technical oversight. The dive team also received mechanical assistance from Lito Roque, ESSM Port Hueneme.

The 14-person dive team worked with NAVSEA 00C5, Emergency Ships' Salvage Material (ESSM), and Submarine Squadron 11 to requisition all essential gear to complete this arduous evolution. One 40-ton crane was pier side to transport rigging to the water's edge, while a 50-ton floating crane was utilized for propeller lay down area and heavy lifts. Divers conducted the Visual Technical Inspection (VTI) on the replacement propeller prior to commencing diving. Once all the tools and materials were inventoried the dive team reviewed the work procedure and the various rigging set-ups.

The in-water phase started by removing the rope guards and fairwaters. This gave the Divers access to the gland seal ring and propeller cap fasteners. The next step was to determine what type of preservative was inside the propeller cap. There are two types of preservatives used as internal rust preventatives. If the last propeller replacement was conducted in dry dock there would be a wax like tallow used called Cosmoline. If the repairs were done in-water, Divers would have to use drain plugs on the propeller cap and hub. Since the last repairs were done in dry dock the dive team could shift the propeller cap to the pier, remove the Cosmoline and clean the surface area of the cap topside.

Divers worked on removing the torqued fasteners that held the gland seal ring in place. Once the gland seal ring was moved to the forward end of the shaft, Divers began breaking the propeller cap fasteners. Topside personnel worked on getting the rigging in place to remove the 2,000-pound propeller cap. After removing the propeller cap, the Divers started preparations for removing the pilgrim nut while topside rigged the pilgrim nut handling fixture. Once the pilgrim nut was removed and brought to the pier, the dive team reversed the pilgrim nut in the handling fixture so the loading ring was facing aft. Reinstallation of the pilgrim nut followed using a 100-foot nylon sling to thread the nut back on the shaft. Divers inserted the withdraw studs into the hub and the 3,000-pound backing plate was positioned against the pilgrim nut. Topside could then pressurize in intervals up to maximum designed pressure to unseat the propeller off the shaft taper. The hydraulic intensifier unseated the propeller at 7,000 psi.

An 11,000-pound "J" bar designed specifically for the purpose of removing the MOD 25 propeller was then positioned to take the weight off the shaft. Once the propeller was ready for removal the crane transferred the damaged propeller to the lay down area where the new propeller awaited installation. As the new propeller was rigged in place the removal process is reversed as the new propeller was carefully rigged onto the shaft using the 11,000-pound "J" bar. This evolution requires extreme skill by Divers. Damage to a keyway or the threaded shafting, which is wrapped with aluminum sheeting, can set back the diving operations for days, if not weeks.

The new propeller was safely installed on time with concerns of swells from passing ships affecting the reinstallation process. This evolution was a testament to the skill and determination of the SWRMC Divers Charlie Crew and their support personnel. After working 12 to 16 hour days with heavy waterborne rigging, this repair evolution encompassed over 179 hours of total safe bottom time. This highly complex and technical Underwater Ship Husbandry repair effort saved PACFLT over 1 million dollars in repair funds and dry-dock avoidance and allowed the vessel to meet critical wartime and underway training commitments.

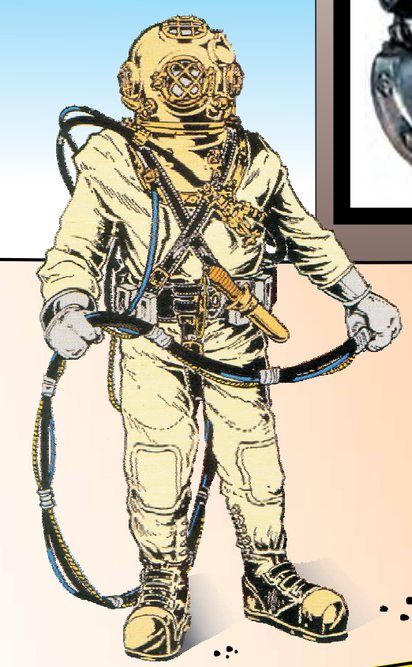
Dive team members were instrumental in accomplishing this vital procedure and included the following personnel pictured here (back row from left): NDCS (MDV) Ryan Stewart, ND1 Michael Celestine, ND2 Blaise Schrader, ND1 Roman Mersino, ND1 Brad Bell, ND1 Jason Shurtz, BM3 Jason Aparicio, ND1 Wayne Shearer, and ND2 Ben Eisenbarth; (front row from left) ND2 Christopher Peek, ND1 Lonn Trinidad, HM2 Stephen Hood, ND1 Nicholas Atkinson, NDC Jason Mette, and Mr. Dan Jackson.

Hooyah Navy Deepsea Divers!

ND1 Brad Bell is the Leading Petty Officer for SWRMC Divers Charlie Team.

Article cover photo: NDC Jason Mette enters the water to begin installation of the new MOD 25 propeller.

Navy Diver
Active Duty Career Path



START HERE!

Prep Course

6 weeks

2C Dive School

18 weeks

1st / 2nd Tour (Apprentice)

*(1) Underwater Ship Husbandry (ship/sub repair)
*(2) Salvage (Mobile Diving Salvage Unit)
(3) SPECWAR / EOD / USMC support
(4) Specialized (Instructor Duty, DSU, NEDU, Etc...)
* = Must pick one of these type tours as a 2C Diver.
1st Tour 3-4 years time in service. 2nd Tour 4-7 years TIS

1C Dive School

4 weeks

3rd / 4th Tour (Journeyman)

*(1) Underwater Ship Husbandry...(ship/sub repair)
*(2) Salvage (Mobile Diving Salvage Unit)
*(3) SPECWAR / EOD / USMC support
(4) Specialized (Instructor Duty, DSU, NEDU, Etc...)
* = Must pick a type tour (13) not served at as a 2C.
3rd Tour 7-10 years TIS. 4th Tour 10-13 year TIS

Senior Enlisted

Academy (E7/E8) 6 weeks

(Sometimes difficult with one of one turnovers.)

Master Diver COI

(Type 1-3 @ 4 CMDS)
5 Weeks

5th Tour

1st MDV Tour
(RMC, MDSU, SDV, etc.)
13-16 years TIS

6th Tour

Lead MDV
(RMC, SDV, DSU, Training Unit, etc.)
16-19 years TIS

7th Tour

MDV Staff position
(EODGRU, SPECWARGRU, NAVSEA, COMLOGWESTPAC, etc...)
19-22 years TIS

CMC School

6 weeks

8th Tour

Command Master Chief
(MDSU, ESU, NDSTC)
22-25 years TIS

9th Tour

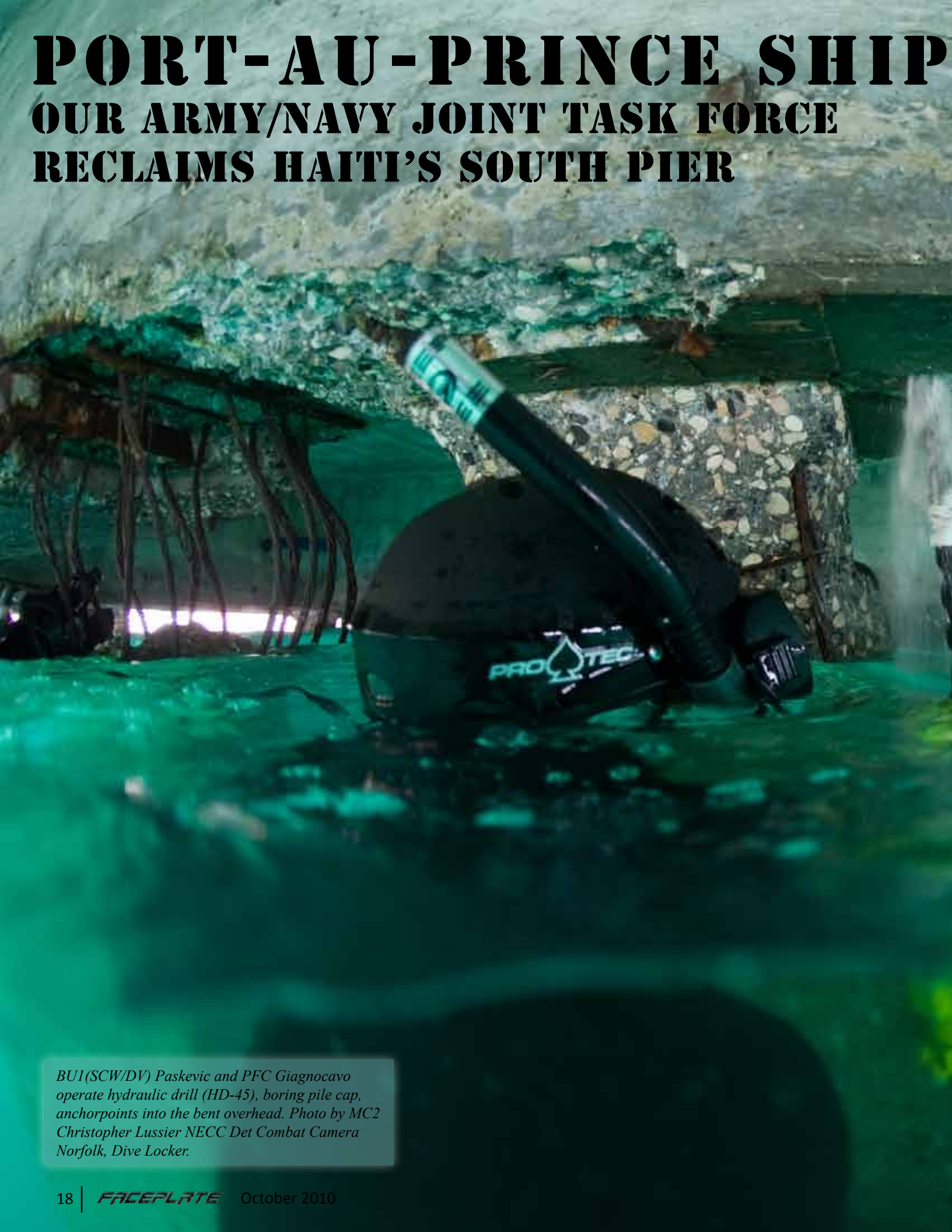
Command Master Chief/Staff
Major Command
(CEODD, Detailer, ECM, NECC, NAVSEA, etc...)
25-28 years TIS

10th Tour

Force Master Chief
(NECC, NETC, etc...)
28 - 30+ years TIS

PORT-AU-PRINCE SHIP

OUR ARMY/NAVY JOINT TASK FORCE RECLAIMS HAITI'S SOUTH PIER



BU1(SCW/DV) Paskevic and PFC Giagnocavo operate hydraulic drill (HD-45), boring pile cap, anchorpoints into the bent overhead. Photo by MC2 Christopher Lussier NECC Det Combat Camera Norfolk, Dive Locker.

PING RESUMES:

The earthquake which decimated the nation of Haiti on 12 January 2010 left a lasting impression on Port-au-Prince's main shipping pier. Two of three port operation cranes toppled into the sea, and while the main shipping pier (south pier) remained standing, it was left in critical condition. In response to this catastrophic natural disaster, the U.S. created Operation Unified Response (OUR) to provide humanitarian aid to the Haitian people. With current operations arising from the demands of a modern world, OUR exemplifies our ever changing role and directive, to not only deliver humanitarian relief, but to concurrently foster essential inter-military fellowship, critical to successful mission execution. The south pier, located 8 miles from the epicenter, was identified as the key sustainable logistic avenue to fulfill Haiti's aid and commerce needs. The United States Southern Command (USSOUTHCOM) unhesitatingly looked to Underwater Construction Team (UCT) ONE to lead the pier recovery project.

UCT ONE's unique operational capabilities qualified the command to provide host nation, diving engineering construction expertise. The south pier project, measured 870' long and 60' wide with 42 bents, and a total of 256 piles, most of which required serious repair, stands out as the largest undertaking a UCT has ever faced. The objective was to shore-up the pier by reattaching the nearly completely severed, support structures (piles) to the superstructure via

EA2(SCW/DV) Robins secures friction clamps that support concrete forms weighing several thousand pounds. Photo by CE3(SCW/DV) Dailey.

the caps (bents), effectively recovering 80% of the piers pre-quake capabilities. NAVFAC engineers intended to use custom formwork and underwater concrete injection techniques that rely on friction clamps for support and stability.

UCT ONE's Command Master Chief Tim Menzie, and Operations CWO3 Lowell Schrader led the charge boarding the USNS GRASP, a Military Sealift Command ship salvage vessel, carrying 17 members of the army's 544th Engineer Dive Team, to arrive at Port-au-Prince on Jan. 18th. In a show of support to UCT ONE's pier assessment and repair mission, the U.S. Navy mobilized units from Naval Mobile Construction Battalion (NMCB) 7, Naval Facilities Engineering Command (NAVFAC), Naval Sea Systems Command (NAVSEA), Explosive Ordnance Disposal Group (EOD) TWO, and Mobile Diving and Salvage Unit (MDSU) TWO. The developing Joint Operations team aggressively assessed the condition of the port. Relying on the army Divers' hydrographic survey capability, the team expertly mapped the ocean floor for obstructions and depth, while augmented Divers from both the Army and Navy units performed a visual inspection of the south pier.

Barely in homeport for a month, returning from the team's first Global Force Management (GFM) deployment, UCT ONE's Construction Dive Detachment (CDD) ALFA rallied to the call of an execution order for their immediate deployment to Haiti. In the fastest and most complete pack-out in UCT ONE's history, the entire command flew into action, assembling ALFA's entire Table of Allowance (TOA) in a single day that stretched deep into the night. CDD ALFA landed in Haiti on January 21, promptly establishing it's footprint in a port compound where an advance party of MDSU TWO Divers had expeditiously formed a Contingency Operating Location (COL). In less than two days, the team began the south pier assessments while concurrently improving their operating and living conditions at the COL.

Old bonds renewed and new ones formed quickly as colleagues and counterparts, from all branches of the military, met and rebuilt interoperable capabilities in support of the Haitian Joint Service Humanitarian Mission. The sheer magnitude of the repairs needed to stabilize the south pier demanded cohesive inter-military relations, coupled with a venue open to the exchange of ideas and techniques. Five UCT ONE Divers shared their expertise as authorities in this type of pier repair, having direct experience from similar, smaller scale, missions in the past. Faced with such adversity, camaraderie was sure to ensue and strengthen joint-service cooperation, a supreme example of the type of inter-service development promoted by the Theater Security Cooperation Program (TSCP) of the 22nd Naval Construction Regiment and 25th NCR.

Reacting to a 5.9-magnitude aftershock, NAVFAC engineers ordered a level 2 pier assessment to gather critical

EOC(SCW/DV) Hurley & EOC(SCW/DV) Eckroth performing quality control inspections of pile-cap, repair, and formwork. Photo by MC2 Christopher Lussier NECC Det Combat Camera Norfolk, Dive Locker.

data for calculating the pier's integrity, to accurately determine the viability of continuing the south pier recovery efforts. Despite the logistical handicaps inherent in disaster relief support efforts of this nature, the joint service team, lead by UCT ONE, rallied together adapting to the unique demands of the project. The NAVFAC engineers gave the project an all-ahead-full, whereupon the Joint Task Force (JTF) team summarily formulated an action plan and Bill of Materials (BOM) to complete the mission.

On February 4th, the joint operations of the 544th Engineer Dive Team and UCT ONE went deep sea in shallow waters, as the planning and logistics came together seamlessly with the first arrival of non organic essential equipment and supplies. The Joint Operations Dive Team had as many as three dive sides operating at once, from the MK 20 Surface Supplied Diving to Scuba and surface swimmers. Equipped with a BOM in hand, the team began testing the proposed friction clamp designs while chipping and cleaning the piles and bents in preparation for rebar caging and concrete formwork.

After securing the friction clamps in place, UCT ONE Divers paired off with Army Divers, to operate the underwater hydraulic drills. Perched on a friction clamp the team of Divers shared the burden of the 45lb hydraulic drill as they bore anchor points into the bents overhead. Following the drilling crew was a vertical rebar crew, equipped with Hilti-epoxy guns, inserting 24" to 40" rebar into the pre-drilled anchor points. Expertly matching their teammates performance, a third crew installing horizontal rebar advanced with an efficiency that only spurred their counterparts to strive harder. The competitive nature of the diving community is a resource in and of itself that exemplifies the highest values of the joint forces serving our country while setting an example to service member of host nations.

On 11 February, rain came in hard and profuse overnight, washing weeks of accumulated filth, and debris into the bay. With a surface slick of an unknown composition peppered with human waste and garbage, the project leaders employed a water survey team to collect samples for delivery to the USNS COMFORT for analysis. Diving and project progress came to a staggering halt for two days, as well as prompting a health assessment of the dive team. Diving resumed on 13 February with the news that the Port-au-Prince waters were comparable to the water found in Portsmouth, VA. Operations continued with renewed vigor as the team completed drilling bents 14-16, placing vertical rebar in bents 8 & 9, and forming the horizontal rebar cages through bents 6 & 7.

PFC Winters, U.S. Army, secures friction clamps to support concrete form work weighing several thousand pounds. Photo by CE3(SCW/DV) Dailey.

In no minor part, NMCB 7 augmented the south pier project with a detachment of skilled Seabees. All equipment and supplies were split between the operating barge and the MLO/Builder yard, located at the heart of the COL. The mission of the NMCB detachment to aid and support the UCT lead project, divided its ranks between the top-side concrete pump crew (located on the pier) and the highly mobile formwork manufacturing and development crew who transited between the builder yard and form staging locations along the pier. The formwork crews' mission was to assemble pre-fabricated and custom formwork, friction clamps, and deployable 55gal drum, or Styrofoam barges. The barges served to effectively, and efficiently mobilize the Hydraulic Power Units (HPU's), support the pump hoses, and relay supplies and reconstituted essential components to the diving teams. The expedient form enhancement team, (an intermediary between the formwork crews and the Divers) established and improved operational efficiency, reconstituting essential components while utilizing the barges as sea level pre-staging platforms, allowing dive teams to function with greatly reduced logistic delays.

On 16 February, the JTF injected their first form. By 1 March the Army/Navy Dive Team completed 100% of the drilling and placement of vertical rebar, as well as the placement of all the horizontal rebar cages, and topped off the day by injecting 4 double and 4 single forms for a total of 8 forms. A milestone was met on 13 March when the team injected a total of 10 separate concrete forms, a record only to be matched on the last day of concrete injecting. The reappearance of the milestone echoed the determination and resilience of the successful inter-service joint operation, laying a solid foundation for future joint endeavors.

Forging ahead, the Joint Task Force completed the south pier enterprise two weeks ahead of schedule, exceeding their mission objectives. The work done to the south pier in Port-au-Prince has empowered the Haitian government with a sustainable route for disaster relief aid, and ensured the evolution of future commerce. This operation is an outstanding example of inter-service cooperation and a great credit to all of the personnel involved.

EA2 (SCW/DV) James Robins is an Underwater Construction and Hydrographic Survey Technician for UCT ONE.

GREEN GAS AND PRESSURE....
WONDERS NEVER CEASE

By: MDV Jim Mariano

Anchored off the coast of Port au Prince, Haiti in support of Operation Port Opening, the USNS GRASP (T-ARS 51) received radio traffic on January 29th requesting the status of their recompression chamber for treatment of a Haitian fisherman suffering from Decompression Sickness (DCS). Immediately, CAPT Dale Fleck (CTG 42.1), CAPT Pat Keenan (SUPSALV) and Master Diver Jim Mariano (CTG 42.1 Salvage Advisor) were notified and the decision was made that the treatment would go hand in hand with the port clearance and repair effort already taking place. Details on the incident were sketchy and no other information on the patient's condition or actual arrival time could be obtained. It wasn't until the afternoon of 31 January that GRASP was notified the patient was inbound from a Canadian Field hospital near the border of Haiti and the Dominican Republic. Expected arrival time was 1630.

HM1(IDC) Coleman and a smiling Adi getting ready to leave surface on the second recompression treatment.

During this time, it was confirmed that that this incident was indeed diving related and the fisherman's dive profile was approximately 120/90, placing him 2 schedules beyond the exceptional exposure limit. He was suffering severe muscle weakness from the waist down, and was catheterized and on IV fluids; however, he had not received oxygen since symptom onset almost 72 hours ago. It was obvious that recompression beyond 60fsw would have little benefit so a treatment plan was set in place for a TT6 with maximum extensions. In conjunction with changes in Rev 6 of the U.S. Navy Dive Manual, it was decided to use the drug Heparin to avoid a possible clotting of the blood due to how long the patient had been suffering from lower extremity weakness. CDR Dominitz, (MDSU-TWO DMO) was contacted and concurred with the treatment plan and would provide medical backing for the chamber team to obtain Heparin from the USNS COMFORT (T-AH 20), also engaged in the humanitarian operation.

Upon arrival, the patient was evaluated by HM1(IDC) Steve Coleman (MDSU-TWO, Company 2-1). His findings confirmed severe weakness along with numbness from the waist down. Using the Canadian doctors as interpreters HM1 Coleman described the treatment procedure, administered Heparin to the patient and had him sign a consent form. When asked about his dive profile the patient, (nicknamed "Adi"), informed them of the following; He speared fish for a living. He had a compressor on his boat with a weighted hose attached. He would lower the hose to whatever depth the fishing was good and breath hold down to the end of the hose. Once on the bottom he would take a breath, venture out, shoot his fish and return to the hose for a breath, then do it all over again. When asked if he ever felt like this before his response was yes, but he felt better the next day once back to work. His bottom time ended when he shot enough fish, was too tired or, "didn't feel good!" After getting somewhat of a patient history, and taking into account it had been over 72 hours since the onset of symptoms, significant improvement was not expected but the effort would be made. At approximately 2130 the chamber left surface under the supervision of Master Diver Jim Mariano, Army Master Diver Tracy Bower of the USA 544th Eng Dive Team and HM1 Coleman serving as primary tender. Initially an interpreter was not required, but once on BIBS it became evident that the French language spoken by the Canadians didn't quite correlate with the "Creole" spoken by the Haitians. CWO2 Tim Andros (MDSU-TWO) made some phone calls and a logistics Specialist, who happened to be a native of Port au Prince, was found onboard COMFORT. The young Logistics Specialist was rousted out of his rack and transported to GRASP to serve as an interpreter for the remainder of the treatment.

By the time the chamber left 60fsw, Adi had mild weakness in his lower extremities and decreased sensation in both legs vice the severe weakness and numbness found pre-treatment. Halfway into the 2nd O_2 period at 30fsw the patient started to fall asleep and it was noticed that the oxygen regulator was only showing deflection in 40-50 second intervals. A round of vitals was made and found that Adi had a resting pulse of 40-45 and respirations of 2-4 per minute! Because the treatment team needed the patient awake and breathing at a normal respiratory rate, sleep was out of the question.

Due to language barriers and other issues, total treatment time came to 8 hours and 40 minutes. Upon completion of the treatment, Adi, (with assistance) walked away from the chamber and onto the fantail. A post neuro exam was conducted by HM1 which revealed minor weakness and almost complete return of sensation. Adi spent the rest of the day under the observation of an Army medic while the chamber team went back to work with the rest of the Divers repairing the south pier. Master Diver Mariano contacted CDR Dominitz and both concurred that consideringthe amount of O_2 the patient had already received ad-

ditional hyperbaric oxygen treatments, in accordance with hyperbaric medicine protocols for residual DCS, posed more of a risk for pulmonary oxygen toxicity than a single TT6. The decision was made to give Adi a 12hr surface interval and then commence a TT6 the following evening.

From left to right: Commodore Dale Fleck, MDV Tracy Bower, Canadian Doctor, Adi, HM1 Coleman, Canadian DMO, and MDV Jim Mariano.

As the Divers returned to the GRASP at the end of the day, they found Adi on the fantail, holding the cap rail and doing deep knee bends, smiling from ear to ear! HM1 Coleman performed a neuro which discovered even less weakness and further improvement with sensation. Later that evening the chamber left surface with Adi, HM1 Coleman and a semi-surprised chamber team. Adi was now accustomed to the procedures and was drawing off the bibs like there was no tomorrow. The standard TT6 went without issue but as expected, Adi was starting to show signs of pulmonary O_2 toxicity towards the completion of the last 30fsw O_2 period. When Adi exited the chamber and stepped onto the non-skid of the fantail he kept saying "baby feet, baby feet". Through the interpreter we found out what he meant. He hadn't had that much feeling on the bottom of his feet in years….Imagine that!

In the morning Adi was transported via the GRASP's work boat to the south pier. Smiling and waving, Adi climbed unassisted, into the back seat of a HUMVEE with his Canadian entourage, bound for his home town. As the Hummer left the pier, the looks on the Diver's faces said it all. They had returned the quality of life to an individual who would have otherwise been sentenced to a wheelchair and catheter for his remaining years. It was a long two days but well worth the effort. You can't put a price tag on the training and experience, and you sure as hell can't beat the personal satisfaction that was felt by all. HOOYAH DEEP SEA goes out to all the Divers from MDSU-TWO (Company 2-1), UCT-ONE and the Army 544th Engineering Dive Team.

MDV Mariano was serving as the EOD Group TWO Master Diver and deployed to Haiti as the Salvage Advisor for Commodore Fleck (COMEODGRU TWO). He is now stationed in the training dept at MDSU-TWO, Little Creek, VA.

How HOOYAH Are You?

The perfect evening, watching "Men of Honor", and enjoying a glass of wine.
What has become of Navy Divers?

Iryll W. Jones III ENC (SW/PJ/DV) USN (Retired) served on the USS ORLECK (DD 886), USS PRAIRIE (AD 15), Navy Experimental Diving Unit, USS HOIST (ARS 40), USS ORTOLAN (ASR 22), Naval Medical Research Institute (Diving Research Support Detachment), USS EMORY S. LAND (AS 39), USS SIMON LAKE (AS 33) and NAVEODTECHDIV.

A friend got Iryll started making wines around three years ago under the "Sat Rat Winery" label as a hobby. The label has a hand drawn picture of a Sat Rat, Chief's anchor, MK 25 with number 310, all are items significant in Iryll's diving career (retired Sat Diver Chief, MK 25 first experimental diving rig, MK 16 rig number). Iryll has experimented with different wines and has 39 recipes developed to this date.

WDHOF Adds Another U.S. Navy Diver to The Hall

By: CAPT Bobbie Scholley, USN (Retired)

During a magnificent Women Divers Hall of Fame (WDHOF) 10th Anniversary Celebration in Secaucus NJ, on March 26, 2010, Chief Petty Officer Roseanne Oliveros became the first and only Underwater Construction Technician to be inducted into WDHOF. She has worked incredibly hard over the last 10 years to earn the qualifications that got her into the prestigious international honorary organization. Chief Oliveros is currently the Officer in Charge of Diving Detachment Bravo at Underwater Construction Team TWO (UCT TWO) in Port Hueneme, CA. She is the first and only female Chief Petty Officer to be assigned in that role, one of the many firsts that she's had along her career in the US Navy. And that distinction was a key factor in her selection to WDHOF.

Following a Navy "tradition", Chief Roseanne Oliveros is pinned by Capt Erica Sahler, Director, Naval Ocean Facilities Program while Capt(ret) Bobbie Scholley, President, WDHOF watches.

Chief Oliveros was one of ten women from around the world to be selected for induction into WDHOF as they celebrated their 10th Anniversary. This prestigious group of new inductees included a cave Diver from Australia, a shark researcher from South Africa, several diving media experts, diving industry leaders, and underwater researchers. Chief Oliveros was able to travel to Secaucus for the formal Awards Dinner during the Beneath the Sea Exposition, where she was presented her certificate of membership. And in the purely Navy tradition, she was "pinned" by WDHOF members, CAPT Erica Sahler, her former UCT TWO Commanding Officer and now the Director of the Navy Ocean Facilities Program and retired CAPT Bobbie Scholley, the current President of WDHOF. To make the evening even more special, Chief Oliveros was joined by her father, Lino Oliveros; mother, Marie Oliveros; and brother Lino Oliveros Jr., who all traveled from her hometown of Guadalajara, Mexico to support her.

US Navy Members attending the WDHOF 10th Anniversary Celebration (left to right): ND1 Helen Andersen, NDC Rebecca Jones, WDHOF Members: Dr. Darlene Iskra, Capt(ret), Bobbie Scholley, Capt(ret), Karin Lynn, Capt(ret), Capt Erica Sahler, EAC (SCW/DV) Roseanne Oliveros, Capt Martha Herb, CDR Rene Hernandez, Mike Herb, Capt(ret), and WDHOF supporter CDR Gail Chapman, Courtesy of BTS.

Chief Oliveros is a 2000 graduate of US Navy Second Class Dive School and after serving as a Diver at UCT TWO, went on become the Honor Grad at First Class Dive School in 2004. She returned to UCT TWO and quickly proved both her diving and leadership skills. She was promoted to Chief Petty Officer in 2006 and became the Assistant Officer in Charge of Construction Diving Det Bravo and then on to Officer in Charge. In that position, she led her 15-man Det through a grueling 6 month deployment to the Pacific Fleet, where she oversaw over 2,070 man-days of underwater construction on 6 separate projects with zero safety incidents. She has also volunteered twice and been deployed for 6 months each time to Iraq. Chief Petty Officer Oliveros has recently been selected as a Chief Warrant Officer, another first for a woman Diver in the US Navy! Several other US Navy Divers, both retired and active duty attended the four day 10th Anniversary Celebration in Secaucus, NJ, and to help induct Chief Oliveros. Six USN WDHOF members were there to welcome her into the organization and five other USN Divers were also there to support Chief Oliveros. The celebration was held during the annual Beneath the Sea Convention, so there were many opportunities for exciting activities. Of the 176 WDHOF members, 59 were able to attend the festivities. The 59 WDHOF members entered the Reception through a gauntlet of NROTC midshipmen "sideboys" which NDC Jones and ND1 Ander-

WDHOF Adds USN Diver... continued on pg.30

Crossword Puzzle

U.S Navy Dive Manual: Chapter 20 - Diagnosis and Treatment of Decompression Sickness and Arterial Gas Embolism

ACROSS

1. The most common symptom of DCS is _____.
2. One of the three primary objectives of recompression treatment is to allow sufficient time for bubble _____.
3. Never fail to treat _____ cases of DCS.
4. Deviation from approved USN treatment tables shall only be made with the recommendation of a _____.
5. The onset of A.G.E. symptoms is usually sudden and dramatic, often occurring within _____ after arrival on surface.
6. Cutis Marmorata is _____ of the skin.
7. The most common skin manifestation of DCS is _____.

DOWN

8. Symptom of A.G.E. _____.
9. While moving a patient to a recompression chamber, the patient should be kept _____.
10. Dive supervisor is responsible to ensure that every member of the diving team has successfully com pleted _____.
11. The symptoms of inner ear DCS include _____.
12. A diver who surfaces unconscious and recovers when exposed to fresh air shall receive a _____ evaluation to rule out A.G.E.

Crossword answers on pg.30

Rendering

Cathy Carpenter passed away on April 23, 2010 at the age of 56. Cathy was the Program Manager for the Defense Compressed Air Testing Program at the Naval Surface Warfare Center in Panama City, Florida. Cathy played a key role during the contract award process, doing the work and research necessary for contract award in FY2010. Many Fleet activities depend on the Diver's Air Sampling Program. The sampling program provides the unique testing needed to meet Navy requirements as well as the gas sampling program for the US Army Mobile Safe Station. Cathy was a valued member of the Navy Diving community and played a large role in Diver safety and performance.
Written by: Mr. James Fenner

John "Jack" Raymond Lynch Jr. Lieutenant, U.S. Navy Seal (Retired) passed away on February 15, 2010, at the age of 66. He joined the U.S. Navy at age seventeen and served honorably for twenty-two years as a senior enlisted man and officer in operational commands with key positions in operations, intelligence, training, research and development, testing and evaluation with operational and international experience.

Jack served as a cook and deck seaman onboard a fleet tug and graduated from Underwater Demolition Team, Replacement Training Class 29 in 1963. He then served with Underwater Demolition Team 21 and SEAL Team 2 with assignments as a cartographer, communicator, sub ops, swimmer delivery vehicle pilot and Navy SEAL Instructor. He taught communications, demolitions and combat firearms courses. He made numerous operational and combat deployments, special assignments and Mobile Training Team detachments.

Jack attended Second Class, First Class, and Saturation Diving Schools and was assigned to the Navy Experimental Diving Unit (NEDU) as a human test subject. He then was assigned to Naval Sea Systems Command and the State Department assisting the Supervisor of Salvage for the Suez Canal Clearance in 1974. His experience with explosives was instrumental in developing techniques to section ships using shaped charges.

Jack returned to the NEDU in 1975 and was assigned as Team Leader on the first 1000-foot saturation dive in the Ocean Simulation Facility, Panama City, FL. He was selected and served with Chief of Naval Operations "Special Projects" where he was an operational team leader for classified operations.

Upon commissioning Jack assumed duties onboard the USS SPERRY (AS 12) as Boatswain and Diving Officer. He received a "Succession to Command" letter from his Commanding Officer and in 1980 assumed duties as Officer in Charge, Navy School Deep Diving Systems (NSDS) and Diving Officer of the MK II Deep Diving System on the USS ELK RIVER.

Jack was a qualified Navy SEAL, Surface Warfare Officer, Navy Parachutist, Saturation Diving Officer and Salvage Officer. He had a Bachelors Degree in Business Administration and a Master Firearms Instructor Certification. He was also a commercial airline pilot and former Virginia Special Deputy Sheriff. He was actively involved with the American Legion, the Veterans of Foreign Wars, the Knights of Columbus and the Man in The Sea Memorial. At the time of Jack's death he was the President of UDT/SEAL Association and member of the Board of Directors of the Naval Special Warfare Foundation. Jack was instrumental in the development of the SEAL Heritage Community Center which is being dedicated in his name. *Written by: Mr. Iryll W. Jones III*

Honors

Clyde Michael (Mike) Einhellig, BMCM (MDV) (SW) USN (Retired) passed away on 25 March 2010. Mike served his Navy and his Country as a Sailor for thirty-four years. He started his career in the Navy as a Ship Serviceman striker aboard the ice breakers USS EDISTO (AGB-2) and USS GLACIER (AGB-4). He then shifted to the Boatswains Mate rating and became a Navy Diver with duty at the Submarine Base, New London, First Class Diving School, Washington, DC, USS TRINGA (ASR 16), and USS SUNBIRD (ASR 15). On TRINGA he was the Tow Master for the tow of SEAWOLF (SSN 575) after her grounding and loss of rudder and stern planes off of New England in January 1968. The seas were heavy and the winds were howling, Mike worked extra hard like the professional he was to keep everyone safe and get the job done. Mike stayed on deck for almost the entire trip in. On SUNBIRD he was the Tow Master for NR 1, the Navy's nuclear powered research submarine.

After qualification as Master Diver in 1972, Mike served at the Escape Training Tank, New London and aboard USS SIMON LAKE (AS 31) and USS CANOPUS (AS 34) in Rota, Spain. He then spent two years as an instructor at the Washington Navy Yard Diving and Salvage School followed by three years in Panama City, Florida after the school's transfer there. While in Panama City he became a co-owner of the "10 Foot Stop".

His final seven years of active duty career were spent at the Naval Support Facility Dive Locker, Diego Garcia, British Indian Ocean Territories; Ship Repair Facility Dive Locker, Subic Bay. Republic of the Philippines; and on USS PROTEUS (AS 19) in Guam where he met his wife, Wendy.

From 1991 to 2001 Mike worked for SEA 00C as a Diving System Safety Certification Manager, inspecting Navy Dive Lockers and continuing to help young Navy Divers learn their trade. After retirement from NAVSEA 00C and moving to Panama City, Mike continued to provide support to the diving community by assisting on safety certification audits. Clyde Michael Einhellig will be the first Diver inducted into the Man in the Sea Museum Memorial Wall.

On 03 April 2010, the remains of BMCM (MDV) Clyde Michael Einhellig were transported to sea by the Navy Dive School Training vessel (YDT-17) and he was buried at sea, with full military honors. As fate would have it, Mike was also the Certification Manager who originally Certified the YDT-17 as "Safe For Manned Use" by the young Navy Diver trainees, whose well-being always meant so much to him.

Mike will be remembered for his ever present big smile, infectious good humor, and love of practical jokes. He could take it as well as dish it out. Fair winds and following seas shipmate. *Written by: Mr. Gary Crawford, & Mr. Robert Warren*

Harry Baynes, LT. USN, Retired, Program Office manager for the PMS 399 Dry Deck Shelter (DDS) Program passed away peacefully on 10 March 2010. He was at home with his family. Harry was not a Diver, but he developed into a champion of a very dangerous and highly technical program of Special Warfare diving and mission support. From 1991 to 1993, Harry was the SUBRON ONE Quality Assurance Officer at a formative time for the DDS program. The Navy leadership was growing the program into a more reliable asset, upgrading from a one DDS and one submarine combination to three shelters and four submarines in the Pacific area of operations. This major increase in readiness and asset availability continued to blossom under his technical scrutiny. In 1993, Harry asked for and was transferred to SEAL Delivery Team ONE stationed in Pearl Harbor, Hi. During his three year tour there, he was instrumental in bringing DDS/SDV assets up to full-time mission readiness and maintaining that status. Harry retired on 1 March 1998 and was promptly scooped up by the Deep Submergence Program Office, PMS395, which later became PMS 399. Harry was asked to do the one thing he did better than anyone else, "Wade in and ensure these multi-million dollar assets are ready to meet their mission requirements." Harry Bayne's singular professional approach and community wide respect continued without let up till his passing. The Navy Diving and Special Warfare Communities have lost a giant of a "Hands-on, No BS, tell it like it is" program manager. Many good men benefitted professionally, technically, and as a friend or acquaintance by having served with him. I am one of the many. *Written by: Mr. Ed Delanoy (CWO4, USN Ret)*

DIVERS WORKING GROUP 2010 HIGHLIGHTS

By: MDV Henry Stark

The 2010 Divers Working Group (DWG), held in San Diego CA this May, was a success with over 225 Divers including Marines, Air Force, Army, and Coast Guard. We had the privilege of having the Master Chief Petty Officer of the Navy (MCPON) Rick West as a guest speaker, along with Commodore Lucas and Paul De Gelder from the Australian Navy who shared the story of his shark attack during a working dive.

This year we changed the format to include training breakout session which included: Salvage Calculations, MK-21 Communications, Bauer Compressor maintenance, and PMS EOD Ship Hull Database.

The open forum for discussion items allowed Divers from all services and all levels to participate. There were a few breakouts for the Master Divers and Diving Warrants for specific community issues which were later back briefed to the group.

As we look to the future we encourage every Diver to submit feedback and ideas for upcoming Divers Working Groups to webdiver@supsalv.org. The next DWG will be held in Panama City Fl 10-12 May 2011.

NAVSEA 00C staff with Able Seaman Clearance Diver Paul De Gelder, Royal Australian Navy at the DWG 2010.

Paul De Gelder

Able Seaman Clearance Diver Paul De Gelder, Royal Australian Navy attended the 2010 Divers Working Group and shared his extremely close encounter with a shark.

At 0630 on 11 February 2009 he was on the surface of the harbor waters of Sydney, Australia preparing for the day's work when he was attacked by a ten-foot bull shark. He describes the attack as similar to "getting hit in the leg with a plank of wood". "You don't even feel the teeth go in," he said. "I think the adrenaline, the panic, probably puts a numb on the pain and you don't feel it." The shark severed his right hand and removed a large chunk of his right thigh and then released him. His fellow Clearance Divers, Leading Seaman Jeremy Thomas, Able Seaman Ryan Dart, and Seaman Arthur McLachlin, pulled him into the boat and rushed him to shore where he was immediately transferred to St. Vincent's Hospital. He lost a significant amount of blood and came close to death. The doctors consider the fact that the shark had not severed a major artery in his leg a significant factor in his ability to survive the trauma.

The surgeons were unable to save his leg which had to be amputated. With the support of the Australian Navy, his fellow Clearance Divers, family and friends, he began the intense rehabilitation, learning to use an artificial leg and a bionic hand. Three months after the attack he was in the water swimming with the sharks at Sydney's Ocean World Aquarium. Within the first year he demonstrated the ability to handle high performance cars driving with one hand and his new leg, and was back at the beach riding his surfboard. Most recently, Paul has shared his story with various organizations including child cancer camps in Australia, and the United Nations in New York. He has also flown a plane, appeared in various television spots, and is back at work and diving again! Paul has overcome this extraordinary experience with grace, perseverance, and a positive attitude. His story is one of motivation and inspiration, and it was an honor to have him share his story with us.

Descent Into Darkness:
A Look Into the Past for a Glimpse at the Future

By: LT Junior Lorah

Retired Navy Commander Edward C. Raymer holds nothing back in his description of Navy Diving salvage operations during the aftermath of the Japanese attack on Pearl Harbor. With at times shocking bluntness, his book, Descent into Darkness, gives a vivid and chilling account of the perilous occupation of a Navy Diver during World War Two. Writing in the first person, CDR Raymer takes the reader on a journey from the moments prior to the Pearl Harbor attack, when he volunteered for Navy Diver training, to his departure from the Pearl Harbor salvage scene in 1944.

The Dive Profile

As the Senior Petty Officer-in-Charge of the diving team, First Class Petty Officer Raymer's "primary work would involve finding any survivors and raising the sunken battleships to get them ready to go back to action…" The Salvage Divers faced multiple problems. As the author relates, "the scope of the Pearl Harbor operation had never been done before. There was no manual on how to do it. Many techniques were developed on the spot." Raymer describes key events of the salvage operations for each major warship he personally assisted with, six in total. The Divers developed new ways to cut through thick hulls of warships. They created techniques to lift and recover heavy items from inside the vessels. Additionally, techniques were devised to maximize their work effort by reducing the weight of their heavy diving rigs on some operations. All of these diving operations, as Raymer describes it, were performed in pitch black visibility, in intense heat, under extremely dangerous and disgusting conditions.

Raymer not only describes the chaotic scene of the damaged battleships, but also brings to life the difficult social scene at Pearl Harbor. He tells the frustrating tale of countless sailors "trapped" in Pearl Harbor with very little to do; alcohol was prohibited, there was a strict nighttime curfew, not to mention the large ratio of men to women. This is the lighter side of the book.

CDR Raymer's book is a story of struggle and triumph. It is haunting and dark in its stories of countless human remains encountered by Navy Divers within the sunken ships. There are even darker parts detailing the tragic deaths of personnel during the salvage operations. However, the real point of this book is not the pervading death and devastation, but the perseverance of Raymer and his team to get the job done. They can teach us that, through back-breaking work and a "focus on the next step forward" attitude, anything can be accomplished.

Navy Diver: A Comparison, Then and Now

CDR Raymer's book gives an honest look at a unique breed of sailor, one that is not too different from the current version. Little has changed with respect to the mission of the Navy Diver. Sure, technology and styles have changed, but the core mission is still intact. There are still daunting salvage operations that must be completed (e.g., Hurricane Katrina, the Haiti Disaster). There are situations that involve resourcefulness (e.g., Minneapolis Bridge Salvage, 2007). Raymer's Dive team is one of many that have paved the way for the current generation. So perhaps Raymer's book is a look at the future of Navy Diving, as well as a summary of the past. No matter the task, using stubbornness, ingenuity, and an undying spirit to get the job done, Descent into Darkness provides proof that Navy Divers have consistently stayed the course.

On Personal Note

I have been in the Navy for a modest and humbling 16 years. I have been a Diver for the majority of those years. Throughout this period, I was aware of CDR Raymer's book, but never bothered to read it up until now. I do regret my stubbornness since this book opened my eyes to the awesome reality and pride of being a Navy Diver. Descent into Darkness gives us a perfect picture of what a Diver is: unique. We have the ability to innovate, improvise, and persevere. Additionally, when times get tough--and for a Navy Diver there are many times when things get tough--our ability to rise to the challenge is what separates us from the common fish. Despite all the sadness of the Pearl Harbor attack, I could not help but find much enjoyment reading the book. I laughed at the bios of each individual CDR Raymer described on his dive team. I am reminded of my first dive team with Chris "Bucky" Baker, Paul Lawson, Herb Packer, Dave Slowik, Matt Downs, Shawn Kolste, Brandon Ghan--led by our crusty Chief Ernie Bernie and the dominating figures of MDV Heinemen Heineman and MDV Storment. After all these years, I will never forget that line up and all the good times we had, to include the heartaches and troubles as well. These mentors, not to mention countless others, made me the person I am today. I would never take them to see my family, or leave them with my girl; but I would trust them (and have!) with my life.

Hoo-Yah Navy Divers!

LT Junior Lorah is a Explosive Ordnance Disposal Officer currently studying at the Naval Post Graduate School in Monterey, CA.
References Raymer, E. C. (1996). Descent into Darkness. Novato: Presidio Press.

NDSTC Change of Command

The Change of Command ceremony at the Naval Diving and Salvage Training Center in Panama City Beach, FL was conducted September 17, 2010 where the Commanding Officer, Commander Timothy P. Richardt was relieved by Commander Michael L. Egan. Captain Bradley R. McKinney, Commander, Center for EOD and Diving, presided over the change of command ceremony and was the guest speaker. During his tour as Commanding Officer, Commander Richardt oversaw the final phase of construction and opening of the 985 thousand gallon Aquatic Training Facility and the installation and certification of the 60-ton gantry crane. Additionally, he directed the building of a new MK-16 Underwater Breathing Apparatus classroom and laboratory, as well as, the certification of the new submarine Lockout Trunk, and implementation of 4 new Diver in-water multi-purpose pool training projects. Commander Richardt's next assignment is in Manama, Bahrain on the staff for Commander, Naval Forces Central Command / FIFTH Fleet. Commander Egan's previous assignment was the U.S. Navy Supervisor of Diving at Naval Sea Systems Command at the Washington Navy Yard in Washington, D.C.

Commander Michael L. Egan is piped aboard.

Captain Bradley R. McKinney congratulates Commander Timothy P. Richardt.

Commander Timothy P. Richardt is piped ashore.

***WDHOF Adds USN Diver**... continued from pg.24*

sen were quickly put in charge of, to the delight of the hundreds of dive industry leaders attending the reception. This little bit of Navy flair to the celebration was very well received by the civilians and highlights how the U.S. Navy Diving Program has always been regarded as a leader in diving worldwide.

WDHOF is an international non-profit professional society whose mission is to honor woman from around the world who have excelled in diving. Those members include pioneers, leaders, innovators and world record holders throughout the diving community. Member contributions span a wide variety of fields including" The Arts, Science, Medicine, Sports, Exploration, Marine Archaeology, Media, Service, Dive Training and Education, Safety, Business, Marine Environment and Conservation Free Diving, Commercial Diving and of course, Military Diving. There are currently 176 members of the WDHOF, of which, 21 are US Navy Divers. A secondary mission of WDHOF is to support the underwater world and its associated careers by promoting opportunities for women and men in diving through scholarships, training grants, internships and mentorship opportunities. For more information on WDHOF, visit their website at www.wdhof.org

WDHOF 2010 New Members:

- Jane Bowman, advanced cave diver, trainer & examiner, tech diver;
- Sheri Daye, accomplished scuba diver, free diver and spear fisher;
- Annie Crawley, filmmaker, motivational speaker, photographer and writer;
- Joan Forsberg, shipwreck diver & researcher; underwater archaeologist;
- Deb Greenhalgh, undersea engineer, instructor, author;
- Anne Davis Hasson, co-founder of the Aggressor Fleet;
- Diane Scullion Littler, Ph.D., research associate & senior scientist; authority on tropical-marine botany;
- Chief Petty Officer Roseanne Oliveros, US Navy underwater construction technician (SeaBee) diver;
- Faith Ortins, developed the first women's drysuits, now leads DUI's sales team worldwide;
- Leslie Rochat, founder of AfriOceans Conservation Alliance, established the SOS Shark Centre in South Africa, documentary producer and environmental journalist.

Crossword Puzzle Answers

Across:

1. joint pain
2. resorption
3. doubtful
4. Diving Medical Officer
5. minutes
6. marbling
7. itching

Down:

8. vertigo
9. supine
10. Basic Life Support
11. dizziness
12. neurological

SUPDIVE SENDS ...CDR Mike Egan

OPNAV N873 and 00C have approved dozens of diving waiver requests over the last two years and have yet to disapprove one that I can recall. When I started this job two years ago, the guidance I got from my boss was to remember that we are not in the business of telling people no, we are in the business of figuring out how to tell people yes! And that is just we have been doing.

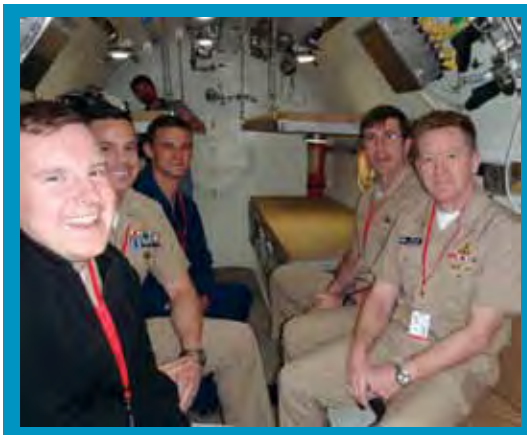
We have been pressing the envelope of "acceptable risk" and been successful at it. What is the definition of success when taking acceptable risk? The answer is mission accomplishment without injury to personnel or damage to equipment. There is no reward without risk but there is not a risk worth taking if personnel are thoughtlessly injured or equipment unnecessarily damaged. I see this very clearly as does all of 00C.

There have been some significant and unique forward steps taken recently and I want to talk about them. First, relationships based on trust are the best kind. PMS-NSW and 00C have worked tirelessly in improving the capabilities and way-ahead for the SEAL Delivery Vehicle (SDV). The SDV is on the Approved for Navy Use (ANU) List and rightfully so. The SDV program is that "one-off" ANU item as I refer to it and is only authorized for use by NSW, and 00C is trusted to keep it that way by working closely and staying involved in the management of configuration control. We do! Second, we work for and support the Fleet. When the Fleet identifies a requirement for a capability they look to 00C to help them find it and develop it. However, we here in 00C have a responsibility to look not only "down and in" we also have a responsibility to look "up and out" as well. The Saturation Fly-Away Diving System (SAT FADS) is just that "up and out" look I am talking about. SAT FADS is rapidly approaching the manned testing and diving phase down in Panama City Beach, FL and will be that capability that 00C feels the Fleet will soon be asking for. OPNAV N873, SUPDIVE, and Fleet units are working to make sure this deep diving capability comes to rest in the right hands.

Commander Michael Egan, USN
Supervisor of Diving

I have enjoyed many successes as SUPDIVE. One of the best jobs in the U.S. Navy! One particular success is the single-point and unity-of-effort that has existed and grown stronger between the U.S. and our diving Allies. I have worked very close with my counterparts, the SUPDIVE's of the United Kingdom, Canada, Australia, and New Zealand. These gentlemen and true professionals have helped guide and advise me on many international and joint diving issues. Most recent success story is the OPNAV N873 approved waiver for U.S. Navy diver's operating in the FIFTH Fleet AOR, to use the British recompression chambers aboard British Mine-Sweepers while conducting diving operations in the Arabian Gulf. Divers helping other Divers! HOOYAH!

This is my last edition of Faceplate as the editor-in-chief. CDR Mike Runkle will relieve me as Supervisor of Diving. The Navy's Diving Program is in good hands! My next assignment is Commanding Officer of Naval Diving and Salvage Training Center in Panama City Beach, FL. Talk about a "plum-assignment" it does not get any better! I am lucky, I am honored, and I am very excited to get back with the troops and start training Divers! HOOYAH Deep Sea!



LT Jamie Cook (OPNAV N873B), CDR Tom Murphy (CO, MDSU-ONE), CDR Warren Fridley (OPNAV N873), and CDR Mike Egan (SUPDIVE) sitting inside the SAT FADS deck decompression chamber living compartment at Phoenix in Largo, MD right before it was loaded and shipped to Panama City Beach, FL for unmanned and manned diving testing.

Annual ABCANZ (America Britain Canada Australia New Zealand) Conference in Vancouver, Canada and the respective Supervisor's of Diving from left to right are CDR Michael Egan United States Navy, CDR Christopher Deere Royal Canadian Navy, CDR Paul Jones Royal Navy, LCDR Trevor Leslie New Zealand Royal Navy, and LCDR Paul Koerber Australian Royal Navy. The ABCANZ Conference is held every year and each country takes a turn hosting.

New METCAL Air Gauge Calibration Requirements

By: Matthew Pappafotopoulos

As of February 26, 2010, interim guidance to Calibration Laboratories for cleaning, calibrating, and labeling instruments requiring MIL-STD-1622 cleanliness has been issued by the Navy Metrology and Calibration program. Under this guidance, critical-application systems and their associated instrumentation require more thorough cleanliness and more specific packaging and labeling than general-application instruments. This applies to breathable air systems such as Divers Life Support Systems and Self-Contained Breathing Apparatus charging air systems as well as all other critical-application systems and components.

When instruments to be cleaned are identified to meet the requirements of MIL-STD-1622, the calibration laboratory personnel shall conduct receipt inspections per MIL-STD-1622. If the gauge does not have documented cleaning, i.e. a paper QA document, a sticker with a traceable number and a sticker with a traceable lab for solvent removal it is not considered clean and must be cleaned before calibrating. All items cleaned per MIL-STD-1622 for critical applications will need to have labels applied following cleaning indicating the required information from MIL-STD-1622 paragraph C.5.8 applicable to each component. In the interim these labels should be locally developed and adhere to the characteristics stated in the guidance issued by the Navy Metrology and Calibration program.

All Divers Life Support System air gauges are critical and must be cleaned and calibrated in accordance with MIL-STD-1622. All non-critical gauges must be marked as none critical. When sending instruments to be calibrated they should be packaged with the full intent to maintain cleanliness and with all proper documentation included. All openings should be plugged or capped wherever possible. If openings are not suitable for plugs or caps, a film, or bag should be applied with tape being used to secure the film or bag and care taken so the tape does not contact the openings or plugged/capped connections. With these initial precautions the time needed to clean and calibrate the instruments can be reduced resulting in a quicker turnover time and prevent an increased cost of maintenance.