The Official Newsletter for the Divers and Salvors of the United States Navy Volume 3, No. 1 / Summer 1997

FACEPLA



An old fin shaft is transported to the jetty after repairs are made to USS *Doyle*. The new waterborne method for repairing fin stabilizers was first tested on USS *De Wert* (see full story on page 3).

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SUPSALV Sends

The Navy's recovery effort in support of TWA Flight 800 ended this May. Manned diving operations had been suspended the first week of November 1996. At that time the Navy hired four scallop trawl boats to drag the bottom for any remaining victims and aircraft debris. The trawling operations were conducted from November to April. In May, a Navy Remotely Operated Vehicle (ROV) inspected 85 separate sites. The ROV inspected a 100-yard circle at each of the 85 sites. In all, only one 8inch piece of aircraft was found. This was a final testimony to the success of the operation.

Although it is difficult to estimate exactly how much debris was recovered by divers, we do know that between 2 to 4 tons of debris were recovered by trawling. This represents between 1 and 2 percent of the aircraft. There was little of the aircraft left in the ocean. This all points to the fact that at the suspension of the diving operations. almost all of the aircraft had been recovered. Also, the medical examiner has been conducting DNA testing on recovered victims and now states that all 230 victims have been identified. This is an incredibly impressive result of which every member of the recovery team can be proud.

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SUPSALV SENDS (from page 1)

In this issue of FACEPLATE we discuss a few new topics, such as the waterborne repair to FFG 7 class fin stabilizers. This a first for this type of in-water repair. This shows just how valuable the contributions of the ship repair lockers are to the operational fleet.

Recently we published the new and revised Authorized for Navy Diving (ANU) list. The ANU lists equipment that is authorized for Navy diving. You should have received a copy of the ANU by now. You can also access the ANU through the Internet at SUPSALV's homepage at http:/ www.navsea.navy.mil/sea00c.

Although we are in the middle of summer as I write this, winter is just around the corner. I encourage all of you to take a round turn and ensure that your locker is ready for winter diving operations. I know that many lockers do not have to worry about winter diving, such as in Pearl Harbor and GTMO. But you never know when you may be tasked to deploy in support of some major operation. I encourage you as a minimum to review the various pubs and become familiar with the rules for cold water and beneath-ice diving.

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Articles, letters, queries and comments should be directed to the Commander, Naval Sea Systems Command, 2531 Jefferson Davis Highway, Arlington, VA 22242-5160. (Attn: FACEPLATE)

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Fleet Divers Conduct Waterborne Fin Stabilizer Repairs

By A. L. Blakey, LCDR RN

On 30 September 1996, NAVSEA 00C5 was tasked to investigate the feasibility of conducting fin stabilizer repairs waterborne. The problem? How to remove an 8000-pound weight with a diameter of 13.5 inches from a hull opening 14 feet below the waterline, replace damaged bearings (thus expanding the hole in the process to 19.5 inches), and then replace the 8000-pound weight (trapezoidal and extremely top heavy), all without sinking the ship. No problem for the UWSH team at 00C-this is precisely the type of evolution it conducts every day of the week in support of the Fleet throughout CONUS and abroad.

By January 1997 the solution had been developed and briefed to COM-NAVSURFLANT. SURFLANT then tasked NAVSEA with executing the repair and the 00C5 team was on a tight schedule to complete the first repair on USS *De Wert* (FFG 45) in Mayport Florida from 7–14 April 1997.

The solution was to use external rigging to support the finshaft and fin assembly as the internal support components were disassembled. A temporary external seal prevents ingress of water as the shaft gland is removed. An internal cofferdam is built over the exposed finshaft to maintain the watertight integrity of the ship.

An internal wire is fed through the top of the cofferdam to control the lowering/recovery of the finshaft in and out of the ship. An outboard aluminum patch is used to keep the hull watertight as the outboard bearing is replaced.

This was all excellent in theory, of course, but the real test was to put theory into practice with the scheduled repair in April. With all the necessary components



The cofferdam fully built. Note the support brace, air blow-down line and gauge, and markings on internal wire.

in existence only as sketches in January, much work had to be done to meet the deadline.

Engineering began immediately to complete designs and develop working drawings for delivery to the manufacturer by 15 February. The manufacturer, in turn, had to finish construction by 15 March. These tools, together with the load list for the rigging plan, had to then be assembled at Cheatham Annex for shipment in time to meet the repair date.

The rigging plan is vital to the success of the operation. It has to be flexible enough to control the load throughout each phase of the movement. It also has to use ship's structure and fittings to avoid unnecessary welding/cutting on the ship, thereby minimizing the impact to the ship. After numerous visits to FFGs in dry dock to witness removal of the fin units using dry techniques, a series of experiments was conducted to determine the behavior of the fin in water. The plan was engineered, rigging drawings completed, and the much anticipated load list dispatched

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The new outboard bearing is positioned for installation.



Old finshaft showing external rigging.



FIN STABILIZER REPAIRS (from page 3)

to Cheatham Annex just in time to meet the Mayport delivery.

As this was the first repair of this nature, a team of contractors assembled under the direction of a NAVSEA representative. They in turn, liaised with a representative from Brown Bros. UK, the manufacturers of the fin stabilizer system. The team, together with excellent support from CDR M. Streeter (USN) and the crew of USS *De Wert*, proved the theory, procedure, and tools assembled at such short notice during this first repair.



New finshaft in position inside ship, with cofferdam removed and shaft held in place by external support rigging. Note the grease smears on the shaft.

The port finshaft and fin assembly, together with the outboard bearing, were replaced within 5 days. Refitting the new finshaft and fin assembly actually took just 2¹/₂ hours, which compared very favorably with dry dock times.

Flushed with success, a much-modified team reassembled in Mayport, Florida 10 on June to conduct the second repair of this type. This time the task was to replace both outboard bearings on USS *Doyle* (FFG 39). The previous operation had proved the theory and the procedure; it was now necessary to prove repeatability on the port side and to prove the experimental procedure and rigging plan for the starboard side. Another success would finalize both the procedure and rigging plans for publication as a chapter of the *Underwater Ship Husbandry Manual*. This time RSG/SIMA Mayport personnel would undertake the diving, rigging, and mechanical support services for the repair.

The repair had been scheduled from 10–24 June, but *Doyle*, an operational ship, had a training commitment to keep and needed to be at sea by 23 June. The RSG/SIMA team worked extremely well under the direction of the subject experts, such that both fin systems were complete and operationally tested by 20 June. Indeed, the port finshaft was refitted in less

than 2 hours. These facts reflect particular credit onto the members of Red Dive Team, Flexhose Shop, and the Rigging section of SIMA Mayport. Their hard work, dedication, and adaptability in successfully conducting an experimental procedure was not just a creditable example of the professionalism of the American Sailor, but also saved the American taxpayer a great deal of money. In addition, a further saving was made by SIMA personnel refurbishing both fins on the jetty and then refitting them, rather than unnecessarily replacing them with new assemblies.

The full list of those directly involved with the conduct of the USS *Doyle* repair appears at the end of this article. Thanks to the efforts of those people, the ship was able to sail on 23 June to honor her scheduled commitments and remain mission ready. The "Bravo Zulu" the SIMA team received from the ship was well earned and thoroughly deserved.

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Red Team supervises the removal of USS Doyle's port fin stabilizer.

FIN STABILIZER REPAIRS (from page 4)

The way ahead now is to publish the procedure as a chapter of the *Underwater Ship Husbandry Manual* and to finalize the load list as a repair kit to be maintained in the UWSH Equipment Pool at Cheatham Annex, such that it can be readily dispatched wherever and whenever it is required.

So what are the advantages to the Fleet for all this frenetic activity? Vessels will still receive planned maintenance on their fin stabilizer systems during scheduled docking periods, but the development of this technique means that those responsible for the maintenance of these vessels will no longer have to incur the expense of an emergency docking solely to repair one system. Current cost estimates for placing an FFG class vessel in dry dock are approximately \$400,000, even before repair materials and personnel costs are considered. Using USN divers, riggers, mechanics, and the NAVSEA repair kit, the dry dock bill is replaced by one of less than \$30,000 and the repair dates become dependant only on the availability of the ship. The repair kit can also be used wherever there is suitable depth of water, rather having to reroute the ship to a dry dock.

This article is therefore just another example of the cost-effective support provided to the Fleet by the use of Underwater Ship Husbandry waterborne repair techniques, and of the work of the team at 00C5 in the Office of the Director of Ocean Engineering Supervisor of Salvage and Diving. ■

LCDR A. L. Blakey (00C57) is a Minewarfare and Clearance Diving officer in the Royal Navy. He was appointed to the Office of the Director of Ocean Engineering, Supervisor of Salvage and Diving under the Personnel Exchange Program. Since his arrival, he has been a member of the UWSH team of 00C5 involved in the waterborne repair of USN vessels and is currently in the second year of his 2½ year appointment. The following SIMA Mayport personnel were involved in the USS Doyle repair:

SIMA Red Dive Team: BMC (SW/DV) P. C. Balesi (Team Leader), QM1 (SW/DV) M. K. Troedel (Diving Supervisor), BMCS (SW/DV) L. D. Lawley, DC1 (SW/DV) R. L. Green, GMG1 (DV) T. A. Kasica, BM2 (DV) C. L. Blanchard, HT2 (DV) N. J. Luoto, EN2 (DV) E. Thompson, EN1 (DV) P. J. Maloney.

SIMA Riggers: BM2 B. Fischer, BM1 L. Kahill, EM1 S. Cox, BM1 D. Hunt, MM1 D. Matlock.

SIMA Flexhose Shop Mechanics: MMC S. Slowey, MMC C. Washington, HT1 D. Gaarder, MM2 M. Larsen, MM2 J. Murphy, MM2 C. Gonzalas, MM2 G. Jennings, MM3 S. Jenkins, EN3 A. Reed, MM3 L. Geyer, MM3 L. Singh.

Additional: MM3 S. Lawrence, CWO4 Axon USNR.

Doyle Port Engineer: Mr. R. Keys.

From SUPDIVE

by CDR Bobbie Scholley

On 14 February 1997, I relieved CDR Dale Lueck as Supervisor of Diving, NAVSEA 00C3B. CDR Lueck has retired to Minnesota to raise cattle and try to stay warm. Since taking over as SUPDIVE, I have had the opportunity to visit several dive lockers throughout the Fleet and one of the most common comments that I have heard is that people don't know what we do up here in Crystal City, VA. In our continued effort to communicate with the Fleet, we will start providing a feature highlighting the current diving programs.

Administrative Structure

I have come to find that many divers are unfamiliar with the organization of NAVSEA 00C3. Code 00C3, Diving Programs, is responsible for the research and development, design, test and evaluation, and acquisition of all diving equipment, as well as the procedures by which we dive. Additionally, we interface with foreign navies on all diving-related exchanges of information. For those of you who haven't been able to break the code



on how 00C3 is organized, the box on the next page shows our current make-up. Although each code is listed with their primary programs, most inquiries can be handled by several people in the division. Our phone number is 703-607-2766, DSN-327-2766 or FAX 703-607-2757.

Equipment Development

Development, testing, and evaluation of new diving equipment is an ongoing

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SUPDIVE (from page 5)

evolution at 00C3. We have, out of necessity, started to use more commercial off-the-shelf (COTS) equipment for Navy use, although we still have a few programs to develop new systems. Either way, all equipment must pass rigorous testing and evaluation before it is distributed to the fleet, which is usually done at NEDU.

The **Transportable Recompression Chamber System (TRCS)** has been in distribution for several years now. In June 1997, Tom Galloway took delivery of the last shipment of TRCSs for shipment to their final destination. Tom produces a *TRCS Times* newsletter, which provides updated information on logistic support, maintenance, and location of the 43 systems. The latest issue is April 1997 and is distributed to commands that have a TRCS.

Additionally, Tom has been working with NAVSEA PMS 395 on the **Submarine Rescue Diving and Recompression System (SRDRS)**. Although still in the developmental stages, the system will consist of the One Atmospheric Dive Suit (ADS) or "Newt Suit," two 62-man Recompression Chambers, and a Transfer Under Pressure Vehicle. The ADS is already under construction and the entire SRDRS will eventually replace the Deep Submergence Rescue Vessels (DSRVs). In conjunction with this program, we are testing two small flexible "chambers" as possible hyperbaric stretchers.

We are delivering the first of the **Fly Away Dive System III (FADS III)** to the Fleet. Bob Kilpatrick is the program manager for the system and is responsible for the success of the system. He and MDV McMurtrie assisted MDSU-2 with the initial training, sea trials, and certification. (See related article on page 8.) We are scheduled to deliver seven more upgrades to the Lightweight Dive System to convert them to a FADS III system within the next year and will replace the consoles and volume tanks for those by the end of 1998. Bob is also hard at work to ensure delivery of the first **Fly Away Mixed Gas System (FMGS)**. This one will be delivered to MDSU-2 in August 97 and will be certified in September 97. Bob and MDV McMurtrie will again assist MDSU-2 in the initial training, sea trails, and certification. MDSU-1 will receive their FMGS late December 1997 and a third FMGS is in production.

We are in the initial stages of evaluating COTS chambers for development of the new **Standard Recompression Chamber**. Stuart Yee is the program manager and is investigating various chambers which could be configured for air lift. The concept of a "chamber in a box" is the direction we are looking for the Standard Recompression Chamber of the future.

Stuart is finishing up the PMS and Technical Manual coverage of the KMB-28 Band Mask. This is another example of a COTS that we have evaluated for Navy use and is in response to Fleet input from the Working Diver Conference. We hope to get this approved for Fleet use by the end of this year.

Procedural Updates

Hopefully by now all commands will have received the new **Authorized for**

Navy Use (ANU) letter. This is an update as well as a significant change in format, designed to make it more usable to the Fleet. The ANU will also be on the next update to the NAVSEA CD-ROM and on the NAVSEA 00C homepage.

One of the largest projects that we have going on right now is the *U.S. Navy Dive Manual*, **Revision 4**. As many of you are aware of, MDV Washington has been visiting the Fleet to collect input. He is in the final stages of collating the various input for a final draft. The changes in Revision 4 will primarily be in format. The manual will be broken up into five volumes designed to be essentially stand alone. The manual will be distributed in both hard copy and on CD-ROM. Our thanks to all the Fleet personnel who have provided input, time, and energy to help make this a better working document. ■

Prior to assuming the duties as Supervisor of Diving, CDR Bobbie Scholley was assigned as the Diving and Salvage Officer at Combat Logistics Group Two. During that assignment, she participated in the TWA Flight 800 salvage operation. She has served as CO, USS Bolster (ARS 38), XO, USS Hoist (ARS 40), OPS, USS Vulcan (AR 5) and Diving Officer, USS Canopus (AS 34).

00C3	Diving	Programs	(703) 607-2766 / 602-0339
00C3	x234	Bob Whaley	Diving Programs
00C3B	x220	CDR Bobbie Scholley	Supervisor of Diving
00C3S	x227	Susann Pearson	Administration, Travel
00C31	x262	Tom Galloway	TRCS, SRDRS
00C32	x244	CDR Hank Chase	Fleet Liaison, ANU, Waivers
00C33	x249	Bob Kilpatrick	LWDS, FADS III, FMGS
00C34	x265	HTCM(MDV) Mike Washington	Fleet Liaison, Dive Manual
00C35	x276	Jim Ruth	SPECWAR, EOD, USMC
00C36	x274	BMCS(MDV/SS) Paul McMurtrie	Fleet Liaison, PMS, OP/EP's
00C37	x237	Stuart Yee	Air Sampling, STD Chambers
00C38	x252	Thomas Heldt	German Exchange Engineer



By ET2 Cecilia Lewis Reynolds

The Dive Locker of Shore Intermediate Maintenance Activity, Norfolk (SIMA) has the distinction of being the most unique dive locker in the Navy. A team of 71 divers coordinate their efforts to provide support for the waterfront at Norfolk Naval Base, Little Creek Amphibious Base, and Portsmouth Naval Station (outside of Norfolk Naval Shipyard). Aside from their local commitments, the divers have gone as far south as Pascagoula, MS and as far north as Earle, NJ and Philadelphia, PA with their "Drive and Dive" capabilities. Dive capabilities are divided into three teams, with a weekly duty rotation for an emergency team, to provide diving services to Atlantic Fleet (LANTFLT) units 24 hours a day, seven days a week. Over the past year, SIMA divers have executed over 2700 dives (logging over 3300 bottom hours) while maintaining a 4.0 safety record.

This dive team routinely designs waterborne repairs and gets approval from NAVSEA to execute repairs. They maintain three Diver's Life Support System (DLSS) boats and two Mark II Light Weight Dive Systems, which enhance their Drive and Dive capabilities. To increase the capabilities of the dive locker, SIMA has sent five divers to Consolidated Diver's Unit (CDU), San Diego to qualify in underwater welding skills (under CDU's procedure), providing underwater welding assets on both coasts.

Some of the highlights of this dive team's past year include implementing a Diving Radiation Control Program/Gas Free Engineer Program for diving in



Members of the SIMA Bravo Dive Team BM2 Jack Riley, EN2 (DV) Michael Barber, MM2 (DV) Brian Klein conduct pre-dive checks.

closed spaces, executing a software change-out (in conjunction with Mr. Frank Buski, NAVSEA), on board the ex-USS Flatley (FFG 21) (currently in the Inactive Shipyard in Philadelphia), templating and manufacturing cofferdams for the ARS 50 class bow thrusters (allowing repairs to be accomplished which previously required dry docking). Additionally, they have implemented underwater visual and magnetic testing. SIMA divers routinely perform services that provide cost savings to the Navy. For example, they recently completed three hub seal change-outs in conjunction with five controllable pitch (CPP) blade changes. The five CPP blade changes performed over an 11-day period saved the Navy over \$900,000. The largest cost savings to the Navy comes in the form of the support provided to COMNAVSURFLANT in the hydroblasting of master belts, and interim propeller polishing-at a cost savings of \$4.6 million over the last fiscal year.

The workload of this professional group will continue to escalate as they receive their new Diver Prototype Surface Supplied Truck (projected deliver date: October 97) and as the MILCON P320 shore-based hyperbaric chamber comes online (projected date: January 99).

As you would expect, the unit cohesion at the SIMA Dive Locker is extremely high. Maintaining this highly demanding schedule requires a lot of team effort. The teams help each other out. Group cohesiveness allows them to get the job done with minimal problems. Khaki support is a vital part of this team's success. As CWO3 Terry L. Harris, Diving Officer, said of his leadership staff, "Of course, execution takes place at the deck plate level with the divers, but we are unique in that we have four Master Divers here right now-that works extremely well, in that they basically make things happen. I call them my 'head shed."" MMCS (SW/DV) James A. Bond added, "The only way we can do this is by the khaki working together, communicating, and helping each other out." The strong leadership and the skilled divers at the SIMA Dive Locker create a tightknit team that works hard to meet the present and future needs of the Fleet.

ET2 Cecilia Lewis Reynolds is the Norfolk Assistant Public Affairs Officer.

Diving and Certification News:

First Issue FADS III Tested and Certified

by BMCS (SS/MDV) Paul D. McMurtrie

Divers from Mobile Diving and Salvage Unit Two (MDSU-2) DET Charlie assisted Naval Sea Systems Command (NAVSEA) personnel in testing and certifying the first issue Flyaway Dive System (FADS) III in Roosevelt Roads, Puerto Rico in February 1997. Testing was originally scheduled to take place in August 1996, but was postponed because of the TWA Flight 800 salvage and recovery operation.

FADS III was developed as a joint effort by Coastal Systems Station, Panama City, FL and NAVSEA 00C3. It evolved from the very successful Lightweight Dive System (LWDS) now in use throughout the Fleet and was intended to provide greater depth and duration capa-



BMCS (MDV) Eric Frank oversees his dive station as BMC (DV) James Mariano and LT Santos bring a diver to his bench.

bility for salvage and husbandry dives. The system includes a control console assembly, volume tank assembly, air supply flask rack assembly, and a 5000-psi air compressor. The FADS III air supply rack assembly contains nine 3.15 cubic foot composite flasks which hold a total of 9000 scf of air at 5000 psi. The system



HM1(DV) Washington operates the FADS III console with the FADS III Air Supply Rack Assembly (ASRA) in the foreground.

operates very much like the LWDS except that both primary and secondary regulators are located on the control console assembly.

Early on in the development of the FADS III, MDSU-2 divers, working hand-in-hand with the NAVSEA and CSS engineers, played an instrumental role in evaluating design considerations from an operator's perspective, suggesting likely dive system configurations and scenarios, and in the development and implementation of the Operational and Emergency Procedures. This proved to be invaluable in the overall success of the project, and helped ensure a viable, useful asset for the Fleet.

The system was certified under a number of different configurations allowing the user maximum flexibility in meeting operational requirements. In addition to supporting typical diving operations to 190 feet with the FADS III, alternate configurations were tested including use of the FADS III as primary air source for the Transportable Recompression Chamber System (TRCS), use of the FADS III control console assembly with the MK-3 LWDS flask rack assembly, and use of

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FADS III (from page 8)

the FADS III flask rack assembly with the LWDS control console assembly. The initial certification was conducted at MDSU-2 in Little Creek, VA in January 1997. This certification was limited to 60 feet and provided MDSU-2 personnel sufficient depth to train and qualify on the system prior to the deeper dives. This also allowed MDSU-2 time to shake down the system and to make recommendations for improvements and other possible configurations to better meet operational needs.

In February 1997, the FADS III deployed with the USNS Mohawk en route to Roosevelt Roads, Puerto Rico for the final system evaluation. A series of workup dives was conducted culminating in three 190-foot dives verifying the ability of the FADS III to safely support MK 21 divers in all desired configurations. All dives deployed three MK 21 divers (including the standby) to evaluate the ability of the FADS III to meet the maximum flow requirements. During all testing the TRCS was configured for receiving primary and secondary air from the FADS III air supply rack assembly. The mission met with great success primarily due the combined efforts of all participants and paved the way for a continued NAVSEA/ Fleet working partnership.

NAVSEA personnel involved in the testing and certification of the FADS III were Bob Kilpatrick (SEA 00C33), BMCS (SS/MDV) Paul McMurtrie (SEA 00C36), Thomas Heldt (SEA 00C38), Rob Warren (SEA 00C41), Darrell Williams (SEA 00C43), and Mike Einhellig (SEA 00C43A).

CSS personnel participating in the testing and certification of FADS Ill were Marty Sheehan (Code A51) and Mark Black (Code A53).

MDSU-2 personnel participating in the testing and certification of FADS III were BMCM (SW/MDV) Eric C. Frank, BMCS (SW/DV) Douglas N. Roberson, BMC (SW/DV) Randy L. Contreras, HTC (SW/DV) Charles O. Catoe, BMC (DV) James A. Mariano, BMC (SW/DV) Michael A. Salazar, ENC (SW/DV) Anthony Hartman, BMC (SW/DV) Hugh C. Bell, HT1 (DV) Philip R. Hathaway, BM1 (SCW/DV) Joseph C. Spencer, DC1 (SW/DV) Timothy Dowell, HM1 (DV) Tanyah Washington, BM2 (DV) Daniel R. Knauss, EN2 (SW/DV) Edward A. Bartelli, EM3 (DV) Dane E. Doolittle, and LT Santos. ■

BMCS (SS/MDV) Paul D. McMurtrie is currently assigned to NAVSEA 00C as the Fleet Master Diver. He attended second Class Dive School in 1979 and was selected as Master Diver in 1992.



(*Top*) ENC (DV) Hartman of MDSU-2 helps red diver to the stage for one of the 190-foot certification dives, while BMCS (MDV) McMurtrie provides technical assistance to the supervisor. (*Bottom*) NAVSEA engineers Darrell Williams and Rob Warren look on during a critical phase of the certification dive involving shifting air supplies on the console while all three divers are on the bottom at 190 feet.

NEDU Report

SAT Divers: A Fleet Diver's Point of View

by MMCM(SS/MDV) Donald W. Curtis

Saturation Diver: it conjures up all kinds of visions for most Fleet divers. Visions range from a person wired with all kinds of testing equipment to a person being poked and prodded by researchers with the compassion of a hooded hatchet man on execution day. Some see a human-looking laboratory rat being electronically controlled to dance to the fancy of those observing him. Then there is the ever-popular idea of shore billet professionals who only go to sea once in a blue moon - you know, those chlorine divers that have never done a real working dive in their lives. There are more visions, but they are too horrid to mention in the company of children and most adults.

I must admit I was truly uninformed as to what the saturation community actually did to earn its dive pay. I had often heard of a senior group of Chiefs and Officers walking around with 409, cleaning saturation diving systems that they never used. Oh yes, the diving systems. Something apparently designed on the theory of Rubix cube. Monstrous contraptions that always seemed to be in overhaul and appeared never to be recertified.

You can imagine my reservations when I received orders to become the Command Master Chief of the Navy Experimental Diving Unit. I had heard all the stories: you'll be working with nukes again, they'll ruin your health, and of course, I hope you like being a guinea pig!

After being on board the unit for almost a year, I now know that these sat creatures are diving professionals and much more active than I was informed. They are no different from you in the Fleet, and yes, I can still walk almost as well as I could when I first reported here. (Old age will eventually catch up to all of us!)

All kidding aside, this is possibly the most interesting and challenging duty station I've had in my Naval career. I have a much greater respect for the divers who choose this demanding duty as their career path. I've done cold water diving in Norfolk, but always had something to do to keep my mind off the cold. Imagine, however, sitting in cold water for 8 hours with little really happening and no hot soup or coffee for the entire dive! Sound easy? You should give it a try. This is not to mention the agony of holding the barrel mouth piece of a LAR V in your mouth for 8 hours. These are dives that challenge the stamina and endurance of a veteran Fleet diver (which most sat divers are). If the cold and an 8-hour dive aren't enough, try staying at 1000 fsw for nearly a month with the cast from a Disney movie. Can you imagine waking up to the voices of Mickey and Donald every morning? How about the pleasure of sleeping on cold steel with no privacy day or night?

You might ask, why does anyone put themselves through such arduous dives? Is it a macho thing or some mental derangement not yet identified? Neither. These divers are professionals doing what they find challenging and important. The sacrifice of self and pain they endure is to ensure that you, the Fleet diver, have the safest equipment and procedures available the Navy can provide.

Dive Notes

Thanks to QMC (SW/DV) Mark Schleef at Deep Submergence Unit, San Diego, who designed and forwarded the modification, there is an approved alteration to the Diving System Module for the Standard Navy Dive Boat that allows operators to shift to emergency air in both configurations at the console instead of the below deck manifold. It also allows topside monitoring of the primary and emergency HP bank pressures from the console. The NAVSEA Drawing number for this alteration is 537-11-551-6965442 REV B. Cost for the alteration is \$20,000. This alteration was recently implemented and certified at Consolidated Divers Unit. Points of contact are Bob Kilpatrick, NAVSEA 00C3 (703) 607-2766 and MMCM (MDV) Hunt, CDU (619) 556-8290.

MMCM (SW/DV) Hunt, Consolidated Divers Unit

Just a few things that have been going on at NEDU recently:

- EXO-26 testing
- LAR V canister duration testing for Special Warfare
- 1000 fsw saturation dive for hearing and speech sound studies for all mixed-gas divers
- 300 fsw sat dive for MK-16 test and evaluation to expand EOD capabilities
- Gas mask testing for use by all branches of the service
- Work with an underwater submersible to make long distances underwater seem shorter
- Testing of buoyancy compensators and regulators for everyday use in the Fleet

So next time someone mentions sat divers with a negative tone in their voice, please take time to mention that the personnel of NEDU are serving the Fleet. These divers are working long hours day and night to make diving safer and easier for all military and civilian divers.

Master Chief Curtis is the Command Master Chief of the Navy Experimental Diving Unit. He has most recently served as Master Diver on the USS Emory S. Land (AS 39), the ex-USS Shenandoah (AD 44) and the Naval Diving School Training Center.

The OLD MASTER

by EMCM(SW/MDV) John P. Propster

While pondering the thought of writing an interesting article for *FACE*-*PLATE*, my mind kept drifting to the "road trip" I'd scheduled with a few local Master Divers to the DC area. The trip was to honor a friend and shipmate, MMCM(SS/SW/MDV) Dennis Wiley, on the day of his retirement ceremony. Then it clicked: write an article for "The Old Master" about THE "Old Master!"

Well, at first I thought this was going to be a monumental task, as not only is Dennis the senior Master Diver on active duty, but he's also the senior active duty Master Chief! I knew gathering his history would take many hours, and documenting it without losing anything in the translation would be an extreme challenge for the average man. What follows is a remarkable chapter of Naval History, as told by the sailor who lived the legend.

Master Diver Dennis Wiley was born March 10, 1944 to Seaman First Class, USN, Robert D. Wiley and Mrs. Marta M. Wiley of Portland, OR. He enlisted in the Naval Reserve in June of 1961 and drilled with Submarine Division 13-7 at Portland. After graduation from Sunset High School in June 1962, he discharged from the Naval Reserve. Following the example of his father, and wearing his father's WWII uniform, FA(SG) Wiley enlisted in the U.S. Navy.

His first assignment was to the Receiving Station at Treasure Island, San Francisco, where he was told he would wait on orders to boot camp. Orders arrived for Machinist's Mate "A" school at Great Lakes—NOT Recruit Training! He arrived at MM "A" School with a smile on his face.

After MM "A" School, he completed Submarine School at Groton, CT, and transferred to USS *Medregal* (SS 480) at Pearl Harbor. After earning his "Dol-



MMCM(SS/SW/MDV) Dennis Wiley.

phins" in August of 1963, MMFN(SS) Wiley moved on to Nuclear Power School at Mare Island, CA. He reported to USS Perch (APSS 313) at Subic Bay, Philippines in March 1964. Perch's mission was support of Underwater Demolition Team and other special forces operations in Vietnam. Perch was the last American submarine fitted with deck guns and the last American submarine called to "Battle Stations—Surface Gun Action." Dennis was on Mount 40-1 when its last round was fired into a Vietnamese village in support of an Army Special Forces Team which was coming under heavy fire. Aboard Perch, in preparation for his first reenlistment, it was discovered boot camp had been omitted from the career of MM2(SS) Wiley. Too late-carry on! Motivated by UDT divers, he attended Second Class Diver training at Subic Bay, graduating in November 1965. While serving on Perch, Dennis married Lily Amador Sabornido of Almeria, Leyte, Philippines. He cross-decked from Perch to USS Tunny (LPSS 282) at Subic Bay, and continued special warfare operations. MM1(SS/DV) Wiley departed the Philippines in mid-1967 for First Class Diver training at the Washington Navy Yard, graduating in January 1968.

From January 1968 until 1970 he gained a working knowledge of surface

and submarine ship husbandry aboard USS *Isle Royal* (AD 29) at Long Beach, CA, and USS *Nereus* (AS 17) in San Diego. He completed Saturation Diver training in August of 1969 at the old Experimental Diving Unit at the Washington Navy Yard. He was under orders to USS *Pigeon* pre-commissioning when USS *Grayback* (LPSS 574) "shanghaied" him for another tour of special warfare operations at Subic Bay.

He advanced to Chief Petty Officer April 1, 1971, and set his sights on the ultimate goal of becoming a Master Chief Petty Officer and Master Diver. After *Grayback* he completed tours at Naval Undersea Center at Long Beach, where he as promoted to Senior Chief, and aboard USS *Brunswick* (ATS 3) at Pearl Harbor as Senior Enlisted Advisor and where he finished all requirements for Master Diver evaluation.

Selected for Master Diver in October 1977, he next served at EOD Training and Evaluation Unit One, Barbers Point, Hawaii, his first shore tour! During that tour he advanced to Master Chief on July 1, 1979, and was assigned duties as Senior Enlisted Advisor/Command Master Chief. At EODTEU ONE, he somehow found the funding and time, with the assistance of two EOD technicians, to design and build the Navy's first fully operational and certified flyaway air diving and recompression chamber system. That system, the first to be certified on the initial NAVSEA visit, is still operational at EODMU 5 Det Bahrain. Upon initiation of the Enlisted Surface Warfare program in December of 1978, Dennis applied for and was awarded the Enlisted Surface Warfare designation in June of 1979 based upon completion of qualifications on USS Brunswick. He transferred from EODTEU ONE to USS L.Y. Spear (AS 36) at Norfolk, VA.

On August 31, 1981, Master Chief Wiley transferred to the Fleet Reserve. "Mr." Wiley was hired by Taylor Diving of Belle Chasse, LA. With Taylor, he logged over 5000 hours supervising saturation diving in addition to surface-sup-

THE OLD MASTER (from page 11)

plied deep air and mixed-gas dives while working in Mexico and along the Gulf and California coasts. In 1984, after completing curriculum development, he spent five months in Shanghai, China teaching saturation diving. In January of 1986, the offshore industry bottomed out and he received an unexpected call and was "invited" to return to active duty.

As a resurrected Master Diver, he reported to Naval Ocean Systems Center at San Diego in July 1986. Naval EOD Technology Center at Indian Head, Maryland was his next assignment in September of 1989.

In March of 1994, Dennis was assigned to BUPERS as Detailer for the Fleet and Saturation Diver Community. During that tour he worked extensively at community management issues for the betterment of all diver communities.

Dennis will cross the brow and go ashore to retirement August 31, 1997 af-

ter completion of over 36 years in service, of which more than 30 years were completed on active duty. He and Lily, his wife for 31 years, have plans to move to Oregon, where they intend to plant a tree and watch it grow to maturity while they establish roots of their own.

Dennis, thank you for providing this insightful chapter, but most of all, thank you for the guidance, wisdom, and sacrifice you and your family have dedicated to your country and its Navy. Your commitment has had an immeasurable impact on the creation and maintenance of the world's greatest Dive Team.

Master Chief John P. Propster has recently transferred to SURFLANT as Force Master Diver. Previous diving commands include USS Florikan, USS Kittiwake, MDSU 2, USS Beaufort, and SIMA Norfolk.

Эп Метогу

Warren D. Thomas, former Navy diver and marine salvage expert, passed away 2 May 1997 in Martinez, California at age 76. Mr. Thomas served in the Navy from 1939 to 1967. A qualified 1st class diver, he retired as Chief Warrant Officer. After retirement he was employed by Murphy Pacific as Senior Vice President and was active in the clearing of the Suez Canal for the Supervisor of Salvage.

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