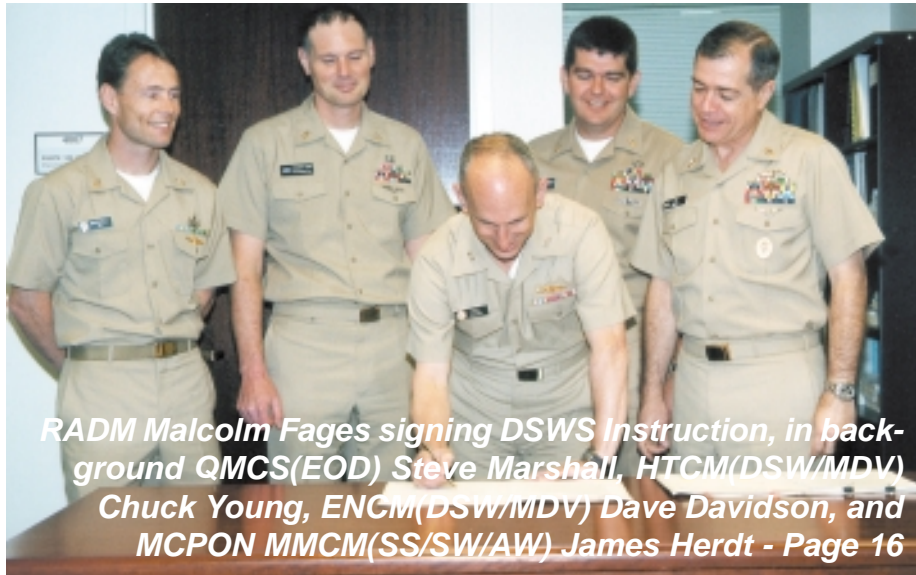




FACEPLATE

The Official Newsletter for the Divers and Salvors of the United States Navy
Volume 5, No. 1 / June 2000



RADM Malcolm Fages signing DSWS Instruction, in background QMCS(EOD) Steve Marshall, HTCM(DSW/MDV) Chuck Young, ENGM(DSW/MDV) Dave Davidson, and MCPON MMCM(SS/SW/AW) James Herdt - Page 16



Omega 5 headed for the bottom in 10,000 feet of water off Pago Pago, American Samoa - Page 9

SUPSALV Sends

As highlighted by our Front Page picture and headline, the article of greatest interest to Fleet divers should be the one titled "Diving Salvage Warfare Specialists" (DSWS). In it, and repeated in CAPT Chris Murray's SUPDIVE note, are the names of those who put forth the effort to get Fleet diving the recognition it justly deserves as a Warfare designation. Let me add my thanks to those who pushed and prodded this initiative along. This change will increase the significance of the insignia we all wear proudly on our uniforms. However, with the recognition comes increased responsibility as there will be greater emphasis on qualification both as a DIVE SUP and in your progression to MDV and on to a commission. Treat it as a challenge and don't get left behind. This office will support you in every way possible.

A principal goal of FACEPLATE is to highlight Fleet salvage. To that end reports on the "Bayou Zachary", by Captain (Sel) Phil Beierl and the story of corralling EX-SUSTAIN, by Jim Ruth prove that what may seem impossible can be done given proper planning and most importantly the right people. To continue emphasis on Fleet accomplishments our next issue will concentrate on three high profile aircraft salvages; first the recovery of JFK Jr's aircraft off Nantucket; second the EYGPT AIR 990

(continued on page 2)

In This Issue

SUPSALV Sends	1	Ballast Tank Improvements	11
New Salvage Calculations Computer Program for Fleet Salvage Personnel	3	NDSTC 20th Anniversary Update	12
Command in the Spotlight	4	USS JOHN C. STENNIS (CVN 74) Screw Change	13
Saga of the EX-SUSTAIN	6	EXO BR MS Approved for Surface-Supplied Diving	14
Reunion 2000 a Big Hit	7	Historical Notes	15
00C Qualifies Friction Stud Welding Procedure	7	Diving Salvage Warfare Specialist Approved	16
USS RUSSELL (DDG 59) Strut Bearing Replacement	8	Bayou Zachary	18
An Adventure in Pago Pago	9	The Old Master	19
Book Review	10	From the Supervisor of Diving	20

SUPSALV Sends *(continued from page 1)*

flight recovery off Rhode Island and finally the recovery of ALASKAN AIR 261 off Port Hueneme. I have a commitment from CDR Lee Hall of Deep Submergence Unit to provide an article on ALASKAN AIR. With input from GRASP, GRAPPLE and other units involved we can document the difficult tasks these high profile jobs entailed. My staff can't document your efforts without your input; who was there; who made the recovery dives. These are stories that rate being told.

To round out this issue we have included articles on two high visibility UWSH jobs both of which directly affected deployment of major Fleet assets. These articles, on the RUSSELL bearing staves and screw changes on the STENNIS, highlight team efforts by MDSU ONE and CDU divers with industrial facilities and NAVSEA personnel. Congratulations to all those involved who enabled timely deployment of NAVY strike capability. Finally, from items to keep in your

toolbox perspective comes LCDR Jeff Stettler's article on the "New Salvage Calculations Computer Program for Fleet Salvage Personnel" and LT Eddie Gallion's article on "00C Qualifies Friction Stud Welding Procedure". Both describe new tools for salvage and UWSH. No tool is of value unless it's used, so call or email if you have questions about these or any other tools in our inventory.

FACEPLATE is published by the Supervisor of Salvage and Diving to bring the latest and most informative news available to the Navy diving and salvage community. Discussions or illustrations of commercial products do not imply endorsement by the Supervisor of Salvage and Diving or the U.S. Navy.

Articles, letters, queries and comments should be directed to the Commander, Naval Sea Systems Command, NAVSEA 00C, 2531 Jefferson Davis Highway, Arlington, VA 22242-5160. (Attn: FACEPLATE). Visit our website at <http://www.navsea.navy.mil/sea00c>.

Captain Bert Marsh, USN
 Director of Ocean Engineering
 Supervisor of Salvage and Diving
 NAVSEA 00C
 marshb@navsea.navy.mil

Jim Bladh
Managing Editor
 Head, Operations Branch, 00C22
 bladhjc@navsea.navy.mil

HTCM (MDV) Chuck Young, USN
ENCM (MDV) Dave Davidson, USN
 Fleet Liaison Editors
 youngch@navsea.navy.mil
 davidsondl@navsea.navy.mil

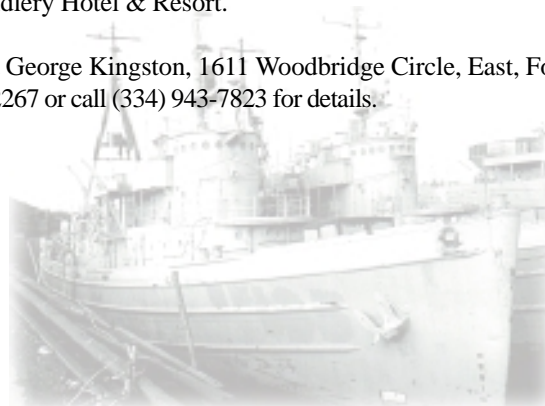
F. Scott Lassiter
 Graphic Designer
 slassiter@roh-inc.com

National Group Seeks Fleet Tug Sailors

Seeking former and current crew members of U.S. NAVY, ARMY, and COAST GUARD "workhorses" (those tugs and salvage ships classified as ATF, ATR, ATO, ATS, ARS, ASR, Ex-NAVY WMEC, U.S. ARMY LT, and WSA, and all YT-class Ships).

The National Association of Fleet Tug Sailors (NAFTS) Eleventh Annual Reunion will be held in San Diego, CA, October 4 - 8, 2000, at the Handlery Hotel & Resort.

Contact George Kingston, 1611 Woodbridge Circle, East, Foley, AL 36535-2267 or call (334) 943-7823 for details.



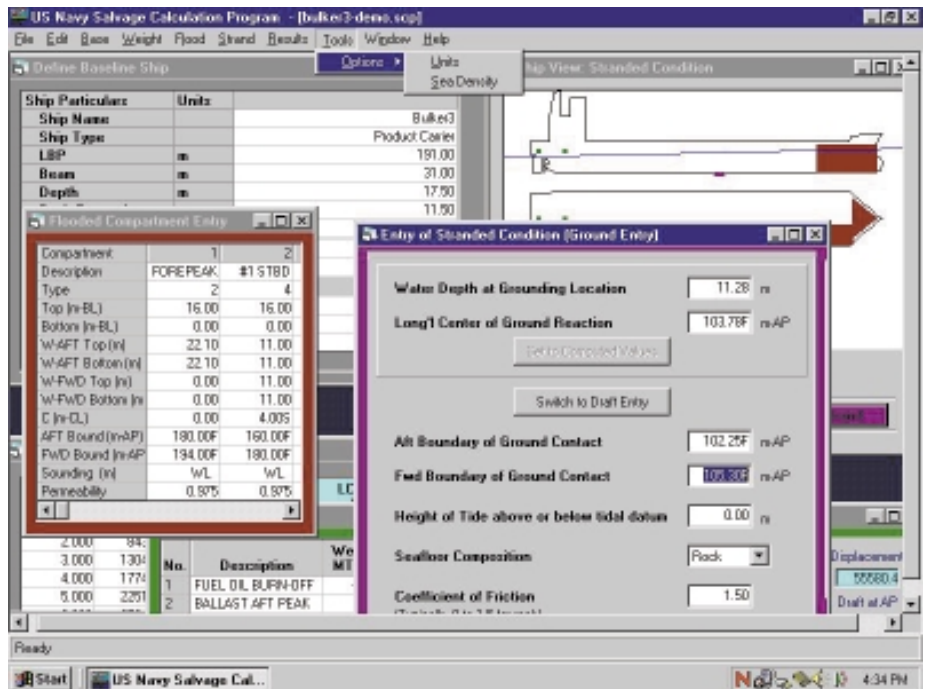
New Salvage Calculations Computer Program for Fleet Salvage Personnel

By: LCDR Jeff Stettler



The 1998 Submarine and IUSS Training Requirements Review for Navy diving and salvage training and the 1998 CNO Salvage Executive Steering Committee requested that NAVSEA 00C develop a computer-based salvage calculations program, a “mini POSSE” – calculation software for light salvage operations. The goal was to provide a computer tool to supplement instruction given in the Salvage Officer course, as well as provide a computer tool for Fleet salvage calculations refresher training and for use in simple salvage operations, where more complex salvage engineering analysis is not required.

In response to these requests, NAVSEA 00C has developed a computer program (named “Salvage Calculations Program” or SCP), based on the RAPID mode of the Program of Ship Salvage Engineering (POSSE). SCP provides the same basic logic flow and calculations as taught in the Salvage Diving Officer course, with special emphasis on conducting stranding calculations as well as calculations for afloat stability and trim (intact or damaged). SCP calculations are based



Screen capture of SCP for Windows.

upon first principles. As with the hand calculations taught in the Salvage Diving Officer course, data input requires knowl-

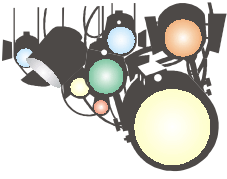
edge or documentation of the vessel’s hydrostatic properties and weight. Analysis capabilities (and results) depend upon the fidelity of the entered data.

SCP is a menu-driven Windows program and has full Windows functionality (e.g., files, print, cut, paste, view, etc.). Logic flow and data prompts follow standard ship salvage calculation methodology. The screen shown above illustrates menu arrangement and data input and output. A baseline condition is established under the “Base” menu, including entry of a vessel’s hydrostatic properties (i.e., data from Curves of Form), vessel weights and centers of gravity, righting arm data (i.e., data from Cross-Curves of Stability), strength information (i.e., section moduli and shear areas), and plan/profile/section



M/V Sergio Zakariadze aground, Old San Juan, Puerto Rico.

(continued on page 15)



Command in the Spotlight

Keyport, Washington

By MDV D.R. Briggs

Keyport? Where's that?

Just down the hill from the crossroads of SCUBA Lane and Hardhat Street, in the small unincorporated town of Keyport, WA, sits an old chapel converted many years ago into a Navy Diving Locker. Inside this 1918 building sits a recompression chamber built in 1930 with every one of its 618 or so original rivets still performing their job. Evidence of several "Diver-Alts" performed throughout many decades by highly creative and motivated divers is reflected in a mismatch of decor. From Paul Hughes' built-in desks and cabinets and Don Rogers' MK 5 helmet and knot board made from small stuff, to the workbench made from the bowling alley floor removed during a previous base renovation (still sporting the pointers), the divers have left their mark. Familiar diving patriarchs like Master Divers Robert Sheets, Jerry Kinnard, and Bobby Moore, or famous diving corpsmen like Larry Stokes, as well as their protégés like First Class Divers Dearl Hankins and Leonard Winter (No "s"!), have all lived part of their lives within the walls of the old locker. But, today's legacy isn't being built into this historical landmark rather into those Navy Divers presently serving in the great Pacific Northwest and the people of its local communities.

In days gone by, Keyport divers devoted most of their talents to the recovery of underwater weapons on local test ranges in Washington and Canada. Operating from small craft, braving waves and cold weather, dodging sea-sick crew members and an occasional torpedo that disappears in the depth where it is more often

felt before it is seen. Divers have been an integral part of the ranges forever. Starting in those early days with the MK 5 and progressing to modern rigs including remotely operated vehicles (ROVs), divers did it all when it came to ushering ex-

dozens of patients. Not generally viewed by most divers as the Hooyah, deep-sea diving, salvage, ship husbandry, Hollywood kind of stuff. HBO carries its own weight when it comes to accomplishment and job satisfaction. From a lifesaving

Scuba Lane, Keyport WA



hausted torpedoes back to the firing pier. This last decade, however, has seen many changes here at Keyport. Not only is the MK 5 permanently mounted on its display stand and ROVs are run by civilians, but the old method of proving *every* weapon has dwindled down to sample testing from a production "lot". Though testing of torpedoes is a fraction of what it used to be, the diving locker has maintained its viability by doing what Navy Divers do best—improvising.

In the Keyport of the new millennium, you will find on almost any given day a team of divers using the chamber for something its builders never envisioned nor would have understood—Hyperbaric Oxygen Therapy (HBO). For the past several years, Keyport has administered on average more than 250 HBO treatments for

treatment of an 8-year-old boy stricken with necrotizing fasciitis (i.e., a frequently fatal flesh-eating bacteria), to the saving of limbs infected with osteomyelitis, or the frequent healing of wounds traditional medicine was unable to achieve, Keyport has "been there—done that".

We haven't done it alone, though. Diving medical doctors at Branch Medical Clinic Bangor, Naval Hospital Bremerton, and the Army doctors at Madigan Army Hospital in Tacoma, provided keen insight and their professionalism allowed them to see and apply the benefits of HBO. Without their help, most of those we have treated would still need healing. Although this HBO service has saved hundreds of thousands of dollars for the Navy medical community in reduced CHAMPUS costs, its real legacy is the people we have

(continued on page 5)

FACEPLATE

(continued from page 4)

treated and the lives they enjoy. To see a shipmate or his family members healed by HBO, after living for years with a medical problem, is worth every minute invested. It's somewhat like the feeling Navy Salvage Divers had when they saw the USS BLUEGILL rise to the surface after 14 years on the ocean floor. The big differ-



EN2 Marler pilots the 35-foot work boat through the Hiram Chittenden Locks, Lake Washington, in preparation for an inspection dive.

ence is that our patients lives have changed, while the BLUEGILL went back to the bottom of the ocean. This may seem like quite a change from our days as hairy chested Deep Sea divers, but it's not a big change for Keyport. After all, this is the only command in the Navy where all the Divers go to chapel every day.

In addition, Keyport has teamed up with divers from Naval Intermediate Maintenance Facility Bangor/Everett and Puget Sound Naval Shipyard to form a Regional Diving Locker. Although there are still three distinct commands with Dive Teams, personnel and equipment are shuffled from locker to locker and command to command to optimize diving assets within the region to get all of the diving-related work accomplished. This cooperative arrangement has allowed maximum efficiency at the least cost, without the confusion or temporary loss of production time normally associated with realignment of billets and organizational structures. All lockers follow the same baseline-training plan, qualify using the same PQS standards, and use the same re-entry control procedures. Military supervisors from

other commands even qualify as Chamber Supervisors on Keyport's recompression chamber. Additionally, the owners of the dive lockers and recipients of these cooperative diving services enjoy the benefit of knowing that their mission priorities are going to be considered and supported equitably with the other commands. They don't feel like just another customer without control over their own destiny. The payoff is a greater number of diving teams available with a broader base of equipment and professionals to satisfy any given job. I'm sure the benefits of that are self-explanatory to all.

In our quest to expand our horizons and find more diving jobs, Keyport has become a preferred diving service provider for many outside local and non local entities. From Fleet mooring buoy inspections for NAVFAC, to deep-

Finally (until we find something new to do), recent requests to support the Army Corps of Engineers have kept us busy working on shipping locks, harbor breakwaters, and other nontraditional adventures. At any given time on any given day, we may be working at Vancouver Island, Canada, one of the San Juan Islands, Dabob Bay, Hood Canal, Lake Washington, Idaho, or any other place we can punch holes in the water. This is diversity at its best.

For all of you who have served here in the Pacific Northwest, you know it's not all fun in the sun. In fact, it's only fun if you don't like the sun. Land of the proverbial moist cloudy drizzle, it's not hard to figure out why it's so green and uncrowded here. But if you prefer cold clear water, plenty of seabag storage space, clean air, no "water hours", and a small military contingent (30 military), there's no better place to be. ☸

CHIEF Strong drives the 70-year-old chamber down while CHIEF Wescom supervises the HBO therapy.



water aircraft salvage and augmenting Coast Guard diving teams in search of sunken fleets under the ice caps, we're doing our part to uphold the Navy Diver "can do" attitude. Naval Undersea Warfare Center, Division Keyport, is one of the best-equipped commands for non-ship husbandry underwater work. If we can't do it strictly with divers, we augment with our deep-diving ROVs and other assets, with personnel who operate underwater on a daily basis.

ENCM(SW, MDV) D. R. Briggs became a Navy Diver over 25 years ago. Stationed in the Pacific Northwest for over 10 years, he has finally been pried loose from Keyport and sent to Millington, Tennessee to serve the Diving Navy in a warmer climate.

SAGA OF THE EX-SUSTAIN

By CAPT(Sel) Phil Beierl and Jim Ruth

On January 14, the EX-USS SUSTAIN (AFDM 7), parted its tow line in a storm off Cape Hatteras while being towed from Little Creek, VA to Jacksonville FL. No one suspected this was going to be the start of one of the largest rescue/salvage/towing operations undertaken by the Navy. The task required close coordination among the Fleet, contractors, and SUPSALV, and spanned over 2000 nautical miles (NM) and took 6 weeks to accomplish.

SUPSALV mobilized its East Coast salvage and towing contractor DONJON Marine to relieve the USS GRAPPLE which was keeping station on the EX-SUSTAIN. DONJON Marine in turn subcontracted Crowley Marine to provide tug support to recover the EX-SUSTAIN.

During the initial ten days, Mother Nature threw an unprecedented series of winter storms at the drifting dock. The tow would be re-acquired on three separate occasions by the Crowley tug CRUSADER only to have the weather deteriorate, resulting in the parting of a 10-inch pendant to an "Orville Hook". On one occasion the CRUSADER became fouled in the tow bridle forcing them to cut the bridle to free themselves. Amazingly the EX-SUSTAIN managed to get east of the Gulf Stream and drift south until it was approximately 300 NM due east of Jacksonville. The tug ENSIGN was dispatched to render additional assistance.

After CRUSADER re-established the tow with a fourth "Orville Hook", Mother Nature again intervened, throwing a new series of Nor'easters at the dock and tugs. At times the winds reached Force 11 on the Beaufort scale resulting in the dock towing the CRUSADER at 7 knots. SUPSALV determined fleet assistance would be required to recover the tow as personnel were going to have to be placed onboard the dock to re-rig the tow

bridle at sea.

Divers from Mobile Diving and Salvage Unit TWO and SIMA, Mayport were tasked by Second Fleet to assist in recovering the EX-SUSTAIN. Second Fleet also provided USS SUPPLY (AOE 6) due to her speed and helo support capabilities from Jacksonville and USNS SATURN (T-AFS 10) from Norfolk with HC-6 embarked to transport the salvage team and equipment to effect the rescue of the EX-SUSTAIN.

SUPSALV established a command center in Jacksonville to coordinate logistics, communications, and rescue operations. Intensive planning sessions conducted by SUPSALV, contractor, and Fleet activities resulted in the development of an emergency tow configuration which was strong enough to support the tow but light enough to be man portable as the EX-SUSTAIN had no power. Several configurations were developed to allow a "max flex" approach to re-rigging the tow. All necessary equipment and personnel were staged in Jacksonville, as two back-to-back snow storms had virtually closed Norfolk and the greater Washington, DC area.

On 27 January, CO, MDSU TWO, CAPT (Sel) Phil Beierl, SUPSALV Rep, Jim "Doc" Ruth, contractor personnel (Billy Kratz and Clarence Squyres) departed Mayport onboard the USS SUPPLY to recover the EX-SUSTAIN. While the dock had nearly a 500 nautical miles (NM) head start and was drifting Northeast at approximately 5 knots, CAPT Joe Stafford, CO USS SUPPLY, dropped the hammer and began closing the gap at 30+ knots as

soon as the ship cleared Jacksonville. Meanwhile the USNS SATURN with HC-6 embarked departed Norfolk to rendezvous with USS SUPPLY.

Using a fifth "Orville Hook", ENSIGN re-established the tow. On 29 January, the first 8 members of the MDSU TWO, SIMA, and contractor salvage team led by MDSU TWO MDV Ken Brown boarded the EX SUSTAIN to commence rigging the dock for tow into Bermuda, which was



Aerial view of the EX-SUSTAIN as it endures the 30+ knot winds and heavy surf.

now only 60 miles away. While attempting to make a hard connection to the newly installed tow bridle, CRUSADER's aft bulkhead was stoved in by the dry dock. Six members of the team were forced to spend a night on the dock due to deteriorating weather conditions. HC-6 helos did an excellent job of placing the 10+ pallets of rigging equipment and the necessary food stuffs required by the salvage team. The remainder of the team was extracted on 30 January, in time to watch the Super Bowl.

A 12 man salvage team consisting of the divers from MDSU TWO, SIMA, SUPSALV, and DONJON re-boarded the EX-SUSTAIN on 31 January. Over the next several days, the salvage team and

(continued on page 11)

Reunion 2000 A Big Hit By Bob Bornholdt

Reunion 2000, a joint SEALAB, Trieste, Submersible Pilots, and support personnel celebration was recently held in San Diego. Over 150 aquanauts and hydronauts attended the four day reunion, held 16 - 19 March.

Activities began on Thursday night with a Mexican fiesta, held poolside at the home of Bob and Judith Bornholdt. On Friday, the activities included a presentation of the capabilities of the Deep Submergence Unit in San Diego, given by its boss, CDR Lee Hall. Lunch followed, with guest speakers Don Walsh and Dr. Andy Rechnitzer, who talked about the "Deepest Dive" on the Trieste (35,800 feet).

On Saturday morning, a business meeting and general discussion was held for all attendees. A banquet was held Saturday night, followed by several outstanding speakers. Jack Tomsky gave a talk on SEALAB; ADM Brad Mooney followed with a history of Trieste; and CAPT Bert Marsh (00C), the keynote speaker, gave an

account of recent Navy salvage operations, including the recovery of JFK, Jr., and his airplane. The evening concluded with the raffle of two stained glass MK V diving helmet creations by that world famous artist, Walt Mazzone (the heart and soul of SEALAB).

Sunday was "getaway day," and the Hospitality Suite was filled with coffee, muffins and farewells.

Attendees included: Sir John Rawlings (England), Richard Blackburn (Australia), John Kleckner (Singapore), Bill Lukeman (Canada), Dominique Sumian (U.S. Divers/Calypso captain), Dr. Paul Linaweaver (Santa Barbara), Dr. Robert Bornnman (Virginia), Mary Lou Cannon (San Diego), Captain Charlie Bishop (San Diego), George Martin (Maryland), Jack Reedy (Cal-Dive), Ed Cargile (Oceanside), Bob Croft (New York), Jim McDole (MS), and Herman Kunz (WA).

For additional information, or to get your name on the mailing list, contact Bob



SEALAB II, circa 1965.

B o r n h o l d t a t bornhlt@aol.com
or (619) 267-7503.

From 1980 - 1982, CDR Bornholt was the Commanding Officer of the Experimental Diving Unit at Panama City Florida, retiring from active duty in 1982. Bob is currently the owner and Chief Operating Officer of M & D Offshore, a San Diego marine surveying and consulting firm.

00C Qualifies Friction Stud Welding Procedure

By LT Ed Gallion

A procedure for underwater friction stud welding was recently qualified by the NAVSEA 00C Underwater Ship Husbandry Division at the Navy Diving and Salvage and Training Center



LT Gallion disassembles the friction stud welder.

(NDSTC). The procedure is for welding 1/2 inch carbon steel studs to base materials of DH36, HY80 and HY100 in water depths to 50 feet.

In friction stud welding, a threaded stud is rotated at a high rate, while under an axial force to generate heat. The interface area is heated to the point that both base material and stud are in a plastic state. Rotation is stopped and the axial force is maintained until the weld cools, creating a sound metallurgical bond between the stud and base material.

The stud welder qualified by 00C is a pneumatic machine attached by a vacuum pad. It can be used on flat or slightly curved surfaces by varying gasket thickness used in the vacuum pad. A fixture can also be used to mechanically attach welder to base material if the configuration will not allow use of a vacuum pad.

Qualifying in a tank is one thing, but does it work? That question was answered in February in support of a SPAWAR project. Five studs were welded to a torpedo tube shutter door to support a camera mounting bracket. The stud welder

performed exceptionally well during this operational trial.

Modification of a stud welder for underwater use and qualification has involved an extensive effort over several years and would not have been possible without the assistance of SIMA Mayport's Dive Locker. They provided divers, arranged NDT service, and came up with good ideas to make the machines more diver friendly. NDSTC allowing use of a controlled environment of thier tower for the final qualification dives was icing on the cake. BZ to all!

LT Gallion is a qualified Seabee Combat Warfare Officer and Basic Diving Officer. Ed is currently assigned to the Naval Sea Systems Command, Supervisor of Salvage and Diving, where he is a Project Officer in the Underwater Ship Husbandry division.

Strut Bearing Replacement for DDG 51 Class Destroyer USS RUSSELL (DDG 59)

By Geoff Healy

In January 2000, the first waterborne main strut bearing removal, repair, and replacement on a DDG 51 Class Destroyer was completed on USS RUSSELL (DDG 59) in Pearl Harbor. The task was successful thanks to the cooperative efforts of Mobile Diving and Salvage Unit ONE (MDSU ONE), Pearl Harbor Naval Shipyard (PHNSY), the crew of RUSSELL, and the NAVSEA Diving Services Contractor.



USS RUSSELL bearing shell.

In November 1999, a routine inspection revealed bearing staves extending aft out of a bearing housing beneath the rope guard on the port main strut bearing. COMSUBGRUMIDPAC's concern was heightened by RUSSELL's upcoming WESTPAC deployment. With a short window of opportunity and no immediately available dry dock, repair options were effectively reduced to a waterborne repair in Pearl or a slow transit to an available dry dock in WESTPAC. NAVSEA 00C5 was contacted to evaluate the feasibility of this operation. It was determined that challenges including lifting the shaft and propeller weight off the main bearing, extracting the bearing housings, and removal and replacement of welded-in-place NICU fairwater could be met.

MDSU ONE rigged and performed a lift of the shaft and propeller off the bearing, removed the damaged bearing hous-

ings, and replaced the bearing housings after refurbishment. The NAVSEA Diving Services contractor was responsible for removal and replacement of the welded fairwater bearing access. PHNSY refurbished the damaged bearings and modified the removed NICU fairwater with bimetallic welding of steel edging on all mating seams of the two fairwater halves, allowing for wet welding replacement of the fairwater.

Estimates based on bearing reaction calculations for total shaft and propeller weight, that would have to be lifted off the bearing, indicated that divers would need to remove three propeller blades to reduce weight. Propeller blade removal and fairwater removal began simultaneously.

After removal of three propeller blades and the fairwater, MDSU ONE divers began the bearing removal process. This required removal of the top half of the strut bearing, transfer of the shaft load to rigging installed in lifting tunnels in the hull, rotating the bottom half of the strut bearing top dead center, and removal of the bottom bearing half.

PHNSY renewed all staves on the bearing, which had detached from the phenolic foundation. Extensive damage to the port strut bearing, lead to inspection of starboard with a miniature underwater camera provided by NAVSEA. Stave damage was apparent on the starboard strut bearing, which increased scope of the operation to include renewal of the starboard strut bearing.

Load cell readings of actual shaft and propeller weight lifted during removal of the port bearing confirmed, that removal of three propeller blades was not required. This determination

saved considerable time and effort on the starboard side bearing replacement.

In little more than one month, complete refurbishment of both port and starboard main strut bearings went from "can't be done underwater" to another outstanding waterborne repair. Congratulations to the "can do" divers of MDSU ONE. QMCS (MDV) Danny Boyd, team leaders EN1 John Theriot and HT2 Rick Belton of MAKO, and EN1 Tim Hall and HT2 Erik Hauptmann of GREAT WHITE led some of the finest underwater ship husbandry divers I have ever had the pleasure of working with. 🙌

Geoff Healy is the Senior Propulsion Systems Engineer for the NAVSEA Underwater Ship Husbandry Division. Like all Navy Divers, Geoff gets lots of motivation from any suggestion that it "can't be done underwater."



Geoff Healy inspects the damaged bearing staves.

An Adventure in Pago Pago

By Jim Bladh

Historical background provided by PA3 Eric Hedaa, USCG



The USN Supervisor of Salvage, under the direction of the U.S. Coast Guard, sent two rusted-out 180-foot long-liner fishing vessels 10,000 feet to the bottom of the sea on 16 and 19 March 2000, respectively, bringing an end to their nine-year stint on the reefs of Pago Pago Harbor in American Samoa. The two Korean-flagged vessels were the last of nine fishing ships removed from the reefs.

In 1991, Hurricane Val tore all nine ships from their moorings in Pago Pago Harbor and threw them onto the reefs in front of the village of Leloaloa. A response team from Coast Guard Marine Safety Office Honolulu responded to the initial pollution threat in 1991, removing 10,500 gallons of oil from vessels that posed the greatest short-term pollution threat. After the initial response, the Coast Guard began a lengthy legal process of finding the ships'



UT-1 and OMEGA 5 sit stranded on the reef.

owners and holding them responsible for removing the ships. In 1997, the Coast Guard took responsibility for another clean-up when a slow oil leak was discovered coming from one of the rusting hulks, and none of the ships' owners could be found.

Three years later, with the environment once again being directly contami-

nated by the wrecks, the Coast Guard received funding from the Oil Spill Liability Trust Fund to remove the remaining oil. The Coast Guard also obtained funding through the Comprehensive Environmental Response, Compensation, and Liability Act for the removal of ammonia, asbestos, and other contaminants aboard the ships.

The Coast Guard contracted Hawaii-based Pacific Environmental Corporation to build trestles from the shore to where the wrecks lay on the reefs; cut seven of them down to their water lines; remove the remaining oil, diesel, ammonia, and asbestos; and dump the scrap metal out at sea. The Coast Guard then requested and received funding for support from SUPSALV for the removal of the two remaining ships. Crowley Marine Services was tasked by SUPSALV to pull the two remaining ships, which were in much better structural condition, off the reefs, tow them 12 miles out to sea, and sink them. Crowley's primary asset for this task was the utilization of the Crowley Salvage Ship AMERICAN SALVOR supported with a Huges 500 D helicopter. Bob Barth, from the U.S. Navy Experimental Diving Unit, was on scene as the SUPSALV representative for the removal phase of this operation. The ships' final resting place was chosen by the Environmental Protection Agency (EPA) based on the depth and



From Left to right: Jim Bladh, SUPSALV Representative, Governor Tauese P. Sunia of American Samoa, and Frank Igaz, Crowley Marine Salvage Master.

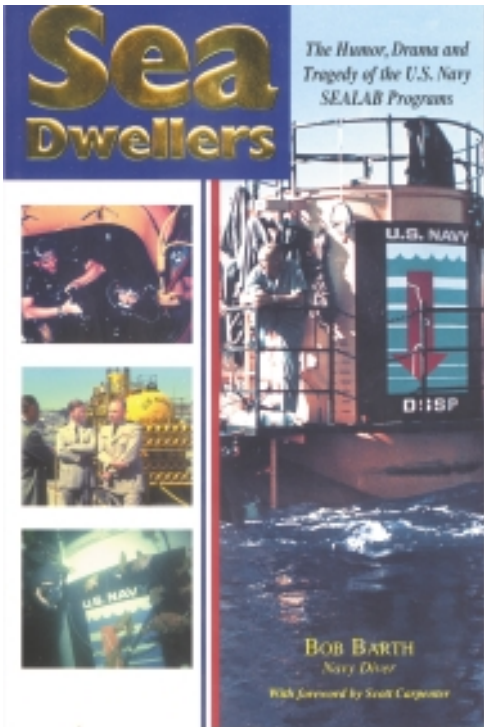
(continued on page 10)

Book Review

SEA DWELLERS

Bob Barth's Stirring Tale of the SEALAB Program

By Howie Doyle



Sea Dwellers: The Humor, Drama and Tragedy of the U.S. Navy SEALAB Programs is a journal of this exciting Navy adventure. Author and Navy Diver Bob Barth was the only man to experience all of the SEALAB programs and its predecessor, the Genesis program, from the other end of the hose. These programs provided the scientific basis for the practice of saturation diving as it is known and performed today. Barth and his peers were literally human guinea pigs. He gave blood, sweat, tears, the prime years of his life, and even his heart and soul to these programs to experience what most men can only dream of, life on the bottom of the ocean.

Sea Dwellers is published by

Doyle Publishing Company, Inc., 5206 FM 1960 West, Suite 107, Houston, TX, 77069; telephone 1-800-457-6459. Price \$16.95 plus \$3.00 shipping and handling. Visa, Mastercard, AMEX accepted. For more information go to: www.seadweller.com.

Editor's Note:

Bob is still charging: He has just recently completed a task for the Supervisor of Salvage, acting as the SUPSALV REP for the removal of two 185-foot LONG-LINERS F/V stranded in the harbor of Pago Pago, American Samoa. Bob's range of experience throughout the world and background in diving and salvage made him ideal for this task. Being no stranger to the South Pacific, he spoke the local language fluently.

(continued from page 9)



OMEGA 5 before extraction.

distance from American Samoa.

In planning the removal of the long liners, the Coast Guard worked closely with the EPA, SUPSALV, the National Oceanographic and Atmospheric Administration, and the government of American Samoa.

“Sinking these two worked out to be much cheaper than building trestles and tearing them apart,” said LCDR John Sifling, the project’s federal on-scene coordinator representative. “There was also much less damage to the coral, and it was quicker.” Sifling said that damage to the other seven boats was too severe to allow them to be pulled from the reef and sunk out at sea. 🚧

Jim Bladh presently serves as Head of the Operations Branch for the Supervisor of Salvage and is the Managing Editor of FACEPLATE.

FACEPLATE

(continued from page 6)

ships company withstood damaged tugs, small boat casualties and gale force winds as they struggled to overcome Murphy's law and Mother Nature enroute to the Old Royal Navy Dockyard in Bermuda.

While awaiting authorization to enter Bermuda, SUPSALV and MDSU TWO designed a more robust towing rig, with suf-



The EX-SUSTAIN enroute to Jacksonville towed by the CRUSADER.

ficient strength for making a 1000 NM tow in the heart of the North Atlantic winter. Using a satellite phone, the SUPSALV rep called in design details to the SUPSALV command center in Jacksonville manned by LCDR Sly Mata.

Finally, on 4 Feb the dock was safely secured along side the pier in Bermuda

cluding people at SUPSALV's ESSM base at Cheatham Annex. ESSM personnel worked tirelessly fabricating padeyes, assembling equipment, and coordinating air shipments to meet the short fused schedule. In the final analysis, five flights were required (two DC 8 flights and three Lear jet flights).

On 16 February EX-SUSTAIN cleared Bermudan waters under tow by CRUSADER enroute to Jacksonville. Finally, after an uneventful eight day tow, the dock arrived safely at Atlantic Marine and Dry Dock, Inc. in Jacksonville, FL.

And so ends the saga of the EX-SUSTAIN. Many times we felt as though we were caught in the Bermuda Triangle with Mr. Murphy along as an unwelcome guest. True to the long standing tradition of Navy salvage, all participants dug in, rolled up their sleeves, and persevered. Quoting Commodore DeStefano in his final sitrep " Bravo Zulu to the salvors who did most of the rigging and heavy manual labor ...including moving 11 shots of anchor chain into place bare handed". The line between military and civilian, Headquarters and Fleet, contractor and government became indis-

Ballast Tank Diving By Mike Dean Improvements

For years divers have entered ballast tank and performed numerous underwater ship husbandry tasks. More recently diving commands have developed gas free procedures in accordance with Naval Ships' Technical Manual, Chapter 074 to permit the divers to remove their hats while working in these confined spaces. This practice has significantly improved the divers mobility and efficiency and made working in ballast tanks a more comfortable practice. In fact, the only down side of this current practice is the effort required by each command to develop and maintain a unique process and to cross train divers to act as gas free technicians. In an effort to streamline the process, SEA 00C has been working to develop a common enclosed space procedure, reduce training requirements, and provide commands with reliable gas monitoring equipment and improved ballast tank lighting systems. To date, we have received agreement to move diving in enclosed space requirements out of NSTM 074 and into the USN Diving Manual. We are looking into portable gas monitoring equipment and will soon begin working with the medical community to develop allowable contaminant levels for divers working in hyperbaric spaces. We have built and provided prototype ballast tanks lights to SIMA Norfolk for evaluation. We would like your feedback in developing this common process and equipment. Commands interested in participating in this development should contact NAVSEA 00C5. A convenient link to SEA 00C5 is available through the Underwater Ship Husbandry Web Site at <http://www.navsea.navy.mil/sea00c>.

The salvage team assembled aboard USS SUPPLY (AOE-6)

MDSU-2	MDSU-2(cont.)	SIMA MAYPORT	NAVSEA 00C22B
CDR Beierl (CO)	MM1 Hooper	ENS(DV) Hensley	Jim "Doc" Ruth
BMCS(MDV) Brown	SM2 Guillen	STG2(DV) Nastasi	CROWLEY MARINE
BMC(DV) Bell	GM2 Urban	HM2(DMT) Dent	Clarence Squyres
BMC(DV) Breaux	BM2 Blanchard	EM2(DMT) Larson	DONJON MARINE
EM2(DV) Borden			Bill Kratz

and Commodore Robert DeStefano, EODGRUTWO arrived to assume on scene commander responsibilities from Capt Stafford. During the next two weeks the salvage team assembled a primary tow bridle and emergency tow bridle, and two additional bridle legs just in case they might be needed. The logistical challenge to accomplish this task required maximum coordination by all parties concerned, in-

tinguishable as we worked as one, to accomplish the mission. The lion's share of the success must be given to the divers of MDSU TWO and SIMA, Mayport who accomplished this task the old fashioned way by the sweat of their brow. To them I say anytime anywhere.

Jim "Doc" Ruth NAVSEA 00C22B Towing and Salvage Engineer.

Michael Dean is an "Ocean Engineer" graduate of Florida Institute of Technology. Mike is Head, Underwater Ships Husbandry Division for the Director of Oceaneering, Supervisor of Salvage and Diving.

NDSTC 20th Anniversary Update

By Master Diver John Schnoering

Greetings from the Emerald Coast! Stop and take a hard look at NDSTC today and compare it to what it was back in 1980. One would notice the school has not only changed on the outside with the addition of two large wings, two new 130-foot diving craft, and a free ascent tower, but also the addition of various specialized courses. To date, we offer 22 different courses of instruction (one is technically an evaluation process) with ~ 1,200 students annually. Even though we are not labeled a “joint training command,” we are working jointly with MCD Marines, Army, and Coast Guard under one roof. On the Navy side of the house, we have Fleet Diver, EOD, and Seabee training pipelines, and, in the not-too-distant future, the Air Force may join our team and move their operations from Key West. We also continue to train submarine sailors, international students, and members of the law enforcement community, and are currently looking at a partnership with the local universities. On top of that, our staff members are heavily involved in the local community, supporting various volunteer and self-help projects. As one can see, we have greatly expanded our role in the diving field outside of the hard-hat and salvage realm since moving the Dive School from Washington, DC. But, not to worry, there is some “old school” left in this institution.

If you want to take a trip back in time, read the book *The Terrible Hours*, by Peter Maas. Not to give away too much of the story, anyone who has the chance to serve on an 1930s/40s vintage ASR, or tried to work a lance through chest-deep mud in 38 degree water, or rode the SRC to depths in excess of 400 feet, could in part begin to relate to the undertaking of rescuing the 33 survivors of the USS SQUALUS and salvaging the sub to eventually be placed back in service. What’s that got to do with the price of tea in Panama City, you

MDV Schnoering



ask?

Our heritage as a diving community started circa 1882 and has played a vital role in Uncle Sam’s Navy and the civilian community ever since. Because of the exposure we have received as a result of the recent air tragedies, more and more people are asking the question, “Who are these guys and what do they do?” Through the press we have been receiving, the public is learning it’s not an easy job; it requires one to leave his natural breathing environment (the surface) and to maneuver underwater to accomplish a task with a support breathing apparatus. What is considered a simple task in theory on the surface becomes difficult and arduous to perform below the surface. The recent filming of the movie *Navy Diver* and the numerous documentaries on TV about diving have brought these facts and the individuals involved to the forefront.

On 1 - 2 June of this year, we are going to take the time to pay tribute to several men who went beyond the call of duty in the early days of diving, in conjunction with celebrating the Dive School’s 20th anniversary and 118 years of formal Navy dive training in Panama City at NDSTC. Planned activities during this celebration will include dedicating the Dive School

building to the legendary “Swede” Momsen and a Hall of Honor for those who received the Medal of Honor in hard-hat diving, to name a few. Food, refreshments, and souvenirs will also be available, with a social to wrap up the two-day event at the Long Glass Conference Hall. I don’t know which will hit the streets first, this column or the AIG announcing the event, but anybody and everybody who is or was affiliated (or not!) with diving is welcome to attend. Start talking to your commands now for travel arrangements and funding. And, for the entrepreneurs among us, we are looking for vendors to peddle diving-related wares. POC: Yours truly. 🙏

John Schnoering currently serves as the Command Master Chief/Master Diver at NDSTC and is approaching his 20 - year anniversary of joining the Navy in July.

USS JOHN C. STENNIS (CVN 74) SCREW CHANGE

By CDR Debra Bodenstedt

On 30 August 1999, divers from Consolidated Divers Unit (CDU) San Diego, CA, and Puget Sound Shipyard (PSNS), WA, started a double propeller replacement on USS JOHN C STENNIS (CVN 74) at Naval Air Station North Island, San Diego. Weeks of behind-the-scenes planning by PSNS (the planning yard for STENNIS work), Southwest Regional Maintenance Center (the work broker in the Southwest Region), NAVSEA 00C, and CDU were necessary before the first diver ever left the surface. This effort was the first combining of underwater

assets under the regionalization repair concept, and it highlighted the flexibility, capabilities, and benefits of regionalization.

PSNS Diving Supervisor Rick Jackson and CDU Master Diver BMCS Storment devised a plan to combine resources to complete the job. A diving station was set up on a barge using specialized equipment provided by NAVSEA 00C, PSNS, CDU, and PWC San Diego. This avoided diving under the flight deck and elevator and allowed movement of the barge with screw attached from under the overhang, to a place where the pier crane could safely lift the propeller. This setup also simplified movement to the outboard side for a second propeller change out. Mounted on the barge were two lightweight diving systems and compressor; a conex box containing the air consoles

communication gear, diver's underwater camera system, and diver changing area; NAVSEA 00C tool van; floodable counter



USS JOHN C. STENNIS (CVN 74) with her battlegroup following in rear.

ballast tank with strongback attached; 10-ton portable crane; pneumatic winch; and a hydraulic power unit, hose reel, and tools. A detailed floor plan was necessary, with accompanying stability calculations.

Good communication and teamwork were a must to safely remove and replace two 63,000-pound propellers. Two dive stations, with up to five MK 21 divers in the water at one time, were periodically used. Phone and chart personnel were kept very busy! As you can imagine, rigging equipment and tools that we used were neither lightweight nor highly portable. A crane was used to transfer rigging, lifting fixtures and tools to the water's edge. A combination of lift bags, chainfalls, a pneumatic winch, and diver ingenuity were used to get it all to and from the worksite. Three 50-ton hydraulic chainfalls were used to yard and stay the

propellers from shafts to strongbacks attached to a floodable counter ballast tank on the barge. Once transferred to the strongback, the entire barge was moved out from under the overhang, and the propeller was transferred to the pier crane.

With a new propeller in place, CDU's underwater welding team went to work reinstalling the rope guards. The Navy's only certified underwater welding team, led by HTC (SW/DV) Barker, fit up and welded the two-piece rope guards in place. Welding of each rope guard took approximately 40 hours, and one

welder completed each.

A combined crew of 16 Navy Divers, 6 civilian shipyard divers, and NAVSEA 00C's representative worked side by side on the surface and in the water, 12 hours a day for 20 days. The high level of professionalism and camaraderie that was quickly established among all personnel led to the safe completion of the job.

CDR Debra Bodenstedt commands CDU, Executive Officer is CWO4 Michael Spisak, and the Senior Enlisted Advisor is BMCS (SW/MDV) Kyle Galliard.

EXO BR MS

Approved for Surface-Supplied Diving

By HTC(M/DSW/MDV) Chuck Young

The Kirby Morgan Dive Systems EXO BR MS Full Face Mask is now class certified for use with surface-supplied diving systems in temperatures down to 28°F and to depths of 190 fsw (air), 140 fsw (NITROX), and 300 fsw (HeO₂). The EXO features a balanced, fully adjustable demand regulator, an oral nasal mask, and an exothermic exhaust system.

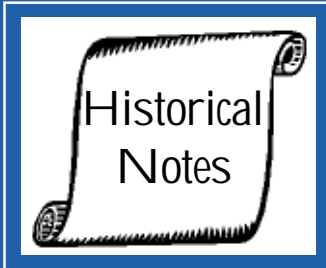
The EXO is an alternate band mask that can be used in ship husbandry, enclosed space diving, and light salvage work. 00C will not be issuing the EXO to Fleet units. Fleet units desiring to use the EXO will have to procure it. It can be ordered under DSI part number 300-038MS and will include the mask, O&M Manual, tool kit, large bore and standard manifold block to mask hose, standard comms module (non-preamplified mic), comm port plug, and air inlet swivel. If you do not already have the DSI Manifold Block Assembly, you will have to purchase it separately using part number 300-150 as well as the preamplified microphone part number 315-026 for use with a Hydrocom. Once procured, you will need to contact 00C for an Indoctrination Training video, qualification card, and PMS. You will also have to update your diving system certification PSOB and send it to 00C4 for approval.

After an on-site survey was conducted at Diving Systems International (DSI) Santa Barbara facility, indoctrination training, certification dives, validation of the operations and maintenance manuals as well as validation of operating and emergency procedures and PMS was conducted at Underwater Construction Team Two, Port Hueneme, CA. Special thanks to LCDR Brant Pickrell, CUCM(DSW) Rusty Deen and the crew of UCT TWO and Steve Kushner, Connie Morgan, and Robbie Olhiser at DSI for their support in certifying the EXO BR MS.



Paul McMurtrie during certification dive.

(continued on page 17)



Legion of Merit Presented to CAPT Willard F. Searle, Jr., USN

Reprinted from Faceplate, Summer 1970.

The Legion of Merit was awarded to CAPT Willard F. Searle, Jr., USN, for his outstanding services as the Navy's Supervisor of Salvage from September 1964 to May 1969. The presentation was made by RADM Maurice H. Rindskopf, USN, on 24 February 1970 during the "Equipment for the Working Diver Symposium" held at Battelle Memorial Institute in Columbus, Ohio.

His citation states "... CAPT Searle contributed more than any other individual since World War II to the high state of readiness which now exists in the Navy's salvage and diving organization."



The presentation of the Legion of Merit to CAPT Searle by RADM Maurice H. Rindskopf with CAPT E.B. Mitchell in the background.

(continued from page 3)

offsets (for display). Vessel weights that vary from the baseline condition are added or removed under a "Weight" menu. Damaged compartments of simple shape can be modeled under the "Flood" menu, and effects of free surface and varying ship waterlines (i.e., free-communication) are included in the calculations. Information for stranding calculation is entered under the "Strand" menu and includes capabilities for entering stranded drafts or defining the grounding location and extend, as well as effects of tidal changes on stranding calculations. Results are presented in graphical and tabular format, allowing the user to look at individual casualty "conditions" (e.g., free-floating flooded condition, stranded condition, stranded condition with tidal change, etc.). Under the "Tools" menu, a user

can select units (i.e., English or metric), display precision, reference frames, and water density. A detailed User's Manual is available as an online Help document under the "Help" menu. A Microsoft Word version of the Help document is available for printing.

SCP has gone through beta testing and has been distributed on CD by mail to all Navy salvage commands. Additionally, the program will be available to download by special request to NAVSEA 00C. Additional information is available on the NAVSEA 00C website.

Note: SCP will have significant limitations when dealing with complex salvage situations. SCP is much less capable than the Navy's POSSE, which is a detailed naval architecture and salvage engineering program. For more complex salvage situations, use of POSSE by an experienced sal-

vage engineer is highly recommended, vice relying solely on SCP.

LCDR Jeff Stettler is Assistant for Salvage and the Program Manager for the POSSE for NAVSEA 00C.



Diving Salvage Warfare Specialist (DSWS) Approval



By HTCM(DSW/MDV) Chuck Young
Cover photo provided by Dick Cole

I know all of you are aware of our efforts to get our community our own warfare designators and hearing us tell you “it’s coming, it’s coming, trust me”. Well, persistence has paid off; on 26 April DSWS was officially signed out. So what does DSWS do for you? The DSWS Program provides a professional development and qualification continuum that will increase combat readiness and enable you to maintain a proficient level of knowledge in all Fleet diving mission areas and operational environments. It will also formally recognize your commitment, experience, leadership, technical competence, and readiness for increased responsibility. DSWS is also equivalent in importance to other warfare designations.

As a warfare specialty, the DSWS qualification can only be obtained through a formal program outlined in OPNAV Instruction 1414.3 and can be viewed at the OOC website <http://www.navsea.navy.mil/sea00c>. Within a few weeks, the NAVADMIN will be released detailing the implementation of the DSWS program. DSWS is an integral part of a diver’s career path. It will be mandatory for all E-5 and senior enlisted personnel. Active duty E-4

and junior personnel may qualify. As part of the Navy Diver training plan, DSWS will be a prerequisite for 1st Class Diver (NEC 5342) and eligibility for advancement to E-5 and above.

While we wait for the NAVADMIN, here are some specifics:

- Master Divers are automatically qualified and will qualify all others.
- Commands and their ISICs not having a MDV should contact 00C34/36 (<http://www.navsea.navy.mil/sea00c>) for guidance.
- E-5 and senior personnel will have 12 months to qualify.
- Only enlisted personnel currently holding NECs 5346, 5341, 5342, 5311, 5343, 8493, 8494, 5931, 5932 are eligible.
- Must complete at least 12 months accumulated time as a 5343, 8493, or 5932.

The following common core PQS must be completed:

- Navy Diver (NAVEDTRA 43245), complete Watchstations 301-304.
- Underwater Ships Husbandry (NAVEDTRA 43252), complete all Fundamentals.
- Salvage (NAVEDTRA 432510), complete all Fundamentals.
- Small Arms (NAVEDTRA 43466), complete Watchstations 301, 302, and 314.
- Re-entry Control Procedures. Complete JQR for Divers Life Support System Maintenance Technician.
- Ship’s Maintenance and Material Management (3M), complete Watchstations 301 through 304.
- Damage Control (NAVEDTRA

U.S. Navy Diving Breast Insignias



2nd Class Diver



1st Class Diver



Master Diver

(continued on page 17)



BU1(SCW/DV) Eric Eaton, EO3 Emory Cole, Paul McMurtrie, HM1(DV) Howard Underwood, CM2(SCW) James Richardson, CE1(DV) Tim Ullom, Scott Lopez and CE1(SCW/DV) Dennis Metcalf.

(continued from page 14)

Point of contact for the indoctrination training video, qualification card and PMS for the EXO BR MS is Stuart Yee (NAVSEA 00C37) at commercial (703) 607-2766, DSN 327-2766, or email yeesm@navsea.navy.mil. Point of contact for certification is Rob Warren (NAVSEA 00C4) at commercial (703) 607-1570, DSN 327-1570, or email warrenrl@navsea.navy.mil.

BU1(SCW/DV) Eric Eaton, BU1(DV) Leo Trebles and CUCM(SCW/MDV) Rusty Deen during indoctrination training.



(continued from page 16)

43119), complete Watchstation 303.

- Safety Program Afloat (NAVEDTRA 43460-4), complete Watchstation 301.

The following platform specific diving related PQS must be completed:

- Diving, Salvage, and Submarine Rescue
- Underwater Ship Husbandry
- Special Warfare/Explosive Ordnance Disposal/USMC

- Naval Research
- Diving Training
- Underwater Construction

All core PQS is available for download at <http://www.cnet.navy.mil/netpdtc/pqs>. This summer MDV Propster will be heading up a PQS working group to develop a single DSWS PQS book and command specific PQS. Till then, commands will have to use the core PQS above and complete any command/platform specific diving related qualifications. Now for the

pin; when qualified, you will wear the diving pin designated by your NEC and wear it as your warfare specialty and use DSW as your designator after your rate.

The DSWS Program has been a tremendous undertaking by many divers within our community, but there are a few who deserve special recognition. They are QMCM(MDV)(Ret) Brendan Murphy, ENCM(MDV) John Propster, HTCM(MDV) Michael Washington, B M C M (M D V) Barry Burgess, MMCM(EOD) Jim Brooks, CDR Bill Orr, ENCM(MDV) Dave Davidson, and QMCS(EOD) Steve Marshall. HOOYAH DEEP SEA! 🇺🇸

Bayou Zachary

By CAPT(Sel) Phil Beierl

Thirty years ago the barge “Bayou Zachary” was stranded and abandoned on the southwest bank of the Hero Cutoff of the Inter-Coastal Waterway (ICW) south of New Orleans, Louisiana. Over the years, some effort to salvage the barge and its cargo of asphalt seem to have been made but without success. The net result was that many years later a badly deteriorated barge—still holding hundreds of tons of semi-liquid asphalt—found its way onto the Environmental Protection Agency’s Superfund list of pollution sites. With no owner to be held responsible for the clean-up costs, the project was “federalized” and made a government responsibility. This opened the door for the EPA to turn to the Navy and Mobile Diving and Salvage Unit Two (MDSU TWO) for help.

A survey in early January revealed the 236 foot by 44 foot barge nearly awash, with all compartments flooded to the waterline and significant structural



MMC Riendeau and SM2 Guillen install an external patch.

damage to the after port quarter—the entire aft one third of the port side of the

barge had been torn away. Test pumping showed that many key compartments could probably be made watertight and a diving survey of the starboard side aft compartments gave reason to believe they could be repaired. Most importantly two of the six cargo compartments thought to be full of asphalt were found to contain mostly water instead. A detailed salvage model in the POSSE program showed a reasonable chance of re-floating the barge. With the apparently low risk of a spill, MDSU TWO agreed to accept the job. While MDSU TWO salvors would handle the job of floating the barge, they would get support from the EPA, the US Coast Guard Gulf Strike Team, the Bureau of Reclamation, and Koester Environmental Services Company who together would handle all pollution control and disposal issues.

CWO3 Chuck Hulsizer and BMCS(MDV) Ken Brown took MDSU TWO Detachment Bravo back to New Orleans just after Mardi Gras. They organized a command post at a small shipyard that would serve as the ultimate disposal site for the barge, and staged diving and salvage equipment on a “spud” barge moored alongside the “Bayou Zachary”. Each morning the team made a ten-mile ICW boat transit to reach the salvage site and got right to work. Their first task was to clean up thirty years accumulation of trash and debris and to remove unnecessary

topside equipment and structure to lighten the barge. Then they got down to the seri-

ous business of restoring buoyancy.

Much of the asphalt was located aft of midships in the third main compartment, so one salvage plan relied heavily on restoring some buoyancy to the badly damaged stern section. Working in muck and tar that seemed to cover everything, divers were able to install patches and shoring to repair the stern-most starboard compartments, but still more buoyancy was needed. A key breakthrough re-



MMC Riendeau and BM2 Ogg install shoring on a damaged bulkhead below the waterline.

sulted from the discovery that there was not eight feet of asphalt in a key cargo compartment, but a three foot thick layer with water underneath. By forcing a large slotted pipe section through the asphalt layer, pump suctions could be lowered through the pipe and the water below pumped out. A final step was a major effort to jet and pump out the mud that had accumulated in the stern of the barge over the many years since its stranding.

Less than two weeks after they set to work, Detachment Bravo cheered as two tugs gently pulled the Bayou Zachary free of the mud bank and began the tow to the shipyard. Having planned for all manner of emergency, it seemed almost too easy as the barge was kept afloat with a minimum of pumping and the tow proceeded uneventfully. Only the premature grounding of the barge as it was two thirds of the way into the disposal slip at the shipyard soured an otherwise perfect operation. Despite this less than ideal mooring arrangement, the EPA happily took custody of the barge, confident that it would

(continued on page 20)

The Old Master

By **BMCM(SW/MDV) Joseph K. Johnson**

I was asked to write this article due to the fact that I just returned from the E-9 Selection Board. From my experience I can tell you that the process is not perfect but it is fair. Selection board members take

commands. The brief sheet also described how divers are detailed, the limited availability to work within source ratings and that divers **must** be a Master Diver (5341/5346) to be advanced to E-9. The latter

one good evaluation does not guarantee selection. It is your responsibility to accept and excel at the hard jobs both sea and shore. I hope we haven't gotten to the point that just because we wear the pin, we think we should be automatically advanced. The pin gives you the opportunity for advancement, but you still have to compete.



Master Diver Joseph K. Johnson

Each and everyone that has the opportunity to sit on a selection board should go. There is always a need for selection board members and recorders. It will really open your eyes and help the diving community to better understand the selection process. In the future when we get our own Selection Board, it will help to choose the best qualified members from our own community although our advance quotas will probably drop.

great pride in trying to choose the best candidate to fill each quota available. In all ratings it's not easy to compare divers versus non-divers. There are always good candidates in both, but with the limited number the board has to select, there will always be good candidates left out. Non-selection does not mean poor performance. It is simply a relative judgment of standing amongst peers when considering members for a finite number of advancement quotas.

statement should speak volumes to first class and saturation divers. If you want to be considered a viable candidate for Master Chief, you need to get hot! The detailer is waiting to hear from you.

I would like to close by congratulating our new Master Chiefs and Senior Chiefs for a job well done. I'm looking forward to working with each of you in the future.

There were 20 Master Divers up for selection to E-9 and seven were selected. There is a false perception that if a Master Diver is on the board, he will have the power to influence each selection. If that were true, we would have selected 20 Master Divers.

In the past selection boards were briefed on SPECWAR programs. That wasn't the case this year as each individual board was given a binder containing information specific to each field of SPECWAR. The divers information sheet contained a brief description of each diver NEC, a list of hard jobs both operational and administrative, a list of sea/shore

It is no secret most boards look back a minimum of five years. Your record has to stand for itself. Make sure your microfiche is accurate and legible and your ESR is up to date. You must have strong evaluations. Don't leave it up to the board to decipher if something is going on with your career, explain it. There is no substitute for sustained superior performance;

BMCM(SW/MDV) Joseph K. Johnson is currently assigned as Command Master Chief and Detachment FIVE Master Diver at Mobile Diving and Salvage Unit ONE.

From the Supervisor of Diving

Captain Chris Murray

Diving Salvage Warfare Specialists (DSWS)

DSWS has been approved by ADM Johnson!

The final step was the signing of OPNAVINST 1414.3 Diving Salvage Warfare Specialist Qualification (see page 16). Attainment of the DSWS designation signifies that a diver has excelled in competency and professionalism, and has achieved leadership positions beyond that of the basic diver Navy Enlisted Classification (NEC) qualification. This is a big step in the continued professional growth of our fleet divers.

Well done to HTC(M)(DSW/MDV) Young, ENCM(DSW/MDV) Davidson, QMCS(EOD) Marshall, HTC(M)(DSW/MDV) Washington, ENCM(DSW/MDV) Propster, BMC(M)(DSW/MDV) Burgess, MMCM(EOD) Brooks, CDR Orr and QMCM(MDV) (retired) Murphy for their persistence in making this happen.

Working Divers Conference (WDC 2000) January 25-27

Great turn out at the WDC in Panama City, Florida. 205 paying customers. Besides being a little cold for the south, it was a very productive week discussing various diving issues. WDC 2000 presentations, point papers, status of action items and a list of attendees can be found at our WEB site, <http://www.navsea.navy.mil/sea00c>. The list of attendees is password protected, but the rest is open.

HEO2 SSDS revised tables

Revised HEO2 tables and procedures are being finalized for operational testing. The tables have been revised to address the O2 convulsion problems that surfaced in the Fleet after the reintroduction of the FlyAway Mixed Gas System in 1997. This is in response to the MDV/CWO conference from last summer. The revised tables

have been reviewed by the Navy Decompression Team and are to be tested this summer with MDSU TWO divers while diving on the USS MONITOR. The goal is to complete 200 plus dives to depths from 210 to 240 FSW. NEDU and OOC will monitor the tests.

Master Diver Candidates

MDV candidates need to get your packages in. The overall manning now sits at 86 MDV's to fill 95 billets. As a reminder a change to the MILPER's manual is in effect as of APR, 2000 that makes it mandatory for E-8's to become MDV's within one year of making E-8. E-7's are required to be fully qualified to attend an MDV class (recommended, passed the test, with a package into BUPERS) within three years.

(continued from page 18)

float all the way into the slip as they began removing cargo.

Two important lessons were learned during this operation. First and foremost, a thorough and detailed salvage survey pays dividends in the long run. Do not assume that the record of a previous survey is correct and don't take anything for

granted. A core sample of the asphalt cargo during the initial survey would have revealed the water underneath. The second lesson is that when working in a team with several agencies it is always important to double-check the work by the other agencies. While preparation of the disposal site was an EPA responsibility, it

would have been wise to QA the dredging work.

CAPT (Sel) Phil Beierl is the Commanding Officer of Mobile Diving and Salvage Unit Two.

DEPARTMENT OF THE NAVY
SEA 00C
NAVAL SEA SYSTEMS COMMAND
2531 JEFFERSON DAVIS HIGHWAY
ARLINGTON VA 22242-5160

Official Business

EDITOR'S NOTE

SHARE YOUR EXPERIENCES AND LESSONS LEARNED: OUR NEXT EDITION OF "FACEPLATE" IS SCHEDULED FOR SEPTEMBER 2000. I WILL REQUIRE YOUR ARTICLES NO LATER THAN 1 AUG 2000. INCLUDE PICTURES WITH CAPTIONS, AND THE NAMES OF YOUR DIVERS. ALSO, A SHORT BIO OF THE AUTHOR. CONTACT YOUR FLEET LIASON EDITORS (SEE PAGE 2).