



Diving Safety Lines

Spring Edition

2010

Diving Safety Lines is a semi-annual release by the Afloat Safety Directorate of the Naval Safety Center. The information contained herein is a summary of research from selected reports of diving hazards to assist you in your mishap prevention program. *Diving Safety Lines* is intended to give advance coverage of safety-related information while reducing individual reading time. This bulletin does not, in itself, constitute authority but will cite authoritative references when available. It is recommended that this bulletin be made available to all hands.

From the Diving Safety Division Head

LT William Cooper

Email: safe-divesalvage@navy.mil

Welcome to the Spring 2010 edition of the Diving Safety Lines. Let me start off by introducing myself, I am LT William Ross Cooper. I reported to the Naval Safety Center in March 2010 from Explosive Ordnance Disposal Mobile Unit One. During a several month gap between LT Wilson's departure and my arrival, the role of diving division head was diligently covered by CWO3 Annon. However, shortly after my arrival it became clear that the diving division had their work cut out for them and that I would have to hit the ground running.

By the end of this fiscal year we will have surveyed over 100 commands. In addition to the two-year rotation of diving safety surveys at Navy and Marine Corps dive lockers, the diving division has now begun conducting surveys on Air Force and Coast Guard commands.

There has been a lot of turnover in the diving division since our previous issue. This will be the last issue of the *Diving Safety Lines* for CWO3 Jeff Annon and NDC Michael Smith as they reach their retirements; we congratulate them on their outstanding naval careers. Welcome aboard to the diving division's newest addition NDC Rebecca Jones.

As many of you have most likely noticed, the face of the Naval Safety Center has changed. We now have a new website, and while the appearance may have changed, the Naval Safety Center will continue to provide the same great product. In addition to a new website, you can now follow the Naval Safety Center on both Facebook and Twitter.

If you need any assistance from the Naval Safety Center, please contact us here at safe-divesalvage@navy.mil or 757-444-3520 ext. 7837. We have a lot going on in the world of Safety, so pay close attention and stay tuned.

V/R

LT William R. Cooper

Diving Safety Lines
Naval Safety Center
 375 A Street
 Norfolk, VA 23511-4399
 Phone: 757-444-3520 ext. 7387, DSN 564-3520 ext. 7387
 Fax: (757) 444-8636, DSN 564-8636
 E-mail: SAFE-DIVESALVAGE@NAVY.MIL
 Head, Diving & Salvage – LT William Cooper
 Editor- NDCS Jeffrey Poulin

INSIDE THIS ISSUE	
Hail and Fairwell	2
MDV's Corner	3-4
MCPON Dives	5-6
DJRS	7-8
Summer Safety	9-10
FAQ – Flex hoses	11-12
Spotlight	13
FY09 Navy Dives	14
AIG 04-04	15
Top Discrepancies	16



Welcome Aboard



NDC (DSW/EXW/SW) Rebecca Jones

Email: Rebecca.A.Jones@navy.mil

I'm NDC (DSW/EXW/SW) Rebecca Jones and I checked onboard the Naval Safety Center this March, coming from NSWG-2 Logistics and Support Unit Two. As I relieve NDC (DSW/SW) Michael "Smitty" Smith, I'd like to congratulate him on a successful 22 year naval career and wish him well with his transition back to civilian life. Smitty has taught me and many of you a lot over the years and we will carry on his mentorship doing the best job in the Navy. Hoo-Yah Deep Sea!!!

I'm excited to be at the Naval Safety Center and I'm looking forward to visiting all the unique diving commands across the all the branches of the Department of Defense (DOD). The Naval Safety Center is already surveying Navy and Marine Corps diving commands and have now expanded our safety surveys to include the Air Force and Coast Guard dive lockers. As always, our goal is to ensure all of the commands we visit are conducting safe diving operations and we will continue to provide the highest level of support to all of the DOD diving commands around the world.

Dive Safe!

NDC Rebecca Jones



Farewell from the Assistant Diving Safety Division Head

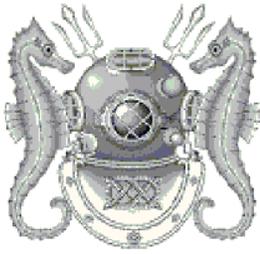
CWO3 Jeff S. Annon

Email: jeff.annon@navy.mil

It has been a distinct pleasure serving you for the last several years. I've enjoyed traveling the world to various dive lockers, meeting new folks, and seeing all the great things that are going on in our community. We have come a long way from the days when I was a young, second class diver. As a community, we've continued to transform ourselves to meet the needs of the Navy, while at the same time held true to our roots as combat salvage and harbor clearance divers. Through our ability to adapt and overcome mission obstacles, we have remained at the tip of the spear and in the fight during this ongoing war on terror. That is of great significance and importance and I think you will continue to see the role of the Navy Diver change. I can only ask that as you young guys come up, you continue to adapt our community to the needs of the Navy, yet maintain the core of who we are as Navy Divers and honor that tradition.

I will be relieved by CWO4 Robert Cassels from EODESU Two who has been around the fleet for many years and has a wide range of diving experience. Please welcome him as he begins to make his rounds out in the fleet. My plans are to retire on 13 Aug, 2010 and I will be moving on to the mid-west. I bid you all a hardy farewell and I raise my glass for a heart felt, "Cheers!" It has been an awesome ride and one I will surely miss! Hoo-Yah Deep Sea!

CWO3 Jeff S. Annon



Master Diver's Corner

NDCM (MDV/DSW/EXW/SW) Kent "Rock" Roberts

Email: Kent.Robarts@navy.mil

My deep sea brothers and sisters,

As I mentioned in my last DSL article, I have experienced the highs and lows of my job. The high point is having the opportunity to interact with the finest the military has to offer; military divers from the USN, USCG, USMC, USAF and USA.

Unfortunately, I experienced the low point of my job again; being an advisor on a safety investigation board (SIB) for a class "A" mishap involving a diving fatality. Although the official cause of death was drowning like the previous mishap, a predisposing medical condition caused the mishap victim (MV) to go unconscious while in the water column and drown.

In my last article I focused on lessons learned from improper procedures. In this article I will focus on "positive" lessons learned from this mishap. Senseless loss of life, in any situation, is devastating but hopefully lessons learned from this mishap can help prevent mishaps in the future. The following is an overview of the accident and factors that contributed to the mishap.

Mishap victim (MV) was a Special Operations Second Class Petty Officer (SO2) conducting a daytime combatant swimmer ship attack training dive using a MK-25 closed circuit UBA. This training dive was part of a three-week combat-swimmer course in Key West, Florida. Once the platoon was on the target vessel they began de-rigging in preparation for the hook and climb. As one of two pole men for the platoon, the MV and the other pole man remained "on bag." They also disconnected their buddy line in preparation for the climb. This was a departure from normal procedure but was preplanned because during a previous hook and climb platoon members became entangled in the pole men's buddy line.

While waiting for the platoon to finish de-rigging, the MV's swim buddy noticed a piece of gear became detached from the de-rigging line, and took action to secure it. He momentarily lost eye contact with the MV (approximately 15 seconds) while the MV lost consciousness, ingested sea water into his lungs, and sank away from the vessel.

The MV's swim buddy noticed the MV was missing and the pole was slowly sinking. He motioned to the platoon Officer-in-Charge (OIC) and surfaced. On the surface, he asked the ship's safety observer if he had seen the MV; he had not. The MV's swim buddy left surface (LS) and conducted a head count on the platoon to see if the MV had moved to a different position. When the swim buddy didn't find the MV, he notified the OIC who signaled for all divers (DV) to surface. On the surface a head count confirmed that the MV was missing.

The dive supervisor (DS) actuated an acoustic recall device and initiated the emergency action plan. Additionally, he deployed the lost-diver buoy and launched standby diver.

Meanwhile, the platoon assembled in a swimmer's pool and organized a search plan which the OIC recommended to the DS. The DS concurred and the platoon assembled at the bow and conducted a sweep.

One of the platoon's swim pairs quickly found the MV on the bottom, brought him to the surface, and placed him in the safety boat. The MV was unresponsive and pulseless. The DS directed CPR be initiated, recalled the rest of the divers, called 911 and got underway to the boat ramp to meet paramedics. Shortly after the safety boat arrived at the boat ramp, the paramedics arrived and transferred the MV to the local hospital. He was pronounced dead by the attending physician.

Due to space constraints, I had to give a condensed version of the casualty. Now, I will give a narrative of some of the “lessons learned.”

1. **Execution of emergency evacuation plan and determining proper course of medical treatment.** At 0911, the MV’s swim buddy noticed the MV missing and by 0930 the MV had EMT personnel attending to him. At 0935, the ambulance departed to for the hospital.

Only 34 minutes elapse from the time that the MV was found missing, a search was conducted, MV was recovered, his condition was evaluated, and he was transferred to the hospital. The dive team’s execution of their emergency evacuation plan was outstanding.

There was a chamber at the training facility; but, due to the MV not having a pulse and not breathing, the DS made the right call to have the MV attended to by EMT personnel vice putting him in the chamber.

2. **Ensure training reflects the operating environment/train like you operate.**

(a) In this training dive, the entire platoon was in the water (16 DVs). This is how a SEAL team platoon operates in a wartime situation. With that many DVs in the water, all personnel must be extremely well trained to ensure the dive side does not turn into chaos when you have a casualty.

Naval Special Warfare Training Detachment Group Two did an outstanding job of training the platoon in diving casualty control while ensuring the platoon received realistic training.

(b) As I mentioned in my narrative of the mishap, the MV and his swim buddy disconnected their buddy line. Although this is a deviation from the platoon normal procedure, the dive manual states the following in regards to MK-25 diving: “Because the risk is greater that a DV will become unconscious or disabled during a closed circuit O₂ dive than during other types of dives, buddy lines are required equipment for O₂ dives.” However the dive manual also provides for the DS to make an exception to this rule (after carefully considering the situation) if he determines that the buddy line will “impede the performance of the mission.”

In this case, the DS made the decision to disconnect their buddy line based on ORM and “train like you operate.” The point of concern is, had the buddy line been connected, valuable time might have been saved during the rescue. That may have improved the MV’s chance for survival. The medical representative and the medical examiner that performed the autopsy concluded that it would have been highly unlikely that the MV could have been revived even if the buddy line had not been disconnected. This conclusion was based on the fact that because of the pre-existing medical condition that caused him to go unconscious, he immediately would have ingested a large quantity of salt water.

The bottom line is, if you are going to deviate from normal procedures, make sure you utilize all aspects of ORM in making your decision.

These are only a couple of the lessons learned from this mishap. Please feel free to ask me to brief your command while I am out conducting a Diving Safety Survey.

SO2 made the ultimate sacrifice while training to go into harm’s way. Our hearts and souls go out to his family and friends.

NDCM(MDV/DSW/EXW/SW) Kent “Rock” Robarts
Naval Safety Center Master Diver



Master Chief Petty Officer of the Navy Dives with Southwest Regional Maintenance Center Code 360 Dive Division



CWO3 Charles L. Senter SWRMC Diving Division

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

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



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



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

He was then led under the hull of Ex-USS Midway to give him an idea of the work conditions Navy Divers endure (cold, dark, physically demanding work environment with multiple machinery spaces including suctions and discharges in close proximity to divers). Soon, the MCPONs :30-minute bottom

time was up and he had to return to the surface. He climbed up and over the dive ladder back onboard the SWRMC weld barge, sat on his dive bench, was un-hatted and he gave the “Diver OK” signal to his diving supervisor.

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

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

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





Dive Jump Reporting System

Managing the Input of Dives

CWO3 Jeff S. Annon

Email: jeff.annon@navy.mil

We have a growing number of commands that have dive reports idle in draft status or dives awaiting approval. It is time to look at your DJRS program and get these dives either removed from the queue or routed up the chain of command for signature. Reasons for these problems typically are:

- (1) Dive log was never finished.
- (2) Dive is incorrect and has been rejected back to supervisor.
- (3) Someone in the chain-of-command has transferred without approving the dive.

No member from your command should be allowed to transfer without first signing for all dives with which they were involved. This creates a huge problem and requires additional work by the command and in most cases the Naval Safety Center. It is imperative that the DJRS administrator for the command be included on the command check out form to prevent this while we are working on measures to prevent this within the DJRS system. In the future, you will not be able to PCS from one command to another if you have pending dives in your queue.

For dive logs never finished, you can either finish the log or change the information to create a new dive log. Since dives cannot be deleted in the system, unless sent back to draft status by the NSC, creating a new dive from this log is the only real answer for the DJRS administrator if the original dive cannot be completed. Dives requiring the dive supervisor's signature who has transferred will need to be PCSed by their current command and pulled back into the command from which the dives were conducted until all dives are routed properly. This is the quick fix until the system can be modified.

As you can see, we continue to work on this system to improve its performance and ease for users to enter information. We need your help to get these dives routed properly and in a timely manner. We are solicited frequently for diving information, particularly the number of dives being completed by Navy Divers. The dives waiting in these various queues are not being counted on our reports since they are not officially signed. It does not take a rocket scientist to figure out that if there is "no splash, there is no cash." This hurts our community immensely when our commands are trying to justify funding and so forth. Remember the diving day isn't done until the dive logs are signed!

CWO3 Jeff S. Annon



Connecting to DJRS

NDCS (DSW/EXW) Jeffrey Poulin

Email: jeffrey.j.poulin@navy.mil

It's a challenge for all of us just to stay connected or gain access to all the different programs we now need to do our jobs. From checking your "myPay" and downloading your LES, to submitting an electronic mishap report, and now even filling out a leave chit, we all face connectivity issues. Unfortunately the Dive Jump Reporting System (DJRS) is no different and in fact, it might be the most complicated for you to gain access to.

All military divers are required to have a DJRS account so that your dives can be recorded for statistical data, pay purposes, and as a personal dive log (PDL) for you. I'm amazed that each week our team creates DJRS profiles for a dozen or more military divers that have somehow fallen through the cracks and don't have a profile. Considering that the DJRS was launched in mid 2008, that's a lot of missing dive logs for these divers. The dive schools and the Naval Safety Center (NSC) are the only authorized authorities to create profiles; so, if you still don't have a profile contact us via e-mail with your profile information and we'll create an account for you.

For some divers, getting a DJRS account created is all that they'll need. But, for the divers that want to view their account or who are required to work with the DJRS to input and approve dives, they must get a web enabled safety system (WESS) account as well. To obtain a WESS account, go to the NSC website below and click on WESS in the right hand corner. Under account setup, you'll find "request account," click it. The process is all electronic and you'll receive a response by e-mail. Here is where DJRS connectivity gets complicated. For a WESS account you're required to have a CAC which must have your current "@mil" e-mail certificate on it. If you have an older CAC and try to get an account with a new e-mail address, you'll face connectivity issues and will have to call the WESS help desk. Once you have a DJRS and WESS account, they must be associated before you have connectivity. Either your command's DJRS manager or our team at the NSC can associate your account which gives you access.

The next step in getting you fully connected is to assign permissions to your DJRS profile. This allows you access to complete various tasks from inputting dives to approving dive logs. Your permissions are good for as long as they are assigned to you at your current command. As soon as the permanent change of station (PCS) button is hit on your account, upon transferring to a new command, all your permissions are erased and will need to be reassigned at your next duty station.

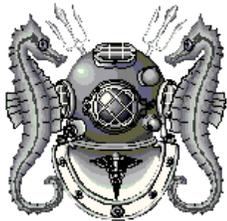
Here is a step by step checklist to get you connected!

1. Create a DJRS account. (e-mail DJRS profile information to NSC)
2. Request a WESS account. (CAC required)
3. DJRS/WESS accounts associated by command DJRS manager or NSC
4. DJRS account permissions set by command DJRS manager
5. PCS new command must reassign permissions

NSC website: <http://www.public.navy.mil/navsafecen>

WESS help desk: 757-444-3520 ext. 7048 (DSN 564)

NSC Code 32 Dive: 757-444-3520 ext. 7837 (DSN 564)



From The Medical Department

HMC (DSW/EXW/FMF) Ron Nading

E-mail: ron.nading@navy.mil

Summer Safety Notes

Heat Stress

During the summer months, heat disorders generally occur due to a reduction or collapse of the body's ability to shed heat by circulatory changes and sweating, or a chemical (salt) imbalance caused by too much sweating. When the heat produced exceeds the level that the body can remove, or when the body cannot compensate for fluids and salt lost through perspiration, the body's core temperature begins to rise and heat-related illness may develop. During environmental heat stress, 1 to 3 liters of water per hour can be lost through sweating. Those at greatest risk for heat-related illness include infants and children up to four years of age, people 65 years of age and older, people who are overweight, and people who are ill or on certain medications. Ranging in severity, heat disorders share one common feature: the individual has overexposed or over exercised for his/her age or physical condition in increased environmental heat. The three types of heat illness are: heat cramps, heat exhaustion, and heat stroke.

Heat Cramps: Brief, intermittent, and often severe muscular cramps that frequently occur in muscles fatigued by heavy work or exercise, with the primary cause being sodium and water loss. Heat cramps are suffered by persons who sweat profusely and subsequently drink water without adequate salt replacement. Water and sodium deficiencies combine to cause muscle cramping, which normally occurs in the most heavily exercised muscles, including the calves and arms (although any muscle may be involved).

Signs and Symptoms: Painful muscle cramps to arms and legs, hot sweaty skin, increased heart rate, normal blood pressure, patient is usually awake and alert

Treatment: Stop activity, cool environment, balanced salt solution (orally or IV in severe instances)

Heat Exhaustion: Heat exhaustion is a milder form of heat-related illness that can develop after several days of exposure to high temperatures and inadequate or unbalanced replacement of fluids, resulting in the inability of the circulatory and thermoregulatory system to keep pace with demand.

Signs and Symptoms: Heavy sweating fatigue/headache, pale, clammy skin, thirst, rapid heart rate, weak pulse, dizziness/fainting, nausea/vomiting

Treatment: Stop activity, cool environment, lie down, elevate legs, balanced salt solution (oral or IV) mist with cool water and fan body

Heat Stroke: Heat stroke is the most serious heat-related illness. It occurs when the body becomes unable to control its temperature: the body's temperature rises rapidly, the sweating mechanism fails, and the body is unable to cool down. Body temperature may rise to 106°F or higher within 10 to 15 minutes. Heat stroke can cause death or permanent disability if emergency treatment is not provided and even with appropriate treatment.

Signs and Symptoms: Extremely high body temperature (>105 F) flushed, hot, dry skin, rapid strong pulse, throbbing headache, dizziness/nausea, altered mental status

Treatment: Move to cool area, apply cold pack to groin, axilla, carotid arteries, mist with water and fan body and use a balanced salt solution (usually IV)

Poisonous Plants

Here are a couple of pearls while we are all out in the boondocks this summer camping and enjoying the great outdoors. We all have heard stories of getting into poison ivy, poison oak, or poison sumac. Poisoning is caused by an allergic reaction that results from touching the sap of these plants. The sap may be on the plant, in the ashes of burned plants, on an animal, or on other objects that came in contact with the plant, such as clothing, garden tools, and sports equipment. Small amounts of sap can remain under a person's fingernails for several days unless it is deliberately removed with a good cleaning of hot soap and water.

Symptoms: Blisters, burning skin, itching, and redness of the skin, swelling; symptoms can also affect the eyes and mouth in addition to the skin.

Home Care: Wash the area immediately with soap and water. Quickly washing the area can prevent a reaction, but it doesn't usually help if done more than 1 hour after touching the plant's sap. Flush the eyes out with water. Carefully wash any contaminated objects or clothing alone in hot soapy water. Do not let the items touch any other clothing or materials. An over-the-counter antihistamine such as Benadryl or a steroid cream may help relieve itching. If you have an exposure, you should see your health care provider or call the National Poison Control Center at 1-800-222-1222.

Medical Changes to Diving Surveys

We would like to inform the diving medical departments attached to diving commands receiving Naval Safety Center diving safety surveys that in the future we would like for the medical departments to provide the team with a memorandum stating your medical readiness and a print out of your medical readiness in regards to the percentage of completed dive physicals, PHA, and NPQ personnel. This report can be from either SAMS or MRRS. Also, I am in the process of developing a medical specific checklist that will be implemented in our diving safety surveys. For any questions or concerns, please call me at 757-444-3520 ext. 7081 or email me at ron.nading@navy.mil



Diving Safety Survey letters

CWO3 Jeff S. Annon

Email: jeff.annon@navy.mil

To better serve the fleet and to minimize the cost of mailing command letters in the future, the Naval Safety Center diving division will provide an electronic copy of the post-survey letter via e-mail. All commands surveyed will provide a valid e-mail address for distribution on the command information form provided by the survey team. Command diving representative will be expected to return an electronic copy of their response letter via their ISIC to the safe-divesalvage@navy.mil addressed within 30 days of receipt of their command letter. Failure to comply will result in a delinquent letter being sent to your ISIC.



FAQ: Flex Hoses

NDC (DSW/EXW/SW) Rebecca Jones

Email: Rebecca.A.Jones@navy.mil

The Naval Safety Center has been receiving numerous phone calls/e-mails about the requirements for testing and tagging of flex hoses. In a perfect world, the hose has the original hydrostatic testing/cleanliness paper work and the correct tag with the required information according to S6430-AE-TED-010. The S6430-AE-TED-010, Topside Tech Notes Volume III, and MIP 5921/033 spell out the requirements however; we're receiving several questions from the fleet:

1. **If you have the proper paperwork for the hose and there is no tag on the hose, what do you do?** If the metal, PTFE, and thermoplastic hose passes the visual inspection according to PMS and S6430-AE-TED-010, a new tag can be made using the information from the original paperwork, leaving the "start service date" blank, according to S6430-AE-TED-010 para. 10.2.3. If it is a rubber hose, follow para. 10.1.R S6430-AE-TED -010 to determine the start service date.
2. **If you have a proper tag on the hose, showing the proper information required according to the S6430-AE-TED-010, do I need to have paperwork?** As long as the tag is showing the proper information according to S6430-AE-TED-010 par. 8.5 and figure 8-1 and it still passes inspection according to PMS, no paperwork is required. Remember, a hose log is required to maintain a history for your DLSS hoses. This is according to PMS and Topside Tech Notes.
3. **What do I do if I have a hose with no paperwork and no tag?** Well, you are out of luck. Before a hose is installed into a system, it must be cleaned and proof tested to 200% of the hose's rated working pressure. To properly do this, the hose needs to be unmarried from its strength member and delivered to a proper testing facility. If you have a hose that is questionable, it is probably best to have a new hose manufactured to the proper specifications listed in the NAVSEA/ NAVFAC system drawings or Gen-Specs and have it cleaned and hydrostatically tested according to the S6430-AE-TED-010. On another note, hoses have been found with low pressure (LP) fittings on high pressure (HP) systems. The NAVSEA/ NAVFAC system drawings are your best source to research requirements for your hoses. If there are no drawings for your system e.g., scuba charging stations, then you should contact the manufacturer for the proper fitting and hose specifications for your application.

The recommended tag for a DLSS hose is shown below.

HOSE ASSEMBLY IDENTIFICATION TAG (SHIP _____)

SRD DWG NO _____	SYST. PRESSURE _____ PSI
SRP ITEM NO _____	START SERVICE
HOSE TYPE/SIZE _____	DATE _____
SERVICE _____	

ID TAG WHEN SELECTED RECORD DRAWING IS AVAILABLE

HOSE ASSEMBLY IDENTIFICATION TAG (SHIP _____)

PIPING ARR. DWG. NO. _____	SYST. PRESSURE _____ PSI
ASSY. PC. NO. _____	START SERVICE
HOSE TYPE/SIZE _____	DATE _____
SERVICE _____	

ID TAG WHEN SELECTED RECORD DRAWING DOES NOT EXIST

If you do not have the tags shown above, then according to PMS/Top Side Tech Notes, the tags must include the following information:

- (1) Test Activity
- (2) Date Tested (M/Y)
- (3) Working PSI
- (4) Proof Test PSI
- (5) Hose Serial Number
- (6) Installation/ Start ServiceDate

Dive Safe!!!!

NDC (DSW/EXW/SW) Rebecca Jones



Diver In The Spotlight



ND2 (SW/PJ) BLAISE A. SCHRADER

SWRMC Code 360 Divers



ND2 Blaise Schrader has the distinction of having the most bottom time of all deep sea divers in the Navy from July 2009 to December 2009. Hailing from Fort Collins, Colorado, ND2 (SW/PJ) Schrader graduated from Mandan High School. After enlisting in the U.S. Navy on January 5, 2006 he attended basic training and machinist's mate "A" school. Petty Officer Schrader reported onboard the USS Denver on June 17, 2007. While onboard, he was awarded the Navy and Marine Corps Achievement Medal for his meticulous troubleshooting abilities and performance under pressure during a loss of steering casualty. Upon completing his first sea duty tour, he started Navy Diver training in Panama City Florida on January 03, 2009. After graduating from Navy diver "A" school, he received orders to Southwest Regional Maintenance Center, Code 360 diving division. Once onboard SWRMC, he was assigned to "Charlie" Dive Team at Naval Base Point Loma supporting 688 Class submarines. ND2 Schrader's stupendous

motivation and hard charging attitude quickly made him a subject matter expert in underwater ship's husbandry. He has completed a myriad of technically demanding jobs to include numerous ballast tank cable runs, CSA pod removal and installations, torpedo tube troubleshooting, replacing the OA-9070 thin line towed array, electrical hull fitting change-out and replacement of a 4400lb outboard transducer array assembly. All underwater ship husbandry repairs culminated in 54 dives that amassed 8,640 minutes of documented bottom time. ND2 Schrader continues to keep that pace as lead diver during the first ever waterborne MOD 25 propeller change-out onboard USS Cheyenne (SSN 773) at NBPL. After eight straight diving days and late nights, this hybrid propeller replacement allowed USS Cheyenne to complete her underway and return to homeport safely. His team saved the Navy \$1.2M in limited repair funds and costly dry docking fees. ND2 Schrader's keen attention to detail and untiring dedication to his team, the diving community and the Navy has resulted in a remarkable amount of bottom time.

HOO-YAH ND2!!!

The Naval Safety Center would like to congratulate ND2 Schrader for conducting 54 approved dives from July 2009 to December 2009 and accumulating a total bottom time of:

6 Days !!

Each issue, we would like to acknowledge the Navy diver with the most bottom time reported in the Dive Jump Reporting System (DJRS) for the last six months. This is not to discount our civilian counterparts who are accumulating an exceptional amount of bottom time themselves.

HOO-YAH! Dive Safe



Top 20 Commands by Total Bottom Time 6 Month Reporting Period

Rpt No:DV-301

07/01/2009 to 12/31/2009

Run Date:

08-Jun-2010

TBT in minutes	Total Dives	UIC	Command Name
471,261	7,166	N0610A	NAVDIVESALVTRACEN PANAMAN CITY, FL.
216,787	3,965	N49746	NAVAL SPECIAL WARFARE BASIC TRNG
198,107	1,898	N4523A	PUGET SOUND NAVAL SHIPYARD
117,903	964	N32253	PEARL HARBOR NAVSHIPYD AND IMF
98,750	888	N55236	SOUTHWEST RMC SAN DIEGO, CA.
95,977	1,118	N41150	NORFOLK NAVAL SHIPYARD AND IMF
81,183	585	N08973	SDV TEAM ONE
69,863	557	N39590	NSWG TWO TRAINING DET
69,681	582	N68316	NAVSUBSUPPFAC NEW LONDON, CT.
62,279	359	N39592	SEAL TEAM TEN
56,417	411	N45255	USS FRANK CABLE
45,198	1,269	N00750	NAVSUBSCHOLGROTON
41,953	459	N0463A	NAVAL EXPERIMENTAL DIVING UNIT
31,084	346	N40027	SOUTHEAST RMC MAYPORT, FL.
31,037	370	N39589	NSWG ONE TRAINING DET
30,703	1,213	N42838	MDSU TWO
29,517	886	N42270	MDSU ONE
28,285	491	N44466	TRIREFFAC KINGS BAY, GA.
26,538	370	N68438	NAVIMFAC PACNORWEST BANGOR, WA.
22,547	1,303	N62640	NAVSCOLEOD EGLIN AFB, FL.



Diving Advisory 04-04



NDCS (DSW/EXW) Jeffrey Poulin

Email: jeffrey.j.poulin@navy.mil

As the Naval Safety Center's mission has expanded this year with surveys being conducted on all branches of the Department of Defense (DOD) diving capabilities we face the challenge of standardizing our site visits. The Diving Safety Lines is one tool we use to achieve this standardization. For some of you the information may seem old or repetitive, but for others, it may be the first time you've been informed and it's necessary to raise the latter group to an equal standard. This is why we're posting the inactive diving advisory Diving Advisory 04-04 "Zeagle Ranger BC inspection," as we have found corrective actions have not been taken across all branches of the DOD. We recommend all units that have not performed this corrective maintenance contact the manufacturer for replacement parts to correct this deficiency. However, because this was a one time deal from 2004, it is not likely that the deal with Zeagle is still valid.

ROUTINE
R 040635Z MAY 04 PSN 552539T29
FM COMNAVSEASYS COM WASHINGTON DC
TO AIG 11295
AIG 239
ZEN/AL 239
ZEN/AL 11295
INFO COMNAVSEASYS COM WASHINGTON DC
BT
UNCLAS
QQQQ
SIC: N03150
SUBJ: DIVING ADVISORY 04-04: ZEAGLE RANGER BC INSPECTION//
UNCLASSIFIED//
UNCLAS //N03150//
PASS TO OFFICE CODES:
COMNAVSEASYS COM WASHINGTON DC//00C//
MSGID/GENADMIN/COMNAVSEASYS COM//
SUBJ/DIVING ADVISORY 04-04: ZEAGLE RANGER BC INSPECTION//
POC/FLEISCHMAN/LCDR/NAVSEA 00C32/LOC:WASHINGTON DC
/EMAIL:FLEISCHMANPAGNAVSEA.NAVY.MIL/TEL:202-781-3821//
RMKS/1. SEVERAL REPORTS INDICATE THE POTENTIAL FOR THE FABRIC COVER TO FRAY AND EXPOSE THE INFLATION BLADDER AT THE OPENINGS FOR THE OVER-PRESSURIZATION VALVES (OPV) AND/OR REMOTE EXHAUST VALVE (REV) OF THE ZEAGLE RANGER BUOYANCY COMPENSATOR (BC). THE OPV ARE LOCATED AT THE BOTTOM FRONT OF THE BC. THE REV IS LOCATED AT THE TOP OF THE BC AND IS CONNECTED TO THE ORAL INFLATION HOSE.
2. ZEAGLE RANGER MODEL BC'S MANUFACTURED FROM 1996-2003 WERE EQUIPPED WITH A 4 PSID OPV TO ALLOW FULL INFLATION OF THE BLADDER. THE INCREASED PRESSURE IS BELIEVED TO BE THE CAUSE OF THE DELAMINATION/SEPARATION PROBLEM. SINCE 2003 THE MANUFACTURER HAS REDUCED THE OPV OPERATING PRESSURE TO 2 PSID.
3. COMMANDS ARE DIRECTED TO INSPECT THEIR ZEAGLE RANGER BC'S AND REPLACE THE OPV WITH THE NEW 2 PSID OPV (MODEL 111-8000P). THERE ARE NO UNIQUE MARKINGS ON THE OLD STYLE 4 PSID OPV BUT IT MAY BE IDENTIFIED BY THE 8 CIRCULAR HOLES AROUND THE CIRCUMFERENCE OF THE KNURLED KNOB THAT CONNECT THE OPV TO THE BC. THE NEW STYLE 2 PSID OPV MAY BE IDENTIFIED BY THE WORD "ZEAGLE" STAMPED 4 TIMES ON THE OPV AND ALSO BY THE 6 VICE 8 HOLES AROUND THE CIRCUMFERENCE.
4. IF MINIMAL DELAMINATION OR MINOR SEPARATION OF THE REINFORCING RING AND FABRIC SHELL HAS OCCURRED AROUND THE OPV/REV, AN ADHESIVE SUCH AS BLACK MAGIC OR A SIMILAR PRODUCT MAY BE USED TO REATTACH THE RING TO THE FABRIC. IF THE SEPARATION IS EXTENSIVE AND FRAYING IS VISIBLE, THE UNIT SHOULD BE RETURNED TO ZEAGLE FOR REPAIR OR BLADDER SHELL REPLACEMENT.
5. ZEAGLE HAS AGREED TO PROVIDE EACH COMMAND A ONE TIME SHIPMENT OF REPLACEMENT OPV PARTS AT COSTS (\$2.00/VALVE). COMMANDS SHOULD CONSOLIDATE REQUIREMENTS AND CONTACT THE MANUFACTURER TO ORDER THE REQUIRED PARTS. ZEAGLE POCs ARE: MR. JIM WITTSTUCK OR MR. SCOTT LAKES (813) 782-5568. EXPECTED DELIVERY TIME IS 5 DAYS.
6. THE ANU AUTHORIZED MODEL OF THE ZEAGLE RANGER BC IS 7907RK. ENSURE FUTURE ORDERS SPECIFY MODEL NUMBER TO RECEIVE BC WITH ALL UPDATES. THE BC IS AUTHORIZED FOR CONTINUED USE PROVIDED A THOROUGH INSPECTION OF THE BC FOR RIPS/TEARS/CUTS IS CONDUCTED PRIOR TO EACH DIVE.//
BT
#1344
NNNN



Top 6 Diving Safety Survey Discrepancies



Submarines:

Admin:

1. A4B3 – Command is not submitting dive reports semi-annually to the Naval Safety Center via the DJRS program.
2. A1L4 – Dive lockers are not properly utilizing EGLs and/or single line items to effectively track dive equipment maintenance on PMS boards.
3. A2W0 – Command does not have a copy of their last Diving Operational Readiness Assessment (DORA) results.
4. A2J0 – Dive locker is not maintaining the most up-to-date file of AIG-239 Diving Advisory Messages.

Training:

5. A1X0 – Command's diver training plan does not include emergency response drills
6. A2B0 – Dive locker is not following their training plan and maintaining records of attendance and critiques of training completed.

All Other DOD Dive Lockers:

Admin: (Navy/USMC checklist reference number)

1. A4G0/A4D0 – Not every diver at command has a current dive physical by a qualified diving medical officer.
2. A1G1/A1F0 – Re-entry control procedures are not being implemented or followed correctly and a log is not being maintained.
3. A1D1 – Command divers are not conducting the minimum number of dives every 6 months in order to maintain their qualifications.

Training:

4. **A1A0 – Applicable sections of the Military Diver PQS have not been implemented in the qualification of divers. *SEE NOTE BELOW**

SCUBA:

5. A1M0 – Not all of the dive locker's SCUBA equipment is properly covered by PMS.
6. A2P0 – Not all of the dive locker's wrist/console depth and pressure gauges are compared with results recorded on EGLs every 18 months.

*Military Diver PQS:

At the Naval Safety Center we are seeing a negative trend in the training and qualification process within commands as we conduct our diving safety surveys. A large portion of commands are still using locally generated JQRs in the qualification of their divers instead of implementing the applicable section of NAVEDTRA 43910-C Military Diver PQS (formally DSWs). OPNAV Instruction 3500.34F states that PQS use is mandatory except when suspended or cancelled by the respective lead type commander. If your respective command has a JQR for a watch station that is not covered by the PQS program, then that JQR needs to be forwarded to your type commander for determination of applicability to other units and inclusion in the PQS program. The level of coverage provided by NAVEDTRA 43910-C is broad so there should be no excuse for commands not implementing applicable sections. An electronic copy of NAVEDTRA 43910-C can be found on Navy knowledge online.