



Diving Safety Lines

Fall Edition

2006

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.

Master Diver's Corner

Diving Safety Survey

Are we losing sight of the big picture or do we just have poor attention to detail? Recently, an EOD mobile unit experienced the destruction of two portable divers' air compressors due to operator negligence. The damage in each incident was due to the operator not checking the oil level properly before operation.

The first incident involved a new RIX compressor. This compressor recently was issued to a detachment and the damage occurred during the initial start up. The drive engine was shipped with low oil level. When checked it appeared to be at a level sufficient for operation. The operator failed to clean the dipstick properly and reinsert it into the reservoir before operation. This resulted in an erroneous oil-level reading. Within ten minutes of operation, the engine seized.

The second incident involved a Bauer compressor that had been in service for a significant amount of time. In this case, the operator didn't check the oil properly. This caused the starting of the compressor with an insufficient amount of oil. Within three minutes, the compressor seized.

These recent string of compressor failures, due to operator error, prompted the dive locker to hold GMT on proper operating procedures for all divers' portable air compressors. Each compressor is valued at approximately \$2,500.00. The incidents could have been avoided had the operators paid attention to detail. Negligence is costly. Fortunately, in this case, injury was not involved. NDCS (MDV) Kayona

INSIDE :	
2	DRS Issues
3	Recent Updates
4	CPR changes
5	Diving Statistics FY 06
7	Traffic Safety
8	ORM

Diving Safety Lines

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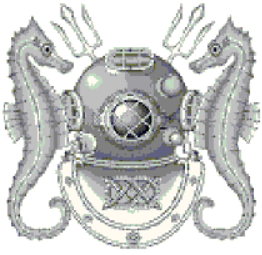
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DRS !



Issues with DRS?

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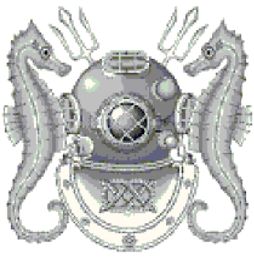
Having trouble with DRS? Here are problems we have been seeing lately.

1. Dive report attachments are getting dropped from your e-mail. Therefore, we are not able to upload your dives. We found out it is NMCI not letting all large compression files through their firewall. If you get a e-mail from us or your administrator saying: A MIME attachment of type <application/octet-stream> was removed, your attachment was dropped.
Here is how to fix the problem, the file is a compression file and has a extension of .lzh, we need you to rename the file extension to .doc so the firewalls will think it's a Word document and will let the attachment thru , leave the first part of the file name alone, it will start with your UIC a date code (A is for January) and the day you compressed the file, e.g., (63393C02.doc).We will e mail you when we receive your dives , don't expect a return right away , we do travel.
2. If you are having troubles with the DRS program please feel free to call us, especially before you get your administrator to work on the program. We might be able to save you a lot of time re-entering dives. The program is based off Windows Microsoft Access 97 and is password protected to provide security for divers personal information. So please don't ask for the password . Hopefully everyone has a copy of their data base (DRS.mdb) file and has it saved some where other than on their computer. Having this will save a lot of headaches in the future.
3. If you forget your password or the DRS guy just transferred and you got a poor turn over, give us a call. We can help walk you through, step by step, on how to compress and send your dives.
4. If you need a copy of the DRS program, it is on our web site. Go to: <http://www.safetycenter.navy.mil> or if you prefer a copy on CD, e-mail your request to : Safe-divesalvage@navy.mil.



Here are some recent updates and issues we are finding

1. OPNAVINST 5102.1D Navy and Marine Corps Mishap and Safety Investigation Reporting and Record Keeping Manual, has been added to the list of instructions required to have on hand as per the U.S. Navy Diving Manual Rev 5.
2. Updated technical manual for the Conshelf XIV regulator, PMS requires the first stage to be set as per manufacture's specifications which is 140 +/- 5psi. Go to www.aqualung.com for an updated copy.
3. Everyone check the version of SKED you are using. You should have version 3.1.11. The program is not updated when the new FR is installed. For updates go to: <http://www.antechsystems.com/sked31.htm#>. For those of you on NMCI, it is approved for download.
4. Diving Equipment Authorized for Navy Use (ANU) updated letter head 26 Jul 04. You are required to have the letter, no need to reprint the whole ANU.
5. I know this was in here before, But we are still not seeing the VIP information on moisture separators and air filter housings required by PMS and topside tech notes Volume V Issue 3 and Volume IX issue 2.
6. New MK 25 MOD 2 Tech man 600-A3-MMA-010/53833 Rev 1, 15 March 2006 also FARS have been shifted to new web site <https://pmsnsw.org>. But, you need a PKI certificate to log on to website vice old password.
7. Cancellation of SECNAVINST 12000.20B, Civilian diving in the Navy. It now falls under OPNAVINST 3150.27B.
8. New NAVFAC requirements on hyperbaric pressure vessels and relief valves technical memorandum TM-CHENG/05-10-SCA states every relief valve that is tested and/or repaired must be accomplished using the new NAVFAC form. You are required to be keep on hand for trend analysis. This goes for non certified scuba charging systems, also.
9. Umbilical Issues:
 - (a). Divers umbilicals are not properly labeled or tagged, and have been found connected to the wrong umbilical port , example red's umbilical connected to green's port.
 - (b). Improper umbilical spinnaker shackle being utilized, e.g. using a miniature shackle vice a 5000 pound-rated shackle.
 - (c). Strain relief's either not connected or connected to the piping system vice mounting brackets. See the umbilical manual.



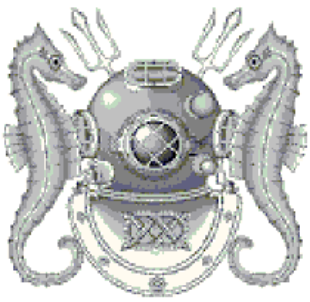
CPR Changes for 2005

One of the biggest training deficiencies during surveys is divers with no CPR cards. Most of the time the reason they don't have a card is because they are maintained at the medical treatment facilities and they seem to always run short. ***When you go through a CPR class, make sure you get a copy of the roster and enter it in your training record.*** This is sufficient for survey and inspection purposes.

The following are American Heart Savers and American Red Cross CPR changes.

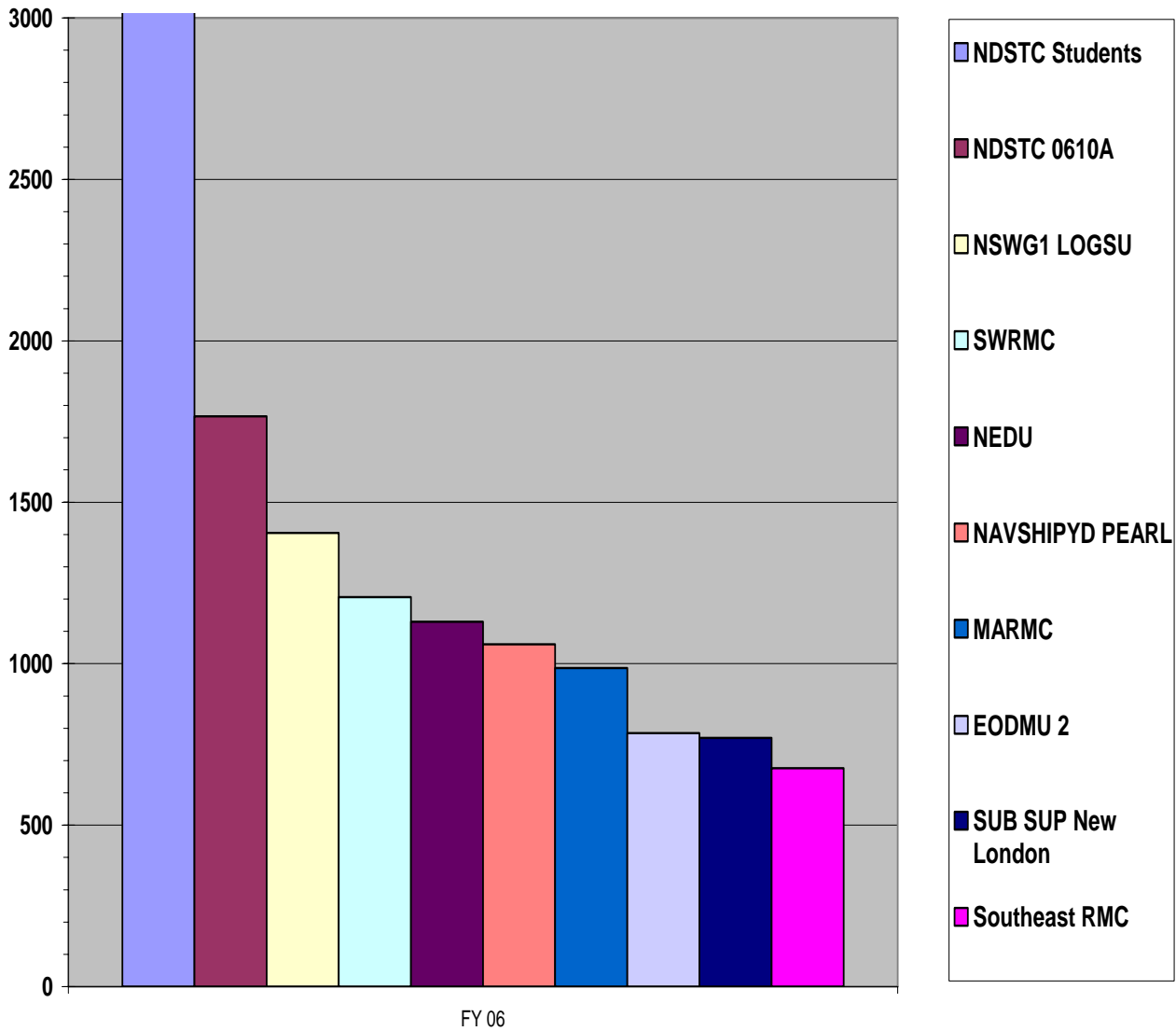
The major changes in the 2005 guidelines recommendations for *lay* rescuer CPR are the following:

1. If alone with an unresponsive infant or child, give about five cycles of compressions and ventilations (about 2 minutes) before leaving the child to phone 911.
2. Do not try to open the airway using a jaw thrust for injured victims—**use the head tilt–chin lift for all victims.**
3. Take 5 to 10 seconds (no more than 10 seconds) to check for *normal* breathing in an unresponsive adult or for presence or absence of breathing in the unresponsive infant or child.
4. Take a **normal (not a deep) breath** before giving a rescue breath to a victim.
5. Give each breath over 1 second. Each breath should make the chest rise.
6. If the victim's chest does not rise when the first rescue breath is delivered, perform the head tilt–chin lift again before giving the second breath.
7. **Do not check for signs of circulation.** After delivery of two rescue breaths, immediately begin chest compressions (and cycles of compressions and rescue breaths).
8. No teaching of rescue breathing without chest compressions (exception: rescue breathing is taught in the Heart saver Pediatric First Aid Course).
9. **Use the same 30:2 compression-to ventilation ratio for all victims.**
10. For children, use 1 or 2 hands to perform chest compressions and compress at the nipple line; for infants, compress with 2 fingers on the breastbone just below the nipple line.
11. **When you use an AED, you will give one shock followed by immediate CPR, beginning with chest compressions. Rhythm checks will be performed every 2 minutes.**
12. Actions for relief of choking (severe airway obstruction) have been simplified.
13. New first aid recommendations have been developed with more information included about stabilization of the head and neck in injured victims.



TOP 10 DIVING COMMANDS FOR FY 06

SUBMITTING DIVES ON TIME

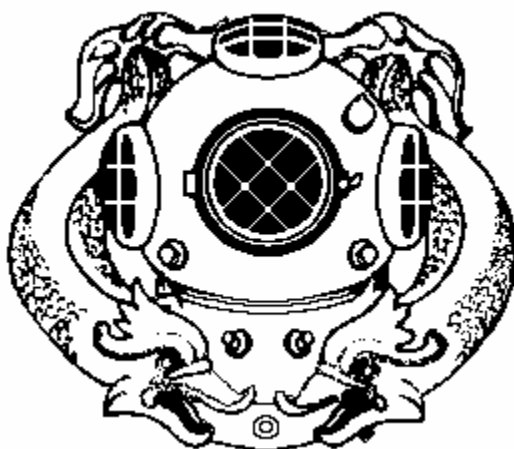


PERSONAL DIVE LOG / HISTORIES

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Here at the Naval Safety Center we receive numerous requests for personal dive histories from divers throughout the Department of Defense. These requests come from a wide range of pay grades and NECs. The average turn around time for a personal dive history may range anywhere from 10 to 60 days depending on our survey schedule at that time. Many of these requests are for justification of experience for employment, but quite a few (about 50%) involve a member's specialty pay. They would not even be required had the service member maintained a personal dive log (PDL). Paragraph 5-6 on page 5-10 of the U.S. Navy Diving Manual even states that when the diving supervisor and diving officer sign these logs, they are an acceptable record of dives that may be required to justify payments.

Don't for one minute think you cannot call on us to help you out with obtaining your dive history because that is a service we gladly provide. Just keep in mind that we travel a lot and may not receive the request you needed yesterday until 20 days later. Had you kept up with your PDLs, you would not be waiting on someone else. Remember it's your pay and your career.





Traffic Safety

August 22, 2006

Rise in Motorcycle and Pedestrian Deaths Led to Increase in Overall Highway Fatality Rate in 2005

An increase in motorcycle and pedestrian deaths contributed to an overall rise in highway fatalities in 2005, the U.S. Department of Transportation's National Highway Traffic Safety Administration (NHTSA) announced today. The total number of fatalities rose 1.4 percent from 42,836 in 2004 to 43,443 in 2005 while the rate of fatalities was 1.47 fatalities per 100 million vehicle miles traveled (VMT), up from 1.45 in 2004.

Despite the spike in motorcycle and pedestrian fatalities, Acting Secretary of Transportation Maria Cino noted other fatality trends were improving. She explained that the number of young drivers dying in car crashes declined in 2005 for the third straight year while the number of children who were killed in crashes also declined. The largest drop was for children ages 8-15.

"We have no tolerance for any numbers higher than zero," said Acting Secretary Cino. "Motorcyclists need to wear their helmets, drivers need to buckle up and all motorists need to stay sober."

The Acting Secretary said the increase in vehicle fatalities comes from the dramatic rise in the number of motorcycle fatalities and increases in the number of pedestrian fatalities over the previous year. She noted, for example, that motorcycle fatalities rose 13 percent from 4,028 in 2004 to 4,553 in 2005 and that almost half of the people who died were not wearing a helmet. The number of pedestrian fatalities increased to 4,881 in 2005 from 4,675 in 2004, the Acting Secretary added. NHTSA is investigating this year's increase in pedestrian fatalities to determine the cause.

Cino said NHTSA is working to reduce the number of motorcycle fatalities by encouraging motorcyclists to get proper training, always wear helmets, and absolutely never drink and ride. She added that the Department's Federal Highway Administration is working with state and local governments to improve pedestrian safety and that the agency is providing more than \$600 million over the next three years to help states develop pedestrian safety programs.

Specifically, NHTSA's Fatality Analysis Reporting System shows that, between 2004 and 2005, the number of young drivers (16-20) killed declined by 4.6 percent from 3,538 to 3,374. Fatal crashes involving young drivers declined by 6.3 percent from 7,431 to 6,964. Meanwhile, the number of children 0-15 dying in crashes dropped from 2,622 in 2004 to 2,348 in 2005.

Cino added that the number of people injured in motor vehicle crashes declined 3.2 percent from 2.8 million in 2004 to 2.7 million in 2005. Passenger vehicle occupant fatalities also dropped by 451, from 31,866 in 2004 to 31,415 in 2005, the lowest level since 1994.

In addition, the number of fatalities from large truck crashes declined slightly from 5,235 to 5,212, while the number of occupants killed in rollover crashes increased 2.1 percent from 10,590 to 10,816. And the number of SUV rollover fatalities dropped 1.8 percent from 2,929 to 2,877. "We will not be satisfied until the fatality and injury numbers reach zero," said NHTSA Administrator Nicole Nason.

Operational Risk Management (ORM) WORKS

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I know what you're thinking, here we go again with ORM. We use ORM every day by planning our dive and diving our plan. That's true, in diving we were exercising and using ORM daily long before it became an everyday term throughout the fleet. There is no question that we are doing pretty good on the dive side these days safety wise as compared to 20 plus years ago.

So ORM is working, right? The obvious response is, "Yes." It is on the dive side; but, what about afterward? The statistics below are from last year and some food for thought when we are conducting business out of the water, on or off duty. The stats may surprise you.

222 Sailors and Marines died in mishaps: January through September FY 06

NAVY

106 Sailors died in mishaps:

- Private Motor Vehicle: 70 (66%)
- Aviation: 10 (9%)
- Ashore Operational, Excluding MV/Navy PT: 1 (1%)
- Operational MV: 2 (2%)
- Off-duty Shore/Recreation: 15 (14%)
- Navy PT: 8 (8%)

MARINE CORPS

116 Marines died in mishaps:

- Private Motor Vehicle: 56 (48%)
- Aviation: 11 (9%)
- Ground Operational, Excluding MV/Navy PT: 35 (30%)
- Operational MV: 3 (3%)
- Off-duty Shore/Recreation: 11 (9%)

Welcome Aboard to HMCS Stewart



Medical Locker

I have replaced Senior Chief Mike Redeen as the DMT at the Safety Center. I am looking forward to getting out on safety surveys to meet you all. You don't have to wait until we come out to your command though. Feel free to call or send me a message anytime.

A little background information, I have been a DMT for almost 17 years. I have a wide variety of experience with most of the diving communities. I was stationed on the USS Shenandoah (AD-44), Explosive Ordnance Disposal Mobile Unit Eight, Seal Delivery Vehicle Team Two, Naval Special Warfare Detachment Little Creek, and Naval Special Warfare Development Group.

I am here to assist the diving community in solving medical diving issues. I don't know all the answers; but, I will utilize all the assets at my disposal to get the best answer. When it comes to medicine a statement was made to me a long time ago. **“Medicine is a practice not a science. If it were a science every time you had a headache, Motrin would take the pain away.”** Our physiology is slightly different in all of us, which means the results of the therapies may and do vary from one patient to the next. Keep this in mind when dealing with any diving injury. I am not an armchair quarterback. You are the care provider for your team. I am here to help you take care of them utilizing lessons learned and disseminating updates.

Very Respectfully

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