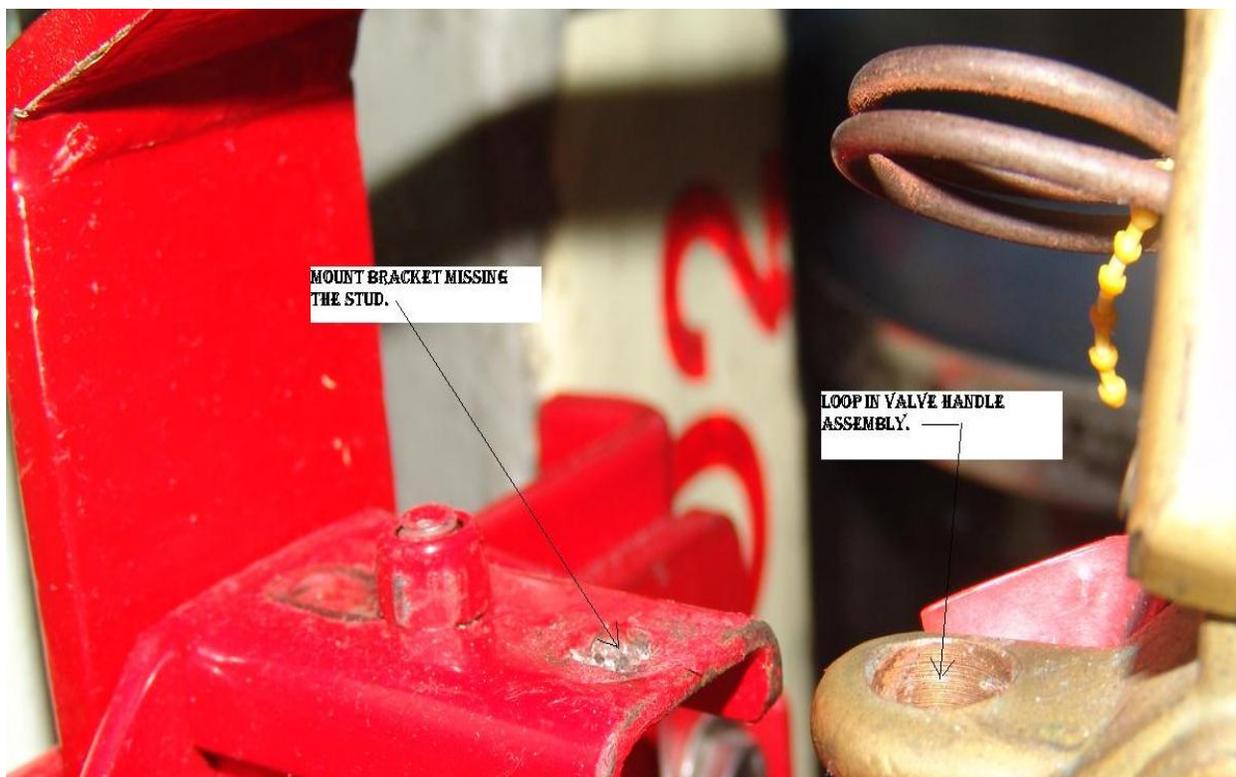


FLASH

Factual Lines About Submarine Hazards
Submarine Division of the Naval Safety Center

January - March 2014



Route for Safety's Sake

CO ___ XO ___ NAV ___ ENG ___ CSO ___ SUPPO ___ COB ___ DCA ___ Safety Officer

EDMC ___ MDR ___ 3MC ___ CPO Quarters ___ Ship's DCPO ___ 1st LT ___

We at the Naval Safety Center look forward to your questions and feedback.

In the spirit of "**ASK THE FLASH**," we have opened the FLASH up for write-in articles and cartoons. You can find the Naval Safety Center classified web page at <https://www.csp.navy.smil.mil/NSC-SUB> and the Naval Safety Center videos on You Tube at <http://www.youtube.com/user/dsteber1849>

Warnings, Cautions and Notes

The Flash is a newsletter that provides safety-related information to the fleet. This information is a summary of research from selected mishaps and surveys done throughout the force. The data is provided to assist you in **your** mishap prevention program and give advance notice of other safety-related information.

This newsletter is NOT authoritative.

Page	Article Name
1	Picture of the Quarter
2	Table of Contents
3	Welcome Aboard LT Oravitz
3	Welcome Aboard LT Lopez
3	Welcome Aboard MMC Alkire
4	General Safety
4-5	Traffic Safety
5-6	Damage Control
6-7	Combat Systems
7-8	Deck
8-9	Electrical / Mechanical
10-11	Medical / Hazardous Material
12	Naval Safety Center Submarine Division Travel Schedule and Upcoming Submarine Surveys
13	Effective COMNAVSAFECEN Submarine Safety Advisories
14	COMNAVSAFECEN Submarine Division Contact Information

This issue of the FLASH covers the 1st quarter of FY 2014 submarine safety survey findings focusing on the significant and most common discrepancies. PMS not being properly accomplished by personnel and verified by leadership is a common theme in many survey areas.

Welcome Aboard

LT John J. Oravitz Jr.

Hoo Yah! I have relieved LCDR Rich Ray as the C33 Division Head and I am excited to get started with my Naval Safety Center (NSC) tour and working with all of the different boats and their crews. In general, the submarine community has been improving in all aspects of safety and we like to think that the NSC is a part of that process. I spent the first 15 years of my Naval career as a Navy Diver, I have extensive experience with all aspects of submarine repair, and I did two deployments with SEAL Delivery Team 2 onboard the USS JAMES K POLK and the USS DALLAS (yeah, I'm that old). I commissioned as a Submarine Repair Officer (6230) in 2006 and prior to this tour I served as the R-3 DIV-O on the USS EMORY S LAND; NNSY FMB (Submarine Repair) Military Deputy Project Superintendent; and AOIC of Naval Special Warfare Group 3, Detachment Little Creek (Dry Deck Shelters - especially looking forward to seeing the 728 and 729 again!). C33 has more than 110 years of Naval experience and it is an honor to be a part of the team. The team truly enjoys travelling and working with the different boats and their Sailors - hope to see you all soon!

Welcome Aboard

LT Michael-Vincent R. Lopez

Kumustaka, my name is LT Mike Lopez, reporting from USS Maine SSBN 741 (BLUE) and have relieved LT Seaward as Submarine Safety Analyst and Submarine Advisor to Class A Safety Investigations at the Naval Safety Center. I am honored to be a part of the team and excited to travel and help support the submarine fleet. I look forward to seeing ya'll soon!

Welcome Aboard

MMC Alkire

Greetings; my name is MMC(SS) Joshua Alkire, reporting from the USS KEY WEST (SSN 722). I have relieved MMCS(SS) Sisk as the submarine damage control analyst at the Naval Safety Center. I look forward to providing the submarine fleet with the support and training required to continue the mission of the United States Navy. Please, feel free to contact me at any time. My contact information is on the last page.

General Safety
LT Oravitz

On a recent Pacific Northwest trip, we found that Puget Sound Naval Shipyard (PSNS) is using Kevlar reinforced synthetic line to suspend temporary services. One of the USS Miami lessons learned was that using combustible material to suspend temporary services is dangerous because in a fire, the end result will be collapsed temporary services that impede access to spaces that require Damage Control action. Further research showed that Kevlar "decomposes" between 427 and 482 degrees C and the requirement, in the Code of Federal Regulations (CFR), mandates that a sample be placed in an oven at 750 degrees C for 20 minutes - don't think the Kevlar is going to make it. The CFR lists exemptions from testing that include metal (the right answer for suspending temporary services) but it does list Kevlar as an exemption, which means it has to be tested. Safety Officers (and squadron Safety Officers too) should work with Project Management teams to ensure that - at a minimum - critical areas have metal wire or banding to support temporary services, with an end goal of metal only. We are working parallel paths with NAVSEA and PSNS to eliminate relearning lessons from the USS MIAMI fire.

Traffic Safety
LT Lopez

Most of us know how to drive. We have been doing it since we were teenagers, and with the Navy's training and a little common sense, we all know what not to do while driving. With the recent weather changes here in Norfolk, I'm reminded that we need to be aware of how weather changes affect the roads and our driving habits. It is easy to say "Yes, I know to slow down while it's raining." or "Yeah, I know to watch for ice as it snows.", but it seems like everyone forgets about the changes to the roads after the storm passes. After the most recent snow storm, there were more than nine accidents in the Norfolk area within three hours (most on the James River Bridge). People often forget that newly melted snow, high winds and cold temperatures can cause ice to form on roads and bridges. Recently, the Norfolk area has had high wind advisories. Roads and bridges have signs to warn drivers of such conditions so that they are alert and drive safely. Drivers should be aware of and understand how high winds can affect larger vehicles, and stay alert and proactive while driving to make it to their destination safely. Regardless of your geographic location, know how the weather affects the

roads and traffic in your area and plan accordingly. At the end of the day, what really matters is that we all get home safely and continue to support the Navy's mission. Remember, pay attention to the road, be proactive, don't rush and you will get to where you need to go safely.

*Damage Control
MMC(SS) Alkire*

Vari-nozzles: On a recent survey, one vari-nozzle was found in this condition.



Note that the nozzle is put together incorrectly. It is stuck in the flush position and is unable to be moved from the wide angle fog position. There is a CAUTION in MRC 6641 S-3R that states, "Do not disassemble nozzle. Removal of "baffle head" (round center piece on discharge end) of Akron nozzles may result in loss of calibration spacers. This will reduce flow rate of nozzle and could result in no foam when used. Elkhart nozzles can be assembled using parts from various nozzle models which fit together but result in malfunction." Equipment assembled or stowed incorrectly wastes precious time while combatting a casualty and could cause the loss of lives or the ship. Below is what the nozzle should look like when assembled properly.



EABs: I have noticed that a majority of EAB masks are not being cleaned properly. When wiping out the mask, you have to do more than wipe out the rubber. If your face piece is dirty, you might as well be fighting a fire with a visual obscurement device on your mask. There are also sanitary implications to not wiping out an EAB mask properly. When you don't clean masks properly, you end up breathing in salt from sweat, dried mucus and dead skin. Knowing that the dried products from somebody else's bodily fluids could enter your lungs should prompt everybody to ensure that your shipmates are taking the time to properly and thoroughly clean their EAB masks. Next time you get sick underway after fire drills, think about that.

If you have any questions about these items or ideas of items to submit, feel free to call or e-mail me using the contact information listed in the FLASH on the last page.

**Combat Systems
MMC(SS) Chayim**

From my recent travels around the submarine navy, I have noticed that some boats have been given substitutes for the originally authorized combat helmet. The combat helmet per the AEL is a Light Weight Helmet (LWH) with the following national stock number:

Small - 8470-01-560-3267

Medium - 8470-01-560-3076

Large - 8470-01-560-3270

X-Large - 8470-01-560-3271

The LWH consists of

- a ballistic protective shell,
- a sling (headband/mesh crown) suspension system, and
- a 4-point chin/nape retention system.

The LWH retains the Personnel Armor System for Ground Troops (PASGT) design but makes use of lighter materials made available by new technologies. The LWH is approximately 3 to 6 ounces lighter than the PASGT, depending on helmet size. By incorporating a four-point retention strap, the LWH is seven times more stable than the PASGT so it won't rock back and forth or fall off. Comfort is improved with soft black leather for the X-shaped nape pad, headband and border around a new breathable nylon mesh suspension pad, and black suede-lined chinstrap. Two buckles on each side of the helmet provide tensioning and centering of the nylon retention webbing.

Some commands have been sent substitute helmets that I have not seen a message stating that they are authorized for use. From research, I have noticed that the substitute helmets resemble the new Enhanced Combat Helmets that were tested for the Marines, Navy and Army. As stated before, I have not seen a message stating that we have moved to this helmet, but I recommend not discarding.

SUBMARINE DECK FTC(SS) MACON

It's been good to see that we are making headway on the safety lanyard situation. There are plenty of you that have been able to open purchase those lanyards in accordance with the AEL and get the right ones onboard. This is really great, but let me draw your attention to another issue that I've been noticing.

Jacob's Ladders

So, I'm beginning to see some problems with the way that we keep the Jacobs Ladder. This piece of equipment gets used and often abused, but you should make sure that you are doing those weeklies the right way when the Jacobs Ladder is out, and stow them in a safe place when not in use. The difference may be a ladder that doesn't pull its weight, **or yours**, when it's needed. Take a look at what the MRC tells you about your ladders!

**Mechanical
ETC(SS) Kingsley**

Only two units that have been surveyed in 2014 so far have had the point of operation guard (chip shield) installed on the drill press and lathe.



The point of operation guard (chip shield) is not available through the Navy supply system. The chip shield must be open purchased. REF: OPNAVINST 5100.19E paragraph D0804, Government Source - Rockford Systems, INC. Phone # 1-800-922-7533 or email - SALES@ROCKFORDSYSTEMS.COM

**Medical / HAZMAT
HMC(SS) Thomas**

HEAT STRESS MONITORING AND SURVEYING

Dry-Bulb Thermometer (DB) Positioning. A hanging DB thermometer (alcohol in glass - NSN 96-6685-00-243-9964) shall be permanently mounted at watch and workstations throughout the ship where heat stress conditions may exist. Evaluation and designation of potential heat stress areas is part of the Industrial Hygiene (IH) survey so make sure to thoroughly review your most recent IH Survey results to identify those areas.

Dry-Bulb Temperature Readings. In accordance with OPNAVINST 5100.19E Article B0204, the ship shall record DB temperature readings when the ship is underway or when potential heat stress conditions exist while in port. The following compartments are areas that are applicable to submarines and are required to be monitored when manned: main machinery spaces, (engine rooms), auxiliary machinery spaces, emergency diesel spaces, laundry spaces, galleys, and sculleries (774 class).

Assigned personnel shall monitor those compartments every four hours for manned spaces if the DB temperatures do not exceed 85 degrees Fahrenheit. If the DB temperatures exceed 85 degrees Fahrenheit, those spaces are required to be monitored every four hours.

During recent safety surveys, review of the temperature logs noted that some units are not monitoring the DB temperatures once every 4 hours for spaces less than 85 degrees Fahrenheit. Additionally, some units failed to monitor spaces hourly if the temperature exceeded 85 degrees Fahrenheit. Advise Medical Departments to review their temperature logs (both forward and aft) to ensure the command is meeting this requirement.

Refer to OPNAVINST 5100.19E Article B0204 for further information regarding Heat Stress Monitoring and Surveying.

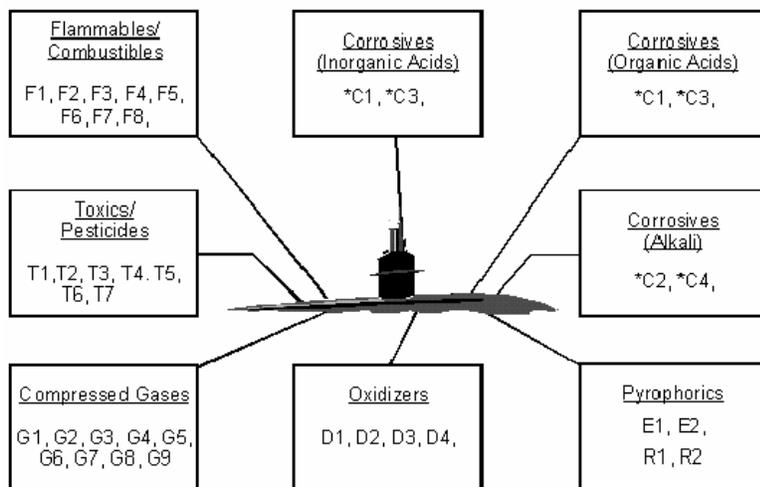
HAZMAT STOWAGE

Over the past several months there have been several units with discrepancies related to the storage of hazardous material (HM). The storage locations (including lockers) shall be marked to identify the type of HM stored within. Examples of the markings include:



A diagram regarding HM Compatibility are provided by OPNAVINST 5100.19E Appendix D15-A. Each of these is indexed using the Hazardous Characteristic Code (HCC) system. HCC codes for stock system items are included on the HMIRS datasheet. The Hazardous Characteristic Code (HCC) for each item can be found in the MSDS located in the Submarine Hazardous Material Control List (SMCL).

HAZARDOUS MATERIAL COMPATIBILITY STORAGE DIAGRAM (USING HAZARD CHARACTERISTIC CODE (HCC))



Refer to OPNAVINST 5100.19E Appendix D15-A for further instructions regarding the Hazardous Material Compatibility Storage Diagram.

Naval Safety Center Submarine Division Scheduled 3rd QTR FY14 Travel Plans

Bangor: 28 Apr - 6 May

Kings Bay: 13 May - 15 May

Pearl Harbor: 25 May - 31 May

The following commands are overdue and need to schedule their submarine safety surveys:

USS SPRINGFIELD (SSN 761) - Expired March 2013
USS VIRGINIA (SSN 774) - Expired March 2013
USS TENNESSEE (SSBN 734) - Expired October 2013
USS PENNSYLVANIA (SSBN 735) - Expired January 2014

Commands that have scheduled their submarine safety surveys:

USS LOUISIANA (SSBN 743) - Expired May 2012 (Scheduling message received from command)
USS SEAWOLF (SSN 21) - Due June 2014 (Scheduling message received from command)
USS ASHEVILLE (SSN 758) - Due March 2014 (Scheduling message received from command)
USS SANTE FE (SSN 763) - Due May 2014 (Scheduling message received from command)
USS HAWAII (SSN 776) - Due June 2014 (Scheduling message received from command)
USS OLYMPIA (SSN 717) - Due June 2014 (Scheduling message received from command)

The safety surveys for the following commands will expire during the 3rd QTR FY14:

USS ALABAMA (SSBN 731) - Due April 2014
USS KENTUCKY (SSBN 737) - Due April 2014
USS NEWPORT NEWS (SSN 750) - Due April 2014
USS ALBANY (SSN 753) - Due May 2014
USS MONTPELIER (SSN 765) - Due June 2014
USS LAJOLLA (SSN 701) - Due June 2014

The safety surveys for the following commands will expire during the 4th QTR FY14:

USS RHODE ISLAND (SSBN 740) - Due Aug 2014
USS HAMPTON (SSN 767) - Due Sep 2014
USS SAN FRANCISCO (SSN 711) - Due Sep 2014

Note: Safety survey scheduling requires a request message sent to the Naval Safety Center from the ship or ISIC. You can find additional survey information, request message template, and survey checklists at www.safetycenter.navy.mil. For additional questions, please call the submarine division at 757-444-3520 ext. 7838.

Effective COMNAVSAFECEN Submarine Safety Advisories

2010		
6-10	081904Z Dec 10	Asbestos Removal Protection
2011		
2-11	041532Z Mar 11	Heat Stress Meter Clarification
3-11	071634Z Mar 11	Heat Stress Survey Clarification
5-11	021648Z May 11	Reportable Mishap Clarification and Reporting
7-11	201437Z Oct 11	Safety Survey Requirement Change
9-11	181607Z Nov 11	Afloat Fall Protection
2012		
3-12	231505Z Aug 12	Reporting Afloat Mishaps
4-12	291342Z Aug 12	Replacement of HMUG with NSTM 670
2013		
4-13	295572 Aug 13	Heat Stress Meter Certification
2014		
1-14	141511Z Jan 14	Effective COMNAVSAFECEN Afloat Safety Advisories for Surface Ships and Submarines

Naval Safety Center

375 "A" Street
Norfolk, Virginia 23511
Phone: 757-444-3520, ext. 7838
DSN: 564-3520, ext. 7838
Fax: 757-444-7205 (DSN 564)
SAFE-submarines@navy.mil
<http://www.safetycenter.navy.mil/>
<https://www.csp.navy.smil.mil/NSC-SUB/>

Commander Naval Safety Center
RADM K.J. Norton

Afloat Directorate Head
CDR McWhorter
rosario.mcwhorter@navy.mil

Afloat Executive Assistant
Mr. Ron Keim
ronald.keim@navy.mil

SUBMARINE DIVISION SURVEYORS

Safety Officer / General
LT John Oravitz
john.oravitz@navy.mil

**Submarine Advisor
for Class "A"
Safety Investigations**
LT Mike Lopez
michael.v.lopez@navy.mil

Damage Control
MMC(SS) Joshua Alkire
joshua.alkire@navy.mil

Electrical/Mechanical
ETC (SS) Adam Kingsley
adam.kingsley@navy.mil

Combat Systems/Deck
FTC(SS) David Macon
david.macon@navy.mil

Medical/HAZMAT
HMC (SS) Frank Thomas
francis.thomas@navy.mil

MMC(SS) Kamil Chayim
kamil.chayim@navy.mil