



FLASH

actual lines about submarine hazards

July - September 2014 Edition

FLASH is a periodic release by the Afloat Safety Directorate of the Naval Safety Center. The information contained herein is a summary of research from selected reports of submarine hazards to assist you in your mishap prevention program. The FLASH 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 newsletter be made available to all hands.**



**Utilize ORM
Execute the mission
Become an old salt**



FLASH

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From the Submarine Safety Division Head

LT John Oravitz

Navy 101: Safety Management System – Fleet OPORD

Let's talk about the new (25AUG2014) Fleet OPERATIONAL ORDER (OPORD): Naval message, date-time group 251720Z AUG 14, from COMUSFLTFORCOM NORFOLK VA (USFF) to ALL operational units in USFF and COMPACFLT – in other words, YOU. This OPORD *directs* ALL "...commands and personnel in the operating forces of the U.S. Navy Fleet to implement a U.S. Navy Fleet Safety Management System (SMS)." *Now that sounds important...* The message describes why this OPORD has been issued, what policy goals are, and what the SMS is all about. In short, (from paragraph 1.4.F) SMS will improve the Fleet's Safety Culture and the mission statement is: "THE U.S. FLEET WILL IMPLEMENT AND EXECUTE AN SMS THROUGHOUT THE CHAIN OF COMMAND IN ORDER TO CREATE A PROACTIVE AND PREDICTIVE RISK-MANAGEMENT CULTURE."

Paragraph 3 details the execution of the OPORD and explains the Commander's Intent (3.A), Concept of Operations (3.B), Phasing of Operations (3.C), and everyone's favorite – **Tasks** (3.D). Three big points from paragraph 3.D.3.A.1 (*in the thick of tasks*): 1) TYCOMS SHALL ensure unit-level commands (i.e. submarines) designate Primary Duty Safety Officers to the *maximum extent possible*, 2) the placement of Primary Duty Safety Officers, as well as the rank of the individual, should take into consideration the size and scope of the unit...and 3) Safety Officers SHALL attend their respective community Safety Officer Schools...TYCOMS need to decide what submarines will have primary duty Safety Officers, if any; to me, I would think – *at a minimum* – all SSGNs (Major Commands) should have a Primary Duty Safety Officer and all submarines that do not have a Primary Duty Safety Officer should have a Department Head as the Safety Officer. As for number three, Safety Officers and prospective Safety Officers should request the class via their Squadron Safety Officer.

Safety Officers! You must read and understand this OPORD and once you understand it, I strongly recommend that you discuss it at your next Safety Council Meeting and make sure your Commanding Officer understands the intent and purpose of the OPORD. As you read and absorb this OPORD, think about the safety related trends you are seeing in the U.S. Navy as a whole and just how important your role as the boat's Safety Officer really is.



Mishap Reporting

LT Mike Lopez

Admin Thoughts

One of the most challenging parts of being a program manager is keeping up with the administration. There are some easy to miss, simple items on the checklist. For instance, there are some Safety Officers who have "Home, Recreational, and Off-Duty Program Managers" listed in the Command's 1301 notice, which should actually be listed as "Recreational and Off-Duty Safety Program Manager" (this should be the Ship's Safety Officer in accordance with the new Fleet Forces OPORD (DTG 251720Z AUG 14) states that on the unit level, the Safety Officer will be responsible for recreation and off-duty safety (3.D.3.A.2). It is up to you as Safety Officer to designate an assistant for RODS to help with the program, but the ultimate responsibility for the program is yours). Another is that the ORM manager should have one senior enlisted and one officer as his ORM assistants listed in the Command's 1301 notice. These low hanging fruits are easy to fix. During inspections, the inspectors are looking to hit you on every discrepancy they can find. For our surveys, we too will look for simple things that are often overlooked by program managers. Unlike many inspection teams, you have access to the checklists that we use. In essence, we are giving you the answers to the test. These are simple administrative actions you can take as the Safety Officer that will not only make you look good, but will improve your program.

There are other areas that could use more attention in order to improve and maintain a good safety program. You should use the previous safety survey and you last annual self-assessment to determine what you need to focus on. If you think your safety climate is solid, do some spot checks to maintain the standard. For example, during your weekly zone inspections, select a few items from the other Safety survey checklists and hand it to either yourself or another inspector and see how that area does. It allows someone not directly involved with the safety program to assess how well the program is running, as well as educating them on safety standards.

Not all items are easy fixes. One of the more difficult items is tracking on-the-spot corrections. It is difficult because they are taken care of instantly and no one reports it and it can be very easily overlooked. One way to combat this is to talk to the Wardroom and Chief's Mess to gather information on safety items they may have corrected throughout the course of their week. Ask them to keep track of their on-the-spot corrections so that you can trend it for Command safety culture tracking purposes. Address on-the-spot corrections at your quarterly Safety Council meetings and encourage tracking them in order to foster and maintain a strong safety culture within your Command.



Damage Control

MMC(SS) Alkire

There have been several boats that have ordered the stainless steel buckles for the band-it kit under the NIIN 00-244-7325 and have received buckles for wire run strapping. These are the wrong type of buckles and should not even be put in the band-it kits if you receive them. They are dangerous to use for any kind of pipe patch or flooding repair because they break apart with very little pressure and could cause serious damage to personnel and equipment, compounding a casualty. You must have the buckles with the teeth. They are a solid piece and are meant to withstand higher pressures. Do not put them in the band-it kit. It is better to have less than the required 100 buckles of the right type in your kits than to have the wrong type in your kits and accidentally use them or waste precious time trying to find the correct ones. The NIIN is correct for the buckles with teeth, but it is also in the supply system that these “toothless dogs” are a suitable substitute. They absolutely are not. If you receive these wire run buckles, you should put in a Quality Deficiency Report through supply and reorder the buckles. Just as you wouldn’t want a dog without teeth guarding your house from intruders, you don’t want the toothless dogs holding your strongback on, guarding your ship from sea pressure.

Combat Systems

MMC(SS/SW) Chayim

Ammunition Stowage

During recent surveys, I’ve seen inert/dummy/drill ammunition stored with the ready service ammunition (RSA) in containers that looked exactly the same. This could cause a problem during a security alert. While storing dummy/inert /drill ammunition with RSA is authorized, anyone looking at the ammunition containers should be able to differentiate real ammunition from dummy ammunition without close inspection of the container. NSTM Chapter 700, Shipboard Ammunition Handling and Stowage and OP-4, Ammunition Afloat states that practice, dummy/drill ammunition and inert components may be stowed with other service ammunition it simulates or with which it is used. In such cases, the item shall be segregated to the maximum extent possible. In addition, all inert ammunition shall be color-coded in accordance with NAVSEA OP 2238 Identification of Ammunition, (bronze color) to ensure ready identification of such items are distinguished from service ammunition. No practice, dummy/drill or inert items may be placed in a service ammunition stowage magazine/locations unless they are color-coded and the container is tagged “FOR PRACTICE ONLY”.



Submarine Deck

FTC(SS) Macon

Let's talk Mk-1 Life Preservers!

Does the color of your MK-1 life preserver make a difference in what the vest is designed to provide? It's not likely that any one specific color is going to make you safer on the top of the boat. Granted, you may become more visible. Visibility might draw you into someone else's awareness, and that may help to keep you from a dangerous situation or circumstance. When it comes down to it, though, the life preserver is to keep you afloat if you fall in the water. The vest only works if you perform the maintenance (MIP Series 5832/SUB-83) on it properly, and you are wearing the "right-size." The MK-1 is not a "one size fits all" preserver, so make sure that you have mix of sizes in your inventory for your line handlers, as well as your watch standers. Remember, proper maintenance is going to keep it working correctly, not the color of the vest.

Since I mentioned colors though, let's talk about it for a minute. How many of you have multiple colored MK-1 life vests? I've been to several boats that use a variety of color schemes. It's good to have line handlers and supervisors wearing different colors. Identification of the Man-in-Charge is easier, and it makes sense. There are many of you in the fleet that practice this already. Well, consider that the last sentence in NSTM 077-2.3.2 states that the color green **SHALL** be used on submarines. With that said, and because many of you have asked me during my visits, I wanted to find out what the real deal is for the specification of the single color green, especially since the AEL lists multiple colors for use. So, I contacted the program manager for MK-1s at NAVSEA to ask him the reasoning behind the single color.

He informed that a letter from SUBLANT in 2001 required submarines to use **olive green** life vests. This is interesting, because olive green is not a color on the AEL. However, changes were made about 2-3 years ago to the submarine AEL to allow for any color. He informed me that NSTM 077 Personal Protection Equipment just has not been revised to reflect that change, and he said that any color MK-1 on submarines is acceptable. I recommended that an official message be sent to the Fleet to reflect the color requirement change, and I'm still waiting on the response to my recommendation. In the meantime, I recommend writing a CO's Standing Order, if you haven't already done so, to reflect the arrangement that you intend to use on your boat, at least until the change is made in NSTM 077.



Electrical

EMC(SS) Belk

Arc Flash Clothing Care and Use

For proper care of arc flash suits, use the following general guidance per NSTM 300 Electric Plant, General:

- Though the manufacturer suggests monthly washings, the frequency of cleaning required will depend on the environment and the frequency at which the suits are used.
- All garments shall be washed separately from the regular ship's laundry. Ensure strict adherence to the manufacturer's cleaning label instructions and precautions. Only potable water (not seawater) shall be used in all cases.
- Face shields and helmets must be carefully removed (if applicable) prior to washing. Until the manufacturer approves the use of commonly used anti-bacterial solutions onboard (such as Wescodyne), only potable water and mild soap should be used to clean the face-shield and helmet.
- When not in use or staged for use, all kits shall be stored in a relatively cool/dry environment and in a space that is normally secured.
- After use, all gear shall be inspected for excessive wear and tear and broken/damaged equipment. Gear shall also be re-inventoried to identify missing equipment prior to re-stowing. Any missing/damaged equipment shall be brought to the attention of the associated division LCPO.
- Arc flash clothing is not designed for fire-fighting and is not to be used for fire-fighting actions.

Arc Flash Suits and associated PPE are listed in NSTM 300, Table 300-I-2. Ships should use ALLOWANCE EQUIPAGE LIST (AEL) when ordering PPE. Note 2 in Appendix I also allows equivalent NFPA 70E rated Personal Protective Equipment (PPE) to be used.



Medical / HAZMAT

HMC(SS) Thomas

Corrosive Materials

This article is on the storage requirements for corrosive materials. In order to successfully meet these requirements, you'll need to be familiar with the following instructions:

- a) OPNAV 5100.19E, Vol III, Submarine Safety Standards, Article 1507
- b) NSTM 670, Vol 2, Afloat Hazardous Material Control and Management Guidelines, Hazardous Material Users Guide (HMUG)

In accordance with article 1507 of reference (a), corrosive materials are defined as chemicals, such as acids, alkalis, or other liquids or solids which, when in contact with living tissue, will cause severe damage to such tissue by chemical action. Stow liquid inorganic acids such as hydrochloric, sulfuric, nitric and phosphoric acids bottled in glass or plastic in such a manner that they are cushioned against shock. They should be kept in their **original shipping carton or box** inside **suitable acid-resistant corrosive lockers**.

Information regarding suitable acid-resistant corrosive lockers. In accordance with article 12.3 of NSTM 670 (HMUG), Approved Commercial Corrosive Storage Lockers:

Approved lockers for in use stowage must meet the requirements of National Fire Protection Association (NFPA) Code 30 and contain the following:

1. Steel construction with acid-resistant epoxy paint or epoxy powder coating,
2. Internal shelves fitted with polyethylene trays or liners to contain spillage,
3. Self-closing lockable doors, and
4. Blue or white in color.

Here is an example of an approved corrosive stowage locker that are available for purchase. The contact information for various suppliers can be found in article 17.3.2 in NSTM 670.

Justrite Corrosive Locker	Original Styrofoam Packaging	Polyethylene Tray Liners
		



Naval Safety Center Submarine Division Scheduled 1st QTR FY15 Survey Plans

Groton: 8 Dec– 13 Dec Kings Bay: 4 Nov – 6 Nov Bangor: 27 Oct – 31 Oct
Pearl Harbor: 17 Nov – 27 Nov

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

USS VIRGINIA (SSN 774) - Expired Mar 2013
USS RHODE ISLAND (SSBN 740) – Expired Aug 2014
USS SAN FRANCISCO (SSN 711) – Expired Sep 2014

Commands that have scheduled their submarine safety surveys:

USS PENNSYLVANIA (SSBN 735) - Expired Jan 2014
USS NORTH CAROLINA (SSN 777) – Due Dec 2014
USS CITY OF CORPUS CHRISTI (SSN 705) – Due Dec 2014
USS HOUSTON (SSN 713) – Due Dec 2014
USS DALLAS (SSN 700) – Due Dec 2014

The safety surveys for the following commands will expire during the 1st QTR FY15:

USS TOLEDO (SSN 769) – Due Dec 2014
USS SCRANTON (SSN 756) – Due Oct 2014
USS GEORGIA (SSGN 729) – Due Oct 2014

The safety surveys for the following commands will expire during the 2nd QTR FY15:

USS TOPEKA (SSN 754) – Due Mar 2015
USS MISSOURI (SSN 780) – Due Mar 2015
USS NORFOLK (SSN-714) – Due Mar 2015

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.public.navy.mil/comnavsafecen/. For additional questions, please call the submarine division at 757-444-3520 ext. 7838.



Advisories

<u>Effective COMNAVSAFECEN Submarine Safety Advisories</u>		
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
2-14	101655Z Feb 14	Naval Safety Supervisor Course Requirement Change
4-14	151837Z APR 14	Electrical Safety Advisory



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