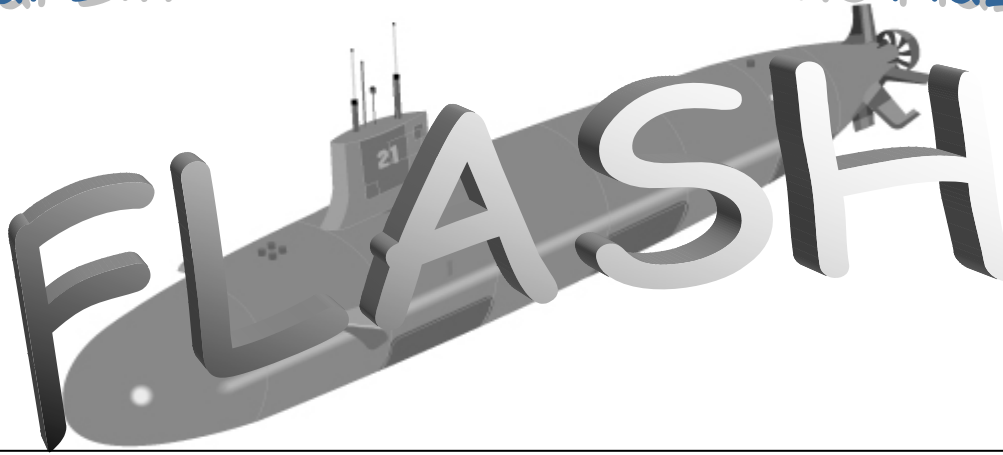


Submarine Division of the Naval Safety Center Factual Lines About Submarine Hazards



April-June 2007

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Route for Safety's Sake

CO _____ XO _____ NAV _____ ENG _____ CSO _____ SUPPO _____ MDR _____

DCA _____ COB _____ EDMC _____ 3MC _____ CPOs _____ Ship's DCPO _____

When reading through these articles, remember this is not an all inclusive list and there are many other issues that should be addressed with regard to each section's attribute checklist. Each section owner is cautioned to review the Hazard Reviews for each section. For further

information or assistance in improving your safety and/or processes go to:

<http://safetycenter.navy.mil/afloat/downloads/default.htm> - submarine.

Damage Control

MMC (SS) Fannin

First of all, fair winds and following seas to CWO2 Robert Morrow and thank you for all the work you have done for Submarine Damage Control, and the Submarine Auxiliary community.

I am MMC/SS Fannin reporting from the USS Jefferson City SSN-759. I am qualified on 637, and 688I class submarines, with tours as Damage Control Petty Officer on both classes of boats. So I know how important good information in a FLASH and support from the Safety Center can be at the deck plate level.

School - In the 7 surveys I have done, it is apparent that the Damage Control Petty Officer School (CIN A-495-2054) is being underutilized. This school offers a great opportunity to conduct PMS and maintenance on things like SCBAs (which continue to lead the way in the world of material deficiencies with under pressurized cylinders) and the Galley Range Guard (a close second with cable travel, and cleanliness issues) and provides a great level of knowledge foundation for our young sailors. This school is designed to provide the ship's DCPO's a more in depth look at the gear that they own and how to maintain it. Don't forget this is a required school per the STMPS report and is available at all bases. If you cannot find this course in the normal catalog call your local

training facility and attempt to schedule a special convening.

AFFF extinguishers - Everyone knows the requirements for the pms to be performed and how to fill out the extinguisher tags properly. But after several surveys of boats on both coasts and different classes, it is becoming apparent that some problems are coming up. The scale required to perform the R-2 and the R-48 pms (NSN 9V-6670-01-035-5507) is not being maintained in calibration or in operational condition. Also the correct weights are not being recorded on the proper tags (NAVSEA 9555/1 S/N 0116-LF-114-3100). This scale is a 0-60 lb scale in 1 oz graduations. The trick is that the face only reads 0-20 lbs. So in order to weigh the extinguishers properly you have to watch the needle make one complete revolution and then see where the needle stops. You then should add the number where the needle stopped plus 20 lbs to get the accurate weight of the extinguisher. This weight is recorded on the tag in the manner of lbs and oz. That means the reading should not be rounded up or down to the nearest whole pound. The correct range is from 27 lbs 9oz-28 lbs 4 oz. And please do not forget to transfer the weight value over to the next line or new tag, when you are performing the R-2, R-48 or the Q-10R and you need a new tag.

Band-It Buckles - Here is some more follow up on the buckle issue from the last FLASH. I am still currently awaiting word from NAVSEA as to how and what will be done with these buckles. But I have more info to help segregate these new buckles from the old

reliable ones. The part number for the authorized buckles is **C25499**. The part number for the buckles that need to be removed from use for the time being is **C15499**.

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DECK

FTCS (SS) Lauber

New Safety Harnesses are now approved for use onboard submarines. NAVSEA has approved the use of MSA or DBI Sala safety harnesses for use onboard submarines in message 280905Z JUN 07. Below is the message:

REMARKS/1. NAVSEA 05P14 AND 04R INITIATED AN EFFORT TO EVALUATE COMMERCIALY AVAILABLE SAFETY HARNESSSES AND LANYARDS THAT MEET CURRENT INDUSTRY REQUIREMENTS IN ORDER TO IMPROVE FALL PROTECTION ON NAVY SHIPS. REF A APPROVED SAFETY HARNESSSES AND LANYARDS FROM MINE SAFETY APPLIANCES (MSA) AND DBI/SALA FOR SURFACE SHIPS. AS A FOLLOW ON TO THAT EVALUATION, THE SAME HARNESSSES AND A DIFFERENT LANYARD WERE EVALUATED ABOARD ON VARIOUS SUBMARINES.

2. BASED UPON THE EVALUATION RESULTS, THE FOLLOWING NEW SAFETY HARNESSSES ARE AUTHORIZED FOR SUBMARINES:

A. DBI/SALA SAFETY HARNESS, SIZE SMALL, MODEL 1100841

NSN: 9B 4240-01-543-5503

COST: APPROX. \$110

B. DBI/SALA SAFETY HARNESS, SIZE UNIVERSAL (MEDIUM), MODEL 1100840

NSN: 9B 4240-01-543-5507

COST: APPROX \$110

C. DBI/SALA SAFETY HARNESS, SIZE XLARGE, MODEL 1100842

NSN: 9B 4240-01-543-5520

COST: APPROX. \$110

D. MSA SAFETY HARNESS, SIZE: STANDARD, MODEL 10067411,

NSN: 9B 4240-01-544-3376

COST: APPROX. \$100

E. MSA SAFETY HARNESS, SIZE: XSMALL, MODEL 10067414,

NSN: 9B 4240-01-545-7026

COST: APPROX. \$100

F. MSA SAFETY HARNESS, SIZE XLARGE, MODEL 10067415,

NSN: 9B 4240-01-544-3382

COST: APPROX. \$100

THE EXISTING SAFETY HARNESS (NSN4240-01-421-0859) IS STILL ADEQUATE AND USERS ARE NOT REQUIRED TO REPLACE IT. HOWEVER, NEW REQUISITIONS SHOULD SPECIFY EITHER THE DBI/SALA OR THE MSA SAFETY HARNESSSES SPECIFIED ABOVE.

3. PER REF B, THE SAFETY HARNESS WITH NSN 4240-00-022-2522 IS NOT AUTHORIZED.

4. THE EXISTING SAFETY LANYARD (MINE SAFETY APPLIANCES PART NUMBER 501195/NSN 4240-00-022-2521) IS THE ONLY LANYARD AUTHORIZED FOR SUBMARINES. USERS SHALL ORDER DIRECTLY FROM THE

MANUFACTURER AND NOT USE NSN 4240-00-022-2521 TO OBTAIN THIS LANYARD.

5. ALLOWANCE EQUIPAGE LISTS 2-330023055 THROUGH 2-330023057 WILL BE UPDATED TO REFLECT THE NEW SAFETY HARNESSSES. MIP 6231/001 AND MRC 163TRTN WILL BE UPDATED. USE THE EXISTING MIP AND MRC UNTIL UPDATES ARE ACCOMPLISHED. A SECTION ON SAFETY HARNESSSES WILL BE ADDED TO NSTM

CHAPTER 077 AND INFORMATION IS PROVIDED ON WWW.DCFP.NAVY.MIL.

If you have any questions regarding this message please contact me or MMC Lint immediately. If you are having problems ordering the Safety Lanyards I have a Point of Contact number for MSA. Let's keep it safe out there.

Electrical Safety Checks for Personal Equipment

EMCS (SS) Brunberg

I have fielded several questions and noted several discrepancies on recent surveys regarding electrical safety checks for personal portable electrical gear. Requirements for these checks can be found in several instructions and here are excerpts from each.

Standard Submarine Organizations and Regulations Manual (SSORM):
Article 4309 1. b. (1) Portable electrical equipment (electric drills, vacuum cleaners, coffee pots, etc.), **including personally owned electrical/electronic devices**, shall be tested in accordance with applicable Planned Maintenance System requirements. Equipment which has not been tested, has no safety tag attached, or is overdue for safety inspection shall not be used.

NSTM 300:
300-2.7.3.6.1 The Electrical or Electronic Officer or other designated personnel must inspect electrical equipment brought aboard ship for shipboard or personal use. The decision to accept or reject portable electrical and electronic equipment for use aboard ship, and the selection of interval between inspections, rests with the officer in charge of the inspecting shop.

300-2.7.3.6.2 **Approved equipment shall be tagged** or marked to indicate the approval. Two acceptable tagging methods are use of tag NSN-0116-LF-051-0025, which may be amended to indicate the interval between inspections; or use of color-coded tape or a self-adhering sticker NSN 0116-LF-985-4300. 300-2.7.3.6.3 Initial inspection and testing of electrical equipment shall be performed in accordance with the procedures of paragraph [300-2.7.5.1](#). These procedures shall also be followed to approve equipment for use following its repair. Routine inspections following initial inspection shall be performed according to the procedures of paragraph [300-2.7.5.2](#).

300-2.7.3.6.4 Personally-owned equipment/appliances such as portable radios, clock radios, electric shavers, curling irons, hair dryers, electric curlers, hobby equipment, etc. are not of standard issue. Personal equipment can be approved for shipboard use when the following conditions are met:

- Adequate government-owned equipment is not available to meet the need.
- The personal and electronic equipment has been inspected by the electrical/electronic shop and passes inspection for safe, rugged construction and requirements of paragraph [300-2.7.3.4](#). Any personal equipment which fails to pass this inspection must be appropriately

modified to meet these requirements or its use shall be forbidden aboard ship. Final acceptance or rejection is at the discretion of the officer in charge of the inspecting shop. Approved personal equipment shall be tagged.

OPNAVINST 5100.19E:
B0702

Division officers shall:

(3) Ensure that all personal electrical/electronic equipment is authorized for shipboard use. Reference B7-1 contains guidance on determining suitability for shipboard use. The electrical safety checks for personal electrical/electronic equipment are not required.
f. All hands shall:

(1) Request permission from their division officer prior to bringing personal

electrical/electronic equipment aboard. This requirement does not apply to battery-operated.

The statement "The electrical safety checks for personal electrical/electronic equipment are not required." From OPNAVINST 5100.19E does not void the requirement from the NSTM or the SSORM. The bottom line is that all portable electrical equipment, including personal equipment is required to be inspected, tested and tagged by electrical division prior to use onboard the sub.

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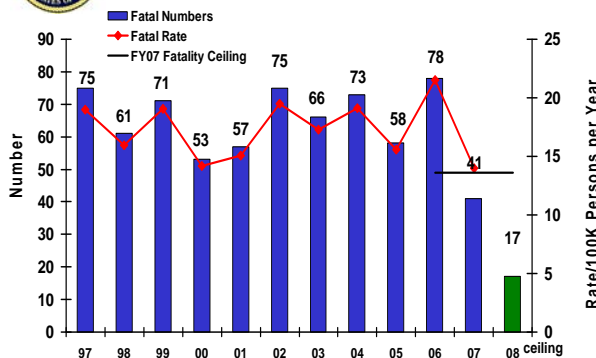
Private Motor Vehicles

LCDR Webb

Private motor vehicle accidents continue to be the #1 killer of our Sailors, with excessive speed and fatigue being primary contributors. Motorcycle accidents are on the rise and should be of direct concern to all levels of the command. Increased pay and higher bonuses appear to be resulting in the ability of our junior sailors to purchase what I call the "scary fast" high performance toys. Intrusive Leaders who take the time to discuss off duty ORM with their junior personnel could save their sailors life!



PMV FATALITIES

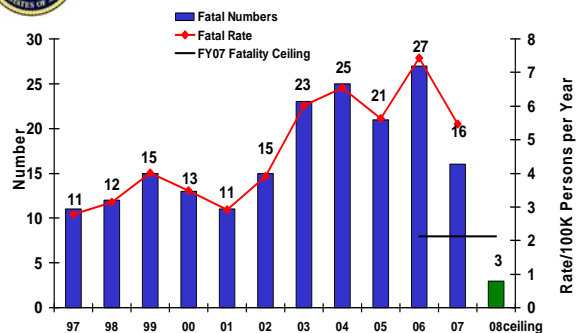


1 PMV Fatality during this reporting period 28 July - Aug 03

	01 Aug 07	01 Aug 06
CLASS A FATALITIES/FATALITY RATE FY COMPARISON:	41 / 14.00	65 / 21.42
FY06 FATALITIES/FATALITY RATE:	78 / 21.49	
10-YEAR AVERAGE (FY97-06) FATALITIES/FATALITY RATE:	66.7 / 17.61	



MOTORCYCLE PMV FATALITIES



0 Motorcycle Fatalities during this reporting period 28 July - Aug 03

	01 Aug 07	01 Aug 06
CLASS A FATALITIES/FATALITY RATE FY COMPARISON:	16 / 5.46	22 / 7.25
FY06 FATALITIES/FATALITY RATE:	27 / 7.44	
10-YEAR AVERAGE (FY97-06) FATALITIES/FATALITY RATE:	17.3 / 4.57	

Changes to 5100.19E

LT Koch

A recent revision to the Navy Safety and Occupational Health Program Manual for Forces Afloat has been signed (OPNAVINST 5100.19E). A pdf version of this manual can be found on the on the Naval Safety Center along with an executive summary of all changes.

(<http://www.safetycenter.navy.mil/instructions/default.htm>) The following is a list of some of the major changes applicable to Submarines.

- Requires the immediate superior in command (ISIC) to ensure timely safety investigations are being conducted.
- Requires that the ship's CO provide a copy of the safety survey report and corrective actions within 30 days to the ISIC, with a copy to the Safety Center.
- Requires the safety officer to maintain workplace inspection results for at least two years.
- Requires an annual self-assessment of all safety programs applicable to the afloat unit. Requires the safety officer to maintain these assessments for two years and to advise the safety council of the results and status of corrective actions.
- Requires the safety officer to maintain documentation of hazards and deficiencies identified during inspections or surveys and those reported by an individual. Identifies the minimum elements required in the documentation.
- Refers the safety officer to the hazard report process in WESS identified in OPNAVINST 5102.1D for submitting external hazard reports outside the command.
- Requires the safety officer to assign a risk assessment code (RAC) to each hazard which cannot be immediately corrected. The RAC is defined by combining both the hazard severity and mishap probability. Hazard severity is defined as the reasonably expected consequence. Mishap probability is the likelihood that the hazard will result in a mishap.
- Requires the CO to be notified if a RAC 1 or 2 hazards cannot be corrected immediately and to determine who will personally be responsible for approving interim control measures.
- Adds reporting of safety hazards, including right to a timely response or appeal, and oil spill response as topics to be discussed during command indoctrination.
- Requires training completion to be documented and training accomplishment to be evaluated on an annual basis.
- The asbestos management chapter effectively deletes the requirement for the ship to develop a stand-alone document and provides clearer guidance on what tasks the ship is required to perform.
- Requires all permanent hearing threshold shifts to be reported in accordance with OPNAVINST 5102.1D. Defines work-related significant threshold shift for entry into WESS as an occupational injury.
- Requires personnel assigned to work noise hazardous areas to be enrolled in the hearing conservation program and to receive annual audiograms, beginning

within the year of being assigned to work in the environment.

- Adds a requirement for an annual sight conservation program evaluation and provides a checklist in the appendix.
- Identifies that eye hazard signs and labels are not required on individual pieces of equipment but shall be posted above the hazard. Recommends avoiding placing the eye hazard sign at the entrance of a shop or space if only selected equipment is eye hazardous.
- Requires division officers to ensure that applicable PMS is conducted on all portable electrical equipment.
- Prohibits all hands from altering the ship's electrical system.
- Prohibits the use of electrical safety gloves for anything other than electrical work.
- Adds a requirement for an annual personal protective equipment (PPE) program evaluation and provides a checklist in the appendix.
- Adds a requirement for division officers to budget for, procure and stock PPE.
- Requires PMS to be conducted on all harnesses and lanyards prior to use and requires a fresh water rinse of all harnesses and lanyards exposed to salt water prior to storage.
- Updates stock numbers and types of PPE recommended for shipboard use.
- Requires EAB and safety training within 72 hours of reporting aboard ship.
- Requires review of hazardous materials precautions prior to moving hazardous material stores.
- Requires wearing steel-toed safety shoes and prohibits wearing cell phones and pagers during line-handling evolutions.
- For working aloft, requires wearing a full body harness with safety lanyard and climber safety device when climber safety is installed. Requires wearing a full body harness and a double safety lanyard configuration if no climber safety rail is installed.
- Requires an ORM assessment prior to refueling operations.
- Requires a back-up person for tank entry to also be equipped with the proper emergency breathing protection.
- Specifies two classes of hot work.
- Requires electrical equipment exposed to hot work to be de-energized.
- Requires use of incandescent lights used for machinery with rotating shafts or chucks to avoid the stroboscopic effect from fluorescent lights.
- Prohibits wearing rings, watches, cell phones or pagers when operating machinery.
- Requires all engineering department personnel wear long sleeve Navy uniform shirts or fire retardant coveralls with sleeves rolled down during watch or maintenance in spaces with steam circulating in the piping or when the diesel engine is in operation.
- Requires continuous net exhaust ventilation after opening tanks.

Effective COMNAVSAFECEN Submarine Safety Advisories

17-00 201959Z DEC 00

Contract Liberty Boat (Water Taxi) Safety

1-06 031600Z JAN 06

Effective COMNAVSAFECEN Afloat Safety Advisories for Surface Ships and Submarines

2-06 021852Z AUG 06

Fire Resistant Paper (NSN 8135-00-966-2532)

To download, you must be on a .mil domain terminal and have a PKI certificate. Go to our secure web site by selecting the [Secure site](#) link. Once you are on the secure site, select the [Afloat Messages](#) link, and then select the [advisories](#) you need.

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. This data is provided to assist you in YOUR mishap prevention program and gives advance notice of other safety-related information.

This newsletter is NOT authoritative but will cite references when available.

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