The Submarine Division of the Naval Safety Center Presents:

Factual Lines About Submarine Hazards

Jul-Sept 2004

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# **Fifty Percent Mishap Reduction**

# How Can You Help?

### FTCM(SS) Clements

Last year the Secretary of Defense challenged all of us to reduce the number of mishaps by at least 50% in the next two years. Personal motor vehicle (PMV) mishaps are the leading cause of our largest number of off-duty fatalities tragically costing the lives of six submarine force Sailors so far this year. Motorcycles are a large contributor to the increased number of these mishaps yet motorcycle safety is one of the hardest areas of the traffic safety program to enforce. It is with a renewed sense of urgency that we must practice intrusive leadership and work hard to mitigate risks, communicate the need to be safe at all levels of the chain of command and keep our Sailors alive. OPNAVINST 5100.12G, Traffic Safety Program, outlines the Navy's rules and regulations regarding motorcycle operation.



Note the helmet in the grill

A motorcycle is defined as any government or privately owned motor vehicle (both street and off-road versions) having a seat or saddle for the use of its operator and designed to travel on not more than three wheels. This includes vehicles with less than 50cc engines such as mopeds,

motor scooters, and motorized bicycles. Because personal injury is twenty-times more likely on a motorcycle than in a car, motorcycle riding is considered high-risk behavior, requiring appropriate risk-management strategies to prevent mishaps. The following is a summary of OPNAVINST 5100.12G requirements for Navy motorcycle operators.

- Every military operator of a motorcycle, 1. whether driving on or off base, must have a valid operators license and successfully complete COMNAVSAFECEN-approved motorcycle training. Evidence of course completion is required to obtain a base sticker, and motorcycle safety courses are available through the Navy at no cost. Motorcycle safety training must be entered in the individual's military service record (page 13). Headlights must be turned on at all times while the motorcycle is being operated. Rear view mirrors must be mounted on each side of the handlebars or the left and right side of the fairing. The following personal protective equipment (PPE) must be worn while operating or riding as a passenger on a motorcycle on or off base:
  - a. Properly fastened helmet that meets U.S. Department of Transportation (DOT) standards.
  - b. Properly worn eye-protective devices (impact or shatter resistant goggles or full-face shield properly attached to the helmet). A windshield, fairing or

- eyeglasses alone are not proper eye protection.
- Properly worn long-sleeved shirt or jacket, long-legged trousers and full-fingered gloves or mittens designed for use on a motorcycle.
- d. Sturdy footwear is mandatory. Leather boots or over the ankle shoes are strongly encouraged.
- e. A brightly-colored outer upper garment during the day and a reflective-upper garment during the night. The outer upper garment shall be clearly visible and not covered. Military uniforms do not meet these criteria.
- f. PPE for government-owned motorcycles during off-road operations shall also include knee and shin guards and padded full-fingered gloves.

OPNAVINST 5100.12G is a lawful general order and does not require

issuance of a local instruction to be enforced. Failure to comply with OPNAVINST 5100.12G subjects the member to disciplinary action under the Uniform Code of Military Justice (UCMJ). These rules apply to ALL Navy personnel, at all times (on or off a Naval installation). When military personnel are injured as a proximate result of their violation of OPNAVINST 5100.12G, the violation may be considered in making line of duty/misconduct determinations for injuries received on or off a naval installation.

Being an intrusive leader means participating in the process, asking the tough questions, and guiding the review of risk and decisions of Sailors where necessary. A ships entire chain of command should make motorcycle safety a priority and enforce the requirements.

# Sign Me Up

### MMC(SS) Nixson

About 50% of the 688 submarines surveyed are missing an "Ammunition Far Side" sign under the small arms locker on the torpedo room starboard side in the overhead. NAVSEA OP 4, Ammunition Afloat, states that, "Ammunition Far Side signs shall be posted on the external side of all boundaries of ammunition stowage spaces except for those outside surfaces which are visible from the exterior of the ship, are to be posted." If you do not have replacement signs they can be manufactured IAW OP 4 using the following specifications:

The signs shall be paint-stenciled labels, painted signs, or permanently affixed adhesive reflective labels with a yellow rectangle, a minimum of 5 inches high by 9 inches wide. Black slanted lines are required along the top and bottom edges, not to obscure the letters. Letters shall be black, a minimum of 1/8-inch thick and 3/4-inch high. Markings on bulkheads shall be placed 5 feet above the deck and spaced 12 feet apart horizontally, if possible.



Markings on decks and overheads shall be spaced 12 feet apart, if possible. All measurements are

approximate and may be adjusted slightly where required. With the new aft small arms locker being installed, **All** units should ensure proper signs are being used and ensure proper placement of the signs throughout the ship.

# **E&E Support Bars Update**

ETC (SS) White

In the article entitled "E&E Adapter Support Bars" in FLASH (April-June 2004), the focus was on the deficiency of weight testing of the Type 18 E&E adapter and Type 8B periscopes' support bars, and the required periodicity of the weight testing. The required periodicity for weight testing is 48mos. The reference documents quoted in the article were COMSUBLANT Technote 02-00 Appendix C and the Type 18 Technical Manual NAVSEA (0924-LP-065-3010). A more accurate reference for the test requirements and periodicity is NAVSEA

Drawing No. 904-4398614 Rev. 5 (Lifting Clamps & Slings For Antenna Masts & Periscopes)
SHEETS 6 / Note 38, 51, 52, 57 / Note 4, 59, and
63. Currently the only scheduling aid is through the METCAL system. SUBMEPP is recommending changing the MIPs for both the Type 18
(4251/R09) and Type 8B (4251/001) periscopes to incorporate a scheduling aid to weight test the scope bars, eyes, and bolts every 48mos. Creating this scheduling aid will improve the completion of weight testing for this critical piece of equipment.

# **Collateral Duty Safety Officer**

# **Effective Time Management**

### LT Romano

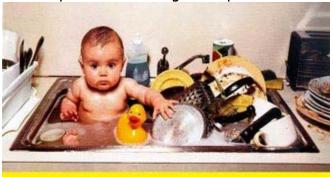
Time management skills are vital in balancing the responsibilities of primary duties with the collateral duties and tasking required of Chief Petty Officers and junior officers. A Collateral Duty Safety Officer on a submarine is expected to produce the same quality results as a Safety Division on a surface ship. Quality end

results cannot be produced unless the Safety Officer is a motivated leader with effective time management skills.

During recent safety surveys, I have seen more and more Safety Officers that have "inherited" the job without the benefit of a formal face-to-face turnover. Often times, the

newly reported chief or junior officer gets the job without the benefit of historical data including the Safety Council minutes, submitted Mishap Reports, and other supporting documentation necessary to run an effective NAVOSH safety program.

Our mission at the Naval Safety Center is to enhance the war-fighting capability of the Navy and Marine Corps by arming Sailors and Marines with the knowledge they need to save lives and preserve resources. Our analysts are charged not only with documenting discrepancies during safety surveys, but also with educating ship's force personnel of safety-related requirements, and providing process improvement tools to prevent recurring discrepancies.



What are you doing to save time?

During any administrative review, binder organization is key in providing timely documentation required of inspection teams whether it be SMI, MRI, ORSE, INSURV, 3MA, TRE, NEP, or BSA. A well-organized Safety Officer binder minimizes the "slack time" between when an inspector asks for documentation and when the binder is produced. Setting your binder up for success also assists in efficiently performing your collateral duties, so that ample time can be spent on primary responsibilities.

The following are recommended tabs to effectively organize Safety Officer administrative requirements.

- 1. Ship's Collateral Duties Instruction.
- This will provide documentation that the CO has designated in writing the various chiefs and officers en masse without having to maintain separate qualification or designation letters. I also recommend that the Safety Officer maintain required course completion certificates and waivers as required in this section.
- 2. **Mishap Reports**. Section A0602K (4) of OPNAVINST 5100.19D requires five years worth be maintained.
- 3. **Deficiency Abatement Plan**. Section A0404F of OPNAVINST 5100.19D requires the Safety Officer maintain a current Deficiency Abatement Plan or safety-related CSMP. The 3MC is a subject matter expert in providing this information to the Safety Officer whether the ship uses OMMS-NG or SNAP.
- 4. Safety Survey, Inspection, and Assessment Reports. Section A0303D of OPNAVINST 5100.19D requires the Safety Officer receive discrepancy sheets from assist visits and inspections and perform corrective actions as appropriate. Keep it simple in this section by keeping unclassified safety-related discrepancies and not the 188 page CONFIDENTIAL-NOFORN ORSE out brief
- 5. Reports. Maintain any reports that highlight a safety-related discrepancy. This can be in the form of a trouble-call chit, a ZIDL, an Accident and Injury Report, or any of the other reporting systems used.
- 6. Safety Council Minutes. Section A0203 of OPNAVINST 5100.19D requires the Safety Council meet at least quarterly and that the minutes be maintained. This instruction requires the Safety Officer maintain minutes, but does not dictate the formality of the documentation. Use these

minutes to document other requirements of the Safety Council to include reviewing trends and performing NAVOSH program effectiveness reviews.

7. **Training Records**. Appendix A-5A of OPNAVINST 5100.19D is a list of the NAVOSH program training requirements. Instead of maintaining each training critique form for each training session, keep an upto-date A-5A matrix and let the Training Officer/GMT Coordinator maintain the critique forms.

Having a well-organized brand spanking new Safety Officer binder does not ensure that you'll have an effective NAVOSH program, but it is a good first step for organizing the administrative requirements of the collateral duty. I am always available to help Safety Officers with regards to getting their NAVOSH programs groomed so please do not hesitate to call me at (757) 444-3520 ext. 7201, or e-mail me at <a href="Victor.Romano@Navy.mil">Victor.Romano@Navy.mil</a> with any questions, comments, or concerns.

# **Medical Department PMS**

ETCS(SS) Monsam

Emergency medical equipment like damage control equipment is often not thought about until it is needed in a time critical situation. We expect it to be "ready to go" in the event of a casualty. Unfortunately, medical equipment it is often overlooked and emergency equipment might not be ready for use at a moment's notice. Properly performing PMS in accordance with the MRC will ensure that all emergency medical equipment is ready for use at all times.

In the past 18 months, the number of corpsmen not completing pms properly has been rising. Most of the deficiencies have been directly related to not understanding the maintenance requirement resulting in no pms being accomplished. In most cases, these problems should be caught during spot checks required by the 3M program. The completion of pms is not optional, it is required and hopefully this will help clear up what is to be expected. Here are the most deficient maintenance requirements for all submarines.

The most over-looked or improperly completed maintenance is for calcium hypochlorite. MIP 6521/601 provides all of the

references for inspecting and cleaning the calcium hypochlorite storage locker. This maintenance is required to be completed quarterly and it is painfully obvious when it is not done or is done incorrectly. Additional requirements for calcium hypochlorite inspections are listed in COMNAVSUBFOR INST 6000.2 Chapter 6 and state that the chemical storage locker will be inspected weekly and all of the bottles will be inventoried and inspected monthly to ensure they are not expired or there is no discoloration of the chemicals. All of the requirements for HTH storage are in the 6000.2. Attention to detail in performing this pms, frequent 3M spot checks, and HAZMAT inspections by the SUPPO will ensure compliance.

Medical oxygen cylinder pms consistently is being done incorrectly. In accordance with MIP 6521, MRC R-1, all medical oxygen cylinders are required to be pressure checked upon receipt as well as ensuring that the medical oxygen tag DD 1191 and "Control Tag for Medical Oxygen Equipment" are attached to the cylinder. MRC 2W-1 requires that the "IN USE" bottle be pressure checked and the pressure recorded on

the control tag for medical oxygen. MRC Q-1 requires pressure checks for all stowed oxygen bottles. Ensure that the cylinder is in good condition, has been hydrostatically tested within the past five years, and has both tags attached. Verify that the pressure has not dropped by more than 20psi and record the pressure on the appropriate tag. If the pressure drops by more than 20psi, perform a leak check in accordance with the MRC.

The SAR "MEDEVAC" litter, MIP 6521/621, MRC-Q1R requires that every ninety days or after each use it be inspected and cleaned. Ensure that the situational requirements are accounted for when completed. MRC-A1, which

requires weight testing the litter and hoisting lines in many instances is not being completed and/or the documentation, is not available. Your intermediate maintenance facility is available to complete this MRC, but the responsibility is on the ship to request the work. The litter and hoisting lines must be tested together and if any portion is replaced the test must be done again. (NAVAIR Instruction 13-1-6.5) provides all of the details for this procedure.

If you have a problem with any portion of the 3M system bring it to the attention of the 3M Coordinator. Be assured that he will take the time to assist and verify that your program is being maintained as required.

### Hail



Welcome aboard to HMCS (SS/FMF (Fleet Marine Force)) Tim Juneau to the Medical /Occupational Health section of the Submarine Safety Division here at the Naval Safety Center. HMCS Juneau's twenty years of experience and expertise will provide an invaluable asset to the survey team. Previous commands include the USS

Norfolk (SSN 714), USS Boise (SSN 764), USS Oakridge ARDM-1, Puget Sound Naval Shipyard, Naval Aviation Schools Command, and first and third marine divisions. You can reach HMCS @ 757-444-3520 ext. 7097 (DSN 564) e-mail timothy.Juneau@Navy.mil

# Effective COMNAVSAFECEN Submarine Safety Advisories

17-00	201959Z DEC 00	Contract Liberty Boat (Water Taxi) Safety
1-04	051505Z JAN 04	Effective COMNAVSAFECEN Afloat Safety Advisories for Surface Ships and Submarines
3-04	011800Z SEP 04	Electrical Tag Out Verification

To download you must be on a .mil domain terminal. Go to our secure web site by selecting the <u>DoD menu</u> link. Once you are on the secure site select the <u>Afloat Messages</u> link and then select the <u>Submarine</u> <u>effective advisories</u> link.

### 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 are 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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