

The Submarine Division of the Naval Safety Center Presents:

FLASH

Factual Lines About Submarine Hazards

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Driving While Tired

LT Matthew Dodge

This was one of the happiest drives I ever had made; I was driving back to school from Ohio to graduate after four long years of work. I looked forward to all the festivities of graduation week and all the parties with friends and family. I had made this trip a hundred times—for every holiday break and on many weekends to see my girlfriend at her college in

the northeast part of the state. This time was a little different, though.

My typical routine for the drive home was to wake up at 0700, then gather a full cooler of Mountain Dew, some good music, and lots of snacks to make it through the 7.5-hour ride back to school. This schedule usually allowed plenty of time to get back for the 1800 formation. It

always was a nice daytime drive with very few hiccups.

To start with, formation was set for noon on the day of return. I originally had planned to leave at 1600 on the day before the return date. I changed my mind, though, and decided to get some sleep, then leave at 0300.

By the time I finally got everything packed up, it was about 0330, and I was feeling wide awake. The trip was going very well; traffic was light, and I was making excellent time. I didn't feel tired. All I had to do was make it till daylight, and I would be fine for the rest of the way—or, so I thought.

At 0900, I just had passed through Cumberland, Md.—about 2.5 hours away from school. The sun had come up, and I was feeling pretty good about my trip. I had the radio on full blast to help me stay awake. Those thoughts were my last until I woke up staring at the side of a hill. I had fallen asleep, cut across the slow lane of traffic, and run off the right side of the road. The only thing that saved me from running into the side of the hill was the rumble strips on the edge of the road—they awakened me. I ended up popping both tires on the right side of my car and had some serious marks on the front where I had run over three road reflectors.

Needless to say, I was late getting back to school anyway because it took six hours in Cumberland to get new tires on my car. The whole thing cost me close to \$1,000 and a lot of unnecessary stress.

What did I learn from this experience? When I'm driving and grow even a little bit tired, I pull over to the side of the road and step outside for some fresh air, or I take a little nap to rejuvenate. I also drive during normal waking hours so my natural sleep cycle isn't interrupted.

Sometimes, caffeine, snacks and music only go so far, and you have to listen to what your body is telling you. I was lucky that I did only

minor damage. I could have run into another car, caused a major accident, and maybe even killed someone. I never will forget this experience, and I hope it teaches others the dangers of driving tired.

2003 Critical Days of Summer

This year, there were 102 days from the Memorial Day weekend (starting Friday, 23 May) through Labor Day. These are called the "Critical Days of Summer" because the off-duty fatality rates are usually higher than the full-year rates, as the tables below show.

The Critical Days are over. Here 's how we did:

	Actual Fatalities	Actual Rate	Predicted Fatalities*	Predicted Rate
Navy PMV	21	19.69	24	22.50

Navy Private Motor Vehicle Fatalities				
	Critical Days of Summer		Calendar Year	
	Fatalities	Rate	Fatalities	Rate
1994	30	23.08	87	18.91
1995	28	23.24	80	18.60
1996	26	22.52	75	18.23
1997	25	22.82	74	18.87
1998	19	16.77	57	15.00
1999	32	30.92	73	19.57
2000	20	19.33	48	12.82
2001	17	16.24	62	16.33
2002	32	30.00	71	18.44
Total	229	22.74	627	17.48

Rates per 100,000 military personnel per year

A Different Soap Box

MMCS(SS) Downham

Training our Sailors is the ultimate responsibility of the Navy's leadership structure. I've visited numerous boats over the last two years and found many DCPOs did not have the requisite level of knowledge to perform the PMS required on some of their own equipment.

When I conduct a damage control survey, I'm verifying the PMS is getting accomplished IAW the PMS MRC. Do you have the tools, material, or misc. equipment required? Does the equipment show that the PMS is being done correctly and does the DCPO have the necessary level of knowledge to perform the PMS? One of the best tools available for obtaining the

knowledge is the Submarine Damage Control Petty Officer course. The course is three days long and taught at all submarine training facilities (CIN: A-495-2054). All submarine DCPOs are required by the Submarine Readiness Manual to attend this course, regardless if you're the divisional DCPO or the ships DCPO. It is the responsibility of the LPO/LCPO, of a division with DC PMS responsibility, and the command, to ensure all assigned personnel assigned the collateral duty of DCPO attend the course. Damage control readiness is the most important attribute for a submarine; but if the equipment doesn't operate properly, it doesn't matter how good you look!

Navigation Interactive CD-ROM Version 5

ETC(SS) Bryan White

The Navigational interactive CD-ROM continues to be an invaluable tool for navigational personnel to learn from others misfortune. The newest version will include a grounding incident that actually occurred. This mishap could have been avoided through proper planning and supervision. Personnel can step through the series of events leading to this mishap, and apply their knowledge and skills to prevent a recurrence in a simulated environment.

Unfamiliar with this product?

The interactive CD-ROM allows users to interact with navigation scenarios based on real mishaps and challenge their ability to correct or even improve upon the conditions causing the mishap and see if your decisions as navigation personnel would have avoided the mishap.

Version 5 will be released during the second week of October 2003. If your command does not receive the CD-ROM, or has any questions, comments, or suggestions, contact me at bryan.c.white@navy.mil, 757-444-3520 ext.7202 (DSN 564).

Accidental Discharge

MMC(SS) Nixon

Mishaps involving small arms have increased recently. Two submarines have reported incidents of accidental discharges in the last couple of months. One submarine reported an incident of six rounds being "accidentally discharged" from the sail into the water during armed watch turnover. A second reported an "accidental discharge" while conducting small arms maintenance. Although these mishaps were reported as an "accidental discharge," we have to wonder what caused these incidents. The most common explanations are a lack of supervision, attention to detail, and procedural compliance. However, there could be a multitude of reasons that caused the watch stander, or arms handler, to be distracted and result in these negligent discharges of the weapons.

Small arms safety is a constant and never ending issue with all watch sections. Therefore, I will review some of the basic requirements for safety:

- COMSUBLANT/COMSUBPACINST 8500.4B (Conventional Weapons Manual) Chapter 3 provides the proper turnover procedure for all weapons carried on board and is the only authorized procedure.

- A qualified supervisor, with the turnover procedures in hand, is required to be present during all weapons turnovers.
- Always assume that the weapon is loaded until you visually prove it is empty.
- The safety shall be on at all times unless directed by authorized authority and procedures.
- All small arms maintenance shall be conducted by, qualified and certified personnel, in accordance with the applicable MRCs.
- During a recent survey below decks watches were observed doing weapons turnover in control. According to the Conventional Weapons Manual, "Relief procedures should take place on the pier whenever possible." In this case, the weather would have permitted turnover on the pier.

Vigilance for small arms safety is the responsibility of everyone on board. With continued supervision and training, adherence to procedures, and proper formal communications, we can drastically reduce or eliminate small arms related mishaps.

Is Your ICV a Shock Hazard Waiting For a Victim?

EMC(SS/SW) Seplak

During the past year we have seen several mishap reports regarding electrical shock received from the ICV panel. Each mishap was the result of test probes, for total bus voltage, missing insulated finger guards. These guards are designed to prevent the technician's finger from sliding down the probe and coming in contact with energized metal. During recent surveys, I have checked a number of ICV panels and have found that it is common deficiency for these guards to be missing. As a result, I researched how the ships could obtain replacements to correct this deficiency.

Initially, it was difficult to find the requirement for these insulated guards. Finally after exploring numerous technical manuals and making phone calls to Mr. Steve Painter of GNB Industrial Power, I now have the documentation on these finger guards.

According to the design yard drawings (see Fig. 1) these insulators should be manufactured from laminated plastic (MIL-P-15037) 1/16-inch thick. The circular insulator is to be 5/8-inch outer diameter, and the opening centered in the middle should be 11/32-inch in diameter. These guards should be painted with an insulating lacquer (Spec MIL-I-17384). One should be black and the other red. Then they should be installed on the corresponding ICV panel probe between the probe barrel and the nut portion of the probe tip.

Your local IMA should be able to manufacture these insulators. In addition to the

description I have listed the following references that give detailed drawings:

SSN688 class:

Newport News DWG # 4047-356.

SSN21 class:

Newport News DWG # DF4047-1279,
or NAVSEA DWG # 313-6404384.

SSN774 class:

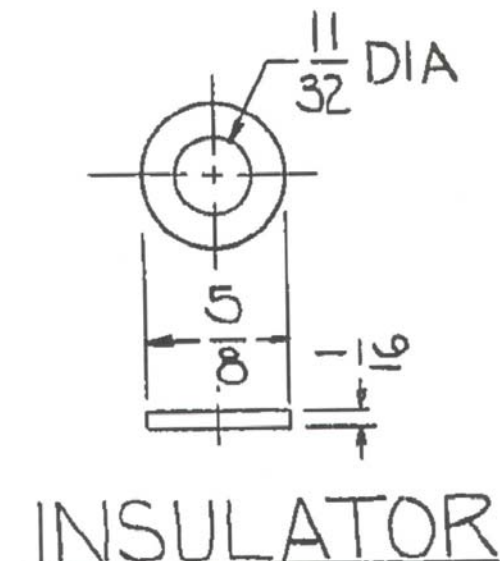
EB DWG # H751-1521,
or NAVSEA DWG # 7068079.

SSBN726 class:

EB DWG # 87751-1521
Or NAVSEA DWG # 4683397 Rev F

If you are in need of any further questions contact EMC(SS/SW) Seplak at (757) 444-3520 ext. 7092 (DSN 564).

Figure 1



Health & Safety Information on Household Products

HMCS(SS/SW) Flannery

The U.S. National Library of Medicine, run by the National Institutes of Health (NIH) in Bethesda, launched a web site in September that lists the potential health effects of more than 2,000 product ingredients. If you're worried about the health risks of all the junk lying around your house, the site also details the

contents of more than 4,000 common household items. Its database lets people search by product type, manufacturer name, or ingredients. Log on to the Household Products Database at

<http://householdproducts.nlm.nih.gov/>.

A Diver's Greatest Asset

MMC (DV/SS) Gest

Having spent the first 5 1/2 years of my career as a submariner, and the last two of that as a diver, I know the challenge of being a dive locker LPO onboard a submarine. Common to most commands, divers aboard the USS Sargo were plagued by inadequate storage, too few divers, and a schedule that robbed the best opportunities for diving. It felt like a family reunion on the rare occasions that the entire dive locker could get together for training. And I'm sure some of you have experienced the frustration of a "mobile" tech-library: "Where's the dive manual?" "I think it's in Mike's rack, he's the only one who has room." When you're on patrol, does your wetsuit ever really dry out? We usually had to take them off the hanger in the shower and stuff them in a locker before they got a chance to stop dripping. How about security-swims just prior to getting underway? As soon as the maneuvering detail secured, everyone in the dive locker went on watch and all the wet gear got shoved in a locker until we were relieved, just around midnight.

However, the greatest asset of any dive locker is professionalism. The fact of life

aboard almost every submarine is that you will always be undermanned, and diving will always be a collateral duty that plays second fiddle to every other evolution, yet few duties aboard a submarine ride the edge of danger as close as diving. I can guarantee that there will be days that you'll be tired and want to take shortcuts, that training seems non-essential, and external pressures drive you to rush through things that should be carefully considered.

It is professionalism that stands guard against the complacency that comes with fatigue. Yes, the job would be a breeze if not for the fact that you're a submariner. But you're not just a submariner, you're a submarine diver. Every time you train, and every time you maintain your gear, you or your buddy's life could hang in the balance. It's with that understanding that when I see a dive locker doing the business right it makes me proud to say that those are my roots.

Finally, the hardships of being a diver onboard a submarine are not an excuse for a poorly run dive locker; instead, it's the reason

you must be motivated (say HooYah), and above all else, you must be professional.

Commands looking for dive school candidates should look for individuals that display a desire to stay physically fit without being pushed. There'll be long periods when a couple sets of pushups and sit-ups before and after watch is all they'll get to do to stay in shape. Self-starters that finish their submarine qualifications ahead

of schedule will more likely meet the demands of dive school studies, which include physics and medicine, and afterwards stay proficient by consistent review of the U.S. Navy Diving Manual and the periodic publications that NAVSEA and the Naval Safety Center publish.

HooYah and AahOooga, dive safe and keep it professional.

Reverse Osmosis Desalinators

FTCM(SS/SW) Clements

Formal PMS has now been issued for SSN 688 Class boats that have the Submarine Escape and Immersion Equipment (SEIE) suit SHIPALT. This new PMS now covers the reverse osmosis desalinators that were issued with this SHIPALT. SUBMEPP Portsmouth NH issued this PMS under letter Ser 1814.6/300 dated 15 August 2003. The letter provided users with MIP facsimile H-409/TBD-63, MRC facsimile Q-1R (Syscom:63AAAN) and MRC facsimile 48M-1R (Syscom:63BBBBN) and was sent to each boat's 3M Coordinator. Final MIP and MRC Syscom

numbers will be issued at a later date. MRC Q-1R has the user perform a visual inspection of the desalinator. MRC 48M-1R has the user test operate the desalinator. If the date of manufacture of your desalinator is greater than 48 months, you must perform both MRCs upon receipt. Review the materials list as soon as you get the PMS. During my last several surveys all of the desalinators were on average 60 months or older in age. Don't wait until your life depends on it to check and see if this piece of survival equipment works.

Editor's Thoughts

HMCS(SS/SW) Flannery

A safety survey offered by the Naval Safety Center is one of the last **free** looks the Navy has to offer! We conduct safety surveys (not inspections), we don't report the specific results of our surveys to anyone (e.g., squadrons and TyComs), provide ORM training, and we write various publications (including the submarine newsletter Flash and Fathom magazine). We take up very little of your time (in the grand scheme of things), are very flexible, and who knows, we may even identify something that may save a life. The majority of items on our survey checklists are looked at by other organizations that are not in the

free-look business (e.g., INSURV, TyComs). In fact, we meet with the INSURV teams regularly and ensure our checklists correspond with theirs.

We work for the government and truly are here to help! Safety surveys are recommended to be completed every two years, and a large number of our boats are coming due or are over due. Our scheduler, FTCM(SS/SW) Clements chris.clements@navy.mil (757-444-3520 ext. 7099, DSN 564), can coordinate a visit for a safety survey and/or ORM Training.

Effective COMNAVSAFECEN Submarine Safety Advisories

17-00 201959Z DEC 00 Contract Liberty Boat (Water Taxi) Safety

1-03 071425Z JAN 03 Effective COMNAVSAFECEN Afloat Safety Advisories for Surface Ships and Submarines

To download you must be on a .mil domain terminal. Go to our secure web site by selecting the [DoD menu](#) link. Once you are on the secure site select the [Afloat Messages](#) link and then select the [Submarine effective advisories](#) link.

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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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