



SEA COMPASS

**INAUGURAL ISSUE
FALL 2011**

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CHARTING THE COURSE TO A MISHAP-FREE NAVY

CHARTING THE WAY AHEAD

Control Risks with the Right Tools and Attitude

**USS SAN JACINTO CREW (CG 56) MAKING A DIFFERENCE
ELECTRICAL SAFETY REACHES NEW HEIGHTS
CAN YOU ESCAPE AFTER THE LIGHTS GO OUT?
CASE STUDY: FRACTURED LEADERSHIP**

COMMANDER, NAVAL SAFETY CENTER
DEPUTY COMMANDER
DIRECTOR, AFLOAT SAFETY PROGRAMS
DIRECTOR, COMMUNICATIONS & MARKETING

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SEA COMPASS MISSION STATEMENT

Our goal is to provide information and resource to help our Sailors, Marines and civilians focus their efforts on the mission. We will provide relevant data and analysis to help you manage risk, on or off duty. Sea Compass will do its part to keep you informed and be combat ready.

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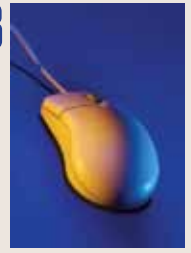
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BROWSE SEA COMPASS ON THE WEB



ISSUE EXTRAS

Can You Hear Me Now?

By YN2 (SCW) Kevin Capelety, *Surface Warfare Magazine*, Spring 2011

Could your hearing be in danger? If you work around loud equipment or in confined spaces, learn how to protect yourself from noise hazards.

Safety First on the Waterfront

By CAPT Mark Whitney, Commander, PSNS & IMF, *Salute* newsletter, July 21, 2011

Ship maintenance and repairs are no simple tasks. But with focus on safety first, workers at the Puget Sound Naval Shipyard and Intermediate Maintenance Facility complete their job with no mishaps.

Don't Tamper with the Evidence

By Evelyn Odango, Naval Safety Center

Collection of undisturbed mishap evidence helps safety investigators reconstruct and analyze.

MORE SEA STORIES

Thanks for the Hard Hat

By CDR Jason Garrett, COMPACFLT Hawaii

A change of command ceremony is the last place you would see a flashlight moving at the speed of light.

AFLOAT SAFETY AWARDS

Afloat-Related Safety Awards

Like to write? Don't pass up the chance to be recognized for outstanding contributions to afloat safety awareness. You and your command have the opportunity to participate in these two media-based awards:

- The VADM Bulkeley Award for Afloat Safety Culture (Command Award)
- The RADM Buie Award for Afloat Safety Culture (Individual Award)

Submission deadline for the calendar year 2011 (Jan. 1-Dec. 31) is Dec. 31, 2011. Award recipients will be notified in Spring 2012. Guidelines are outlined in the Chief of Naval Operations Afloat-Related Safety Awards (OPNAVINST 3590.24E).

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Special Format

Flip the magazine to explore
the underwater world of
Submarine and Diving.

Let us know what you think of
this inaugural issue by emailing
your feedback to
safe-seacompass@navy.mil.

COVER PHOTO: USS *Russell* (DDG 59) plows its way through the South Pacific while on a surge deployment. (U.S. Navy photo by CMC (SW/NAC) Spike Call)

THIS PHOTO: U.S. Navy Sailors stand watch on the forecastle of the Ticonderoga Class Guided Missile Cruiser USS *San Jacinto* (CG 56) while in Naples, Italy, for a port visit. (U.S. Navy photo by MC3 Patrick Gearhiser)



CHARTING THE WAY AHEAD

LEADERSHIP FOCUS



COMMANDER, NAVAL SURFACE FORCES

Sea Compass magazine encourages each Sailor to take ownership of his or her safety and the safety of all of our shipmates. Someone once said, "Tell me and I'll forget, show me and I'll remember, involve me and I'll understand." That is precisely what *Sea Compass* is asking for – your involvement. Get involved with safety by sharing your experiences with the rest of us. How many sea stories go untold (or passed to just one or two shipmates or friends) that could benefit all of us and even our families?

This is your opportunity to help keep your shipmates, their families, and our ships safe. To make this magazine as meaningful and useful as possible, we need (and I ask your support) maximum participation from the fleet. Safety knows no rank or rate. We've all heard the standard phrase over the 1MC: "Anyone observing an unsafe condition will call a safety timeout." This is your opportunity to call a safety timeout and bring attention to those issues afloat and ashore that require focus to correct.

Deckplate leadership doesn't begin and end with the chief or leading petty officer. We are all leaders as well as followers, and we can all learn from each other; that is, as long as we take the time to share our experiences and lessons learned. I'm looking forward to hearing what you have to say, and I'll bet your shipmates are, too. So, let's have it. What happened to you today? And, more important, did you learn anything? Sail Safe.

VADM Rick Hunt



COMMANDER, NAVAL AIR FORCE, ATLANTIC

I am excited to introduce you to a new magazine oriented toward our young Sailors. *Sea Compass* is about you and your stories at the deck-plate level. I hope you will find stories that are entertaining and instructive lessons to learn from, and apply to your daily routines.

It is easy when we are young to think "That won't happen to me." But it can happen to you; and there's nothing amusing about an accident – people get hurt and equipment gets damaged. If you have already been involved in a mishap — whether as a victim, a survivor, a friend, or a shipmate — you understand this and I hope you have learned something from the experience. Today, you can make a difference. You can write about your experience and share it so others may learn.

Your task is two-fold. First, share the stories. Second, apply the lessons so you can avoid making the same mistakes. All the safety programs in the world will not make you any safer if you don't take some action. A magazine with all the best lessons will not improve safety unless together, as professional naval personnel, we apply the lessons.

Your shipmates will relate stories of life's hard lessons so that you can learn the easy way; however, each of us must apply the lessons, common sense, ORM, and other safety resources. It will be incumbent on each of us to ensure that "safety" is an action word — a verb — something you apply time and energy toward. It will be incumbent on each of us to apply these lessons so that as a Navy we can make safety happen. Think safety – do safety – live safely!

RADM Ted Branch



“It is up to each and every one of us to take the initiative to control risks that threaten our mission, our shipmates, or our families.”



ADMIRAL'S PERSPECTIVE | COMMANDER, NAVAL SAFETY CENTER

In partnership with the surface, submarine and dive communities, the Naval Safety Center is proud to launch the inaugural issue of *Sea Compass* magazine, dedicated to afloat, undersea and dive safety. This publication is about you and your stories. My team of safety experts and I welcome your energy and enthusiasm in building a culture that embraces risk management as an essential component in making solid progress toward zero preventable mishaps in our Navy and Marine Corps.

While this sounds like an extremely optimistic goal, it is important to understand that a “preventable mishap” is one where the risks were known ahead of time, yet we failed to effectively manage those risks. Our Navy does a very good job teaching us about the risks we will encounter on and off the job. Just as important, we are taught the process for how to manage these risks. Part of this is time-critical risk management, or TCRM, for those times when a risk is presented to us with limited time to react in an appropriate way. Each and everyone of us has to take the initiative to control risks that threaten our mission, our shipmates or families.



If we don't remain alert to hazards, implement controls and follow rules, we jeopardize ourselves and our future. Because hazards can present themselves with no warning on duty or off, being alert and ready to use risk management is a great way to successfully deal with any challenge we encounter.

It would be simplistic to say that we use our “safety compass” only as a guide for preventing mishaps. Moving in the right direction when it comes to safety is also about creating an environment where everyone embraces safety as an instinctive practice. One key to our success is recognizing the rapidly changing environments we live and work in, and constantly adapting to change. Changes in electrical safety requirements will keep us up-to-date with new equipment and protect our fleet electricians. Rededicating ourselves to sharing important, perhaps life-saving lessons learned, in the form of hazard reports, Class C and D mishap reports, and injury reports will reverse a current trend of under-reporting. This is critical to ensure we provide ourselves the information necessary to allow other similar commands to fully understand their environment, helping them manage risk instead of suffering the same mishap. Although no one likes to admit they made a mistake, a far worse feeling is knowing that failure to share the lesson learned was responsible for a mishap occurring with significant injuries or loss of life.

Our job is to build a culture that involves all hands in every command to be on the alert and proactive in identifying and anticipating what could become contributing causes of a preventable mishap. I know that there is a very large and eager audience that looks forward to reading your personal stories, lessons learned, and secrets to success in future issues of *Sea Compass* that will help us build this dynamic safety culture.

RADM Brian “BC” Prindle



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Safety at Work A PHOTO ESSAY

SHOW US HOW YOU CHART THE COURSE TO A MISHAP-FREE NAVY

Capture images that show how you chart the course to a mishap-free Navy, on the job or off duty. We will feature your entry in *Sea Compass* and on our web site. For the Spring 2012 issue, we will feature a photo essay on job protection or off-duty safety. The theme will center around personal protective equipment (PPE).

Photo Essay Requirements:

- Submit three to five photos depicting the subject PPE (include photo credit and date photo was taken).
- Write extended captions (one paragraph, six lines) that describe each piece of equipment, its purpose, any training required, and why it's important to use it.
- Write a short essay (one page, double-spaced) about a worst-case-scenario if PPE does not work properly or not worn when required.
- If PPE prevented a mishap, write a short essay about your experience and the positive results.

For more information on writer and photographer guidelines, visit www.public.navy.mil/navsafecen/documents/media/magazines/writer-photo_guidelines.pdf.



U.S. Navy photo by Scott A. Thornbloom

What a Production

It's been an eventful year for the Naval Safety Center Media Division, to say the least. Last fall, the final issue of *Sea&Shore* made its way to ships, submarines, diving, and shore commands serving the afloat and shore communities. The decision to split the publication into two separate magazines became a reality this year. And this summer, production of *Sea Compass* kicked into high gear as I took my new post.

Now that we have a brand-new magazine solely dedicated to our seagoing men and women, I want to help you navigate these pages. But first, let me tell you a short story. In June, the task came down the wire: to produce the magazine from scratch. With only seven weeks to work with and no articles in the production bin, I had my job cut out for me. So the subject-matter experts in our Afloat Safety Programs Directorate dusted off their pens and began writing articles for this inaugural issue. From PMS to PPE; from risk management to sleep management — we've covered a lot. My sincere thanks to our contributing writers and technical advisors who laid the foundation for this incredible production.

While we've collected many good articles and feature stories for you to enjoy, the real challenge will begin after this first issue. That's where you — yes, you over there who just helped avoid a major mishap — come in. What matters most to me is that when you read your story in this magazine, you will feel pride in your own command culture that enables you to make a difference. It's just as important that you choose *Sea Compass* to tell your story about how you could have done better. If you have a picture to include, it will make your story more compelling. There's always something to be learned from someone else's unfavorable experience.

Between now and the next issue (Spring 2012), there's plenty of time to write your story. But you don't have to wait until then. Send us your inputs and photos for off-duty and holiday safety articles for the online version of *Sea Compass*, which comes out this winter.

In the meantime, as you read the articles in the front section, you will almost certainly identify with some of the lessons learned. The "If only I'd..." statement by AM2 Justin Asprer in his Sea Story is something we all have muttered at some point. In the ORM Playbook section, LT Jennifer Knott explains why it's vital to keep your ORM brief current with data and interactive discussions during an evolution. A Case Study written by ETC (SW) Jason Mobbs gives us a bird's eye view of an operation that will make the hair on the back of your neck stand.

Flip the magazine and you will explore what goes on down below. Our safety investigators share their observations during assist visits, as Chief Navy Diver Rebecca Jones does in her submarine diving article. Entertaining yet not to be taken lightly, ETC (SS) Kevin Dawson's electricity story hits the mark on safety measures. Do you know what goes on around you during a drill? MMC (SS) Arthur Sisk tells us what happens when your situational awareness is down.

I am certain the stories and information shared in this issue will influence your sense of responsibility for yourself and others. As we move forward and explore many possible topics, don't forget to check out our website (www.public.navy.mil/navsafecen/) for ideas. Browsing the content tabs may inspire or remind you of something worth writing about. Ready to write? *Sea Compass* on the web (www.public.navy.mil/navsafecen/pages/media/seacompass.aspx) offers writing tips and guides. So have at it and rediscover the joy of writing.

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BY EVELYN ODANGO
PHOTO BY JOHN W. WILLIAMS

USS SAN JACINTO

A proud moment for the crew of USS *San Jacinto* (CG 56) was felt through the crowd that gathered on Aug. 19, this summer, as they received the 2011 Secretary of the Navy Safety Excellence Award. Rear Admiral Brian Prindle, Commander, Naval Safety Center, and Rear Admiral Herman Shelanski, Commander, Carrier Strike Group 10, thanked the men and women for their achievement in safety and risk management.

Among the notable efforts of this crew are occupational safety and health innovations, fatigue management, and DUI prevention. Commanding Officer CAPT Douglas Nashold applauded his crew's attention to detail and always keeping an eye for what could go wrong, in port or at sea.

Addressing the crew, RADM Shelanski noted their successful teamwork. "It takes a ship and a crew that's really on top of things. It takes a wardroom of officers who have real concerns. It takes focus of a crew who

has ownership. It takes high regard for operations. It permeates and prevails throughout the ship."

This achievement was made possible by teamwork between *San Jacinto's* leadership and crewmembers. Their proactive efforts begin with their vibrant safety program that involves quarterly commandwide safety stand downs, quarterly safety council meetings, and monthly safety committee meetings (the requirement is quarterly). To ensure strict compliance and proper oversight, *San Jacinto's* CO reviews one safety-related program each week as part of their Program in the Spotlight. Topics include weapons turnover, hazmat control, small-boat operations, tag out, electrical safety, respiratory protection, DUI prevention, and motorcycle safety program. Subsequent reviews allow for assessment and feedback.

Recognizing the hazards of electrocution, the crew also identified a need for clarification in the *Naval Ships' Technical Manual* (NSTM Chapter 300), which does



CREW MAKING A DIFFERENCE

not require PPE while conducting visual inspections of energized equipment. Inadvertent touching of equipment or dropping of an object into the equipment being inspected could pose electrical hazards. To negate this possible threat, the crew submitted a Technical Manual Deficiency/Evaluation Report that requires a CO's approval and PPE when inspecting energized equipment. (See related article on electrical PPE by EMCM (SW/AW) Jim Burke on page 8.)

One of the most valuable types of training on the ship is their fatigue management program. To help Sailors who are just coming aboard — and lack underway experience — a three-on, nine-off underway watchbill helps them get into a routine, especially during six-month deployments.

This four-section rotation benefits watchstanders by allowing them to get seven hours of uninterrupted sleep, providing a short watchbill so they can remain alert, and creating shorter stay times in heat-stress environments. SWOS is now introducing this rotation to students in

the DH, PXO, and PCO courses as a method to reduce fatigue for bridge and engineering watchstanders.

In addition to their shipboard-operations success, *San Jacinto's* chapter of Coalition of Sailors Against Destructive Decisions (CSADD) implemented a day-long training event called "The Lost." Conceived by CSADD advocates Operations Specialist Second Class Rod Thompson and Fire Controlman Second Class David Vendetti, the goal is to bring the statistics to life. During this event, 10 percent of the crew would don white t-shirts over their uniforms to display their tombstone and accompanying epitaph. On the back of each shirt was a description of each person's tragic end. A similar event focusing on suicide prevention takes place in December.

The ship's command culture, and its robust occupational safety and health program, has enabled the crew to effectively prepare for and complete the mission at home and at sea. The ship has earned the privilege to fly the SECNAV Safety Flag for the year 2011. **SC**



“This award is about you setting standards, embracing a mindset to be safe on and off duty, and knowing the risk you’re about to encounter.”

– RADM Brian Prindle,
Commander, Naval Safety Center

Protection, Safety of Fleet Electricians Reach New Heights

BY EMCM (SW/AW) JIM BURKE

Imagine a sweat-soaked Sailor operating in an enclosed, all-metal structure with an ungrounded electrical system, surrounded by seawater and working with voltages upward of 4,160 volts. It doesn't get much more dangerous than that. Fleet electricians have always worked in dangerous environments and, with two electrocutions of shipboard Sailors in 2009 and 2010, leaders are focused on fleet electrical safety.

As our technology advances, scenes like this will become a common sight not only on nuclear carriers, but also on conventional ships as they move to much higher voltage platforms. This means the risk of electrocution increases as well. Add that to the following factors: shrinking budgets, compressed training, minimal manning, higher op tempo and the simultaneous introduction of higher voltage platforms, and you can understand why the rules governing Navy electricians are in the process of changing.

THE FUTURE OF SHIP VOLTAGE

Nuclear-powered carriers have had 4,160-volt systems for years, while all conventional ships operated with 450-volt systems. Why the drive to higher-voltage platforms? The higher the voltage, the lower the current; the lower the current, the smaller the size of the cabling (a key reason why our largest platforms, CVNs, converted to 4,160-volt-systems years ago). Technically, introducing higher voltages will open the door for electric drive propulsion, which makes the ship stealthier while increasing payload, survivability, and power for use in non-propulsion activities. In the long run it will save huge sums of money when compared to fuel consumption of steam boilers or gas turbines.



Photo rendering by John W. Williams

USS *Makin Island* (LHD 8), homeported in San Diego, is already in service with a gas turbine plant and a 4,160-volt distribution system. Other platforms are on the horizon: DDG 1000 will feature a 1,000-volt system and LHA 6 class will feature a 4,160-volt system. In the very near future, we'll see 6,600-volt and 13,300-volt platforms powered by electric drive systems, as well as carriers with electro-magnetic catapult systems (replacing steam).



Arc flash personal protective equipment (PPE) is tested during arc flash of 5,000-volt circuit. Photo courtesy of ArcFlashPPE.com.

THE GOOD AND THE BAD

But with every “good” in the electrical world (in this case, lower current), always comes a “bad.” A by-product of high voltage is “arc flash.” This phenomenon is not a shock, but a burn. When a high-voltage magnetic field is interrupted, the result may be a fire ball upwards of 35,000 degrees Fahrenheit with a force equal to the speed of sound. Unprotected electricians can get electrical burns from intense heat.

For many years now, the civilian industry has been protecting electrical workers from arc flash hazards by mandating boundary distances, PPE, and distinct rules and regulations when working with high voltage. The governing document for these rules is the National Fire Protection Association’s *Standard for Electrical Safety in the Workplace* (NFPA 70E).

SAFER GEAR

The largest change for fleet Sailors will be the introduction of new PPE to include coveralls and a new face-shield, both rated at 12 cal/cm² (the units of incident energy that the PPE can withstand) for use with voltages between 300 - 1,000 volts. For those already working with voltages above 1,000 volts, that PPE is already in use and includes a high-voltage suit, arc-flash-rated hood and high-voltage probes for metering, all rated at 40cal/cm². All arc-flash PPE will be used for initial voltage verification and working with energized gear.

The best advice if you’re reading this and you aren’t in an electrical or electronic rating is to steer clear of electrical equipment until verified de-energized by a qualified technician. The hazards are real and failure to recognize those hazards can kill. This is a key reason why annual training in electrical safety for all hands is mandatory aboard ship per *Navy Safety and Occupational Health Manual for Forces Afloat* (OPNAVINST 5100.19E).

NEW HIGH-VOLTAGE PPE



New, high-voltage PPE and faceshield (left) and full arc flash suit, including a high-voltage metering probe, for use with 4,160-volt system. Photos courtesy of the author.

THE NAVY ELECTRICIAN’S BIBLE

Since the science behind arc flash dangers has already been made clear in the civilian community, the Navy is revising its “electrical bible” for forces afloat, the *Naval Ships’ Technical Manual* (NSTM Chapter 300). For the last 24 months, a team of safety experts has been working to completely revise NSTM Chapter 300 line-by-line, including updating stock numbers, introducing PPE, specifying boundary distances, updating shock statistics, and setting rules for high-voltage safety and when working with energized gear. The driving force behind this revision is to align NSTM Chapter 300 as closely as possible with NFPA 70E. NSTM Chapter 300, Revision 8 is expected in October.

To ensure requirements are met, training will include:

- A shipboard, electrical, advanced maintenance “C” school catering to E-5 and above.
- Baseline introduction to high-voltage safety in “A” school curriculum, and as an immediate interim solution.
- A separate, civilian-based, high-voltage safety curriculum for those serving on higher voltage platforms.

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Naval Surface Force Atlantic
Submarine Forces
Naval Type Commands
Program Executive Office Ships
Various Shipyards
Fleet Sailors

RELATED EVENTS

Electrical Safety Summit, San Diego, July 2011: West Coast fleet electrical leaders and deck plate Sailors got their initial introduction to the anticipated changes at this three-day event. Naval Safety Center experts briefed attendees on fleet trends and statistics. NAVSEA 05 representatives discussed current training initiatives and specific changes in NSTM Chapter 300, Revision 8. Commander Naval Air Forces and the Naval Safety Center addressed fatalities, near-mishaps, and lessons learned. Other electrical safety experts demonstrated use of PPE gear.

Future Summit Locations: Mayport, Norfolk, Groton, Bremerton, Japan, and Hawaii. Also, NAVSEA will produce videos featuring these changes for distribution to the fleet. **SC**

EMCM Burke is the leading chief petty officer for the Naval Safety Center Survey Team.

Can You Escape After the Lights Go Out?

BY DCC(SW/AW) JOHN RALSTON

Firefighters are trained to find their way in the dark. So are Navy SEALs who wear those night-vision goggles. Suppose there's an emergency on your ship and the lights go out. Can you find your way?

Vessels can lose electrical power for many reasons. If you haven't updated the marking system on your ship, you may be in big trouble, unless you own a pair of night-vision goggles. Here are some tips for ensuring you and your shipmates can escape after the lights go out.

THE MARKING SYSTEM

Section 21.7, Practical Damage Control, of the *Navy Ship's Technical Manual* (NSTM 079, Vol. 2, Damage Control) says that the primary purpose of the damage-control marking system is to provide rapid emergency-egress information and to identify the locations of important systems and equipment. The marking system involved photo-luminescent and retro-reflective signs. Self-adhesive signs, labels, letters and tape are authorized applications to replace painted marking that are no longer serviceable or effective. The highest priorities: egress markings, fixed DC systems, fire stations, and portable damage control equipment.

HOW IT WORKS

Photo-luminescent signs absorb energy from any nearby ambient light source, such as fluorescent or incandescent lights. When the light source is removed, the material immediately emits a light of its own. Maximum brightness lasts up to one hour, but the signs stay visible for up to eight hours if your eyes are adapted to the dark. Photo-luminescent material can be reactivated an unlimited number of times if properly applied.

Retro-reflective materials (paint, tape or adhesive labels) stand out when exposed to a shining light. Damage control markings may be retro-reflective, photo-luminescent or a combination of both, depending on the purpose. Do not be caught in your space in the dark without the aids to help you escape during an emergency.



U.S. Navy photo by MC1 Nathaniel Miller

DO'S AND DON'TS:

EXPOSED AREAS

Do not apply in areas exposed or open to weather decks, such as the pilot house, gear lockers and light traps. Only NAVSEA-approved photo-luminescent and retro-reflective materials are authorized for shipboard use.

INCLINED LADDERS

Apply photo-luminescent strips on the inner frame, alternating sides with each step. The handrails are marked with six bands wrapped on each side.

- **Folding-Leaf Ladder Chutes:** Apply alternating strips to the chute when in the stowed position.
- **Ladders Leading to Hatches that Open to Weather Conditions:** Apply photo-luminescent material half the distance from the bottom of the ladder only (to avoid being exposed when the hatch is open).

VERTICAL LADDERS

Apply photo-luminescent strips to both rails along the entire vertical length, alternating sides with each rung.

- **Ladders Leading to Scuttles that Open to Weather Conditions:** Mark only to midpoint of the ladders' vertical length from the bottom of the ladder. Mark scuttles with photo-luminescent strips.
- **Escape Trunk Ladders:** Mark wrap-around escape trunk ladders with a band of material wrapped around the ends of alternating rungs.

HATCHES

Mark the side of a hatch coaming, where the ladder attaches, with a photo-luminescent strip to indicate the location of the coamings.

KICK-OUT PANELS

Place the word "Exit" in the center of the panel. Mark around the entire perimeter borders with a six-inch photo-luminescent strip on each side.

TEST BRIGHTNESS

While these photo-luminescent markings might not appear to be of any importance during a ship's daily routine, they could save you in an emergency. When you pass through, or by, these escape routes and the lights are on, it is hard to tell if the routes are marked correctly. Nonetheless, you should take the time to turn off all lighting and see if current markings are bright enough to be effective in an emergency. **SC**

DCC Ralston is the chief damage control analyst at the Naval Safety Center.



U.S. Navy photo by MC3 Dylan McCord

U.S. Navy photo by MC Alex R. Foster

PRE-SURVEY CHECKLIST

The Naval Safety Center survey team rates *USS Lake Champlain's* (CG 57) overall survey results as outstanding. Surveyors commended the ship's electrical officer, LTJG Alexa Gibbs, and the division officers for using checklists to catch errors and reduce risk.

HOW WE GOT AN A+

BY LTJG ALEXA GIBBS

I have loved being the electrical officer aboard *Lake Champlain* for the past year and a half. I am fortunate to work with a great division and an outstanding chief. Since coming aboard, I have learned so much more than just doing the job. I've had the opportunity to become a better leader by using the right resources and tools to reduce the potential for error.

When I first took over the job in January 2009, I was excited but also a little intimidated. I was a political science major in college and was by no means well-versed in the world of electrical engineering. Not letting any of that stand in my way, I asked questions galore. I went around with my electrician's mates and watched them do countless hours of PMS on power panels, fuse panels and controllers. To further my electrical-engineering know-how, I even got to watch as they traced and isolated various grounds.

I thought I was doing well, until my commanding officer informed all 21 of us ensigns that we had a safety survey in nine months and we needed to start going through our respective checklists and make a binder that would cover every item on that list. My checklist was nine pages long, and I felt overwhelmed.

THE 'AHA!' MOMENT

However, when I started reading through my checklist, I noticed that most of the items listed involved

walking around the ship and inspecting every power panel, fuse panel, switchboard, motor controller, light fixture, and so on. I had an "Aha!" moment: this was something I had already been doing!

Most ships have a program called Division in the Spotlight (DITS). Every week, the CO or XO inspects a different division, looking at their spaces and administrative programs in detail. As the electrical officer, I'd started three months prior, going around to the current week's DITS spaces and inspecting them thoroughly for any electrical safety discrepancies. I'd have them corrected immediately, or I'd formulate a plan to correct them. So I was actually ahead of the game; by doing these walkthrough inspections, I was also going through my safety survey checklist.

As time went on, I found myself digging into reference materials such as the *Naval Ships' Technical Manual* (NSTM Chapter 300), the *General Specifications for Overhaul of Surface Ships*, various OPNAV instructions, and of course the *Navy Safety and Occupational Health Program Manual for Forces Afloat* (OPNAVINST 5100.19E). I pored over these publications, and the more I read, the more questions I had about what I already knew and what I needed to learn.

This intrusive questioning is what I needed to do well on the safety survey and to become a better



One of the routine walk-through inspections. Photo courtesy of the author.

division officer. I was constantly taking items that I had read in the NSTM Chapter 300 and asking my chief to go into more detail explaining it to me — it's amazing he never got tired of my questions. I also contacted the Naval Safety Center and asked even more questions. Master Chief Electrician's Mate (SW/AW) Jim Burke, an analyst in the afloat safety programs directorate, provided timely answers that helped me do my job seamlessly.

PREPAREDNESS IS BEST WAY TO AWARENESS

It took nine months of solid preparation to thoroughly get my team ready for the safety survey. When my CO reviewed my binder

before the safety survey, I impressed him with the amount of knowledge of each line-item on the checklist. I know he appreciated the fact that I had literally walked and put my hands on every power panel, fuse panel, motor controller and light fixture in every space on the ship.

It took a lot of time and effort, but in the end I learned so much more than I could have ever asked for. When the safety surveyors walked aboard our ship, I was excited to show them how well-prepared we were.

When I asked EMCM Burke for feedback, he said, “*Lake Champlain’s* safety survey discrepancies were well below the fleet average for CG hulls.” He and the Naval Safety Center analysts agree that these results were directly

attributed to the diligent preparation of the ship’s crew.

Each division officer presented a binder listing specific checklist items, attached to their corresponding reference list. EMCM Burke and the safety surveyors said they appreciated this kind of proactive effort, which made the crew more knowledgeable and much safer.

I agreed with him that while time consuming, this method was invaluable as a teaching tool for junior officers. **SC**

WE WANT YOUR STORY ABOUT A BEST PRACTICE: To submit a story about how you keep your shipmates safe and your daily shipboard operation mishap-free, contact safe-seacompass@navy.mil.

ONLINE RESOURCES

The Naval Safety Center website provides checklists to help you prepare for a survey or perform daily tasks. To download the following checklists, go to www.public.navy.mil/navsafecen/pages/afloat.aspx.

- Electrical
- Weapons
- Combat Systems
- Damage Control
- Deck
- Safety Administration
- NAVOSH
- Auxiliary
- General Engineering
- Main Propulsion - Mechanical
- Main Propulsion - Steam
- Main Propulsion - Gas Turbine
- PC/Minesweeper Engineering

COMMUNICATION IN THE GALLEY BY CWO4 DANNY L. ROYSE

Steamed About Electric Steam Kettle

A CS2 aboard ship was preparing the noon meal when he noticed one of the electric steam kettles was broken ... again. He’s in a hurry to fix a meal for a big group, so situations like this get him steamed. Muttering under his breath, he calls the technicians who “fixed” it the last time.

THE PROBLEM

When the auxiliaries technicians (members of what we will call the A-gang) evaluate the “broken” kettle, they discover the same old problem: no water inside the kettle and the pressure gauge reads zero (which is difficult to determine with a missing gauge face and a bent needle). The finger-pointing game begins. The cooks blame A-gang and A-gang blames the cooks. This scenario plays out daily aboard ships.

SURVEY SAYS

I have conducted many shipboard safety surveys and when I get to the galley, electrical steam kettles always take a beating. In most cases, these discrepancies were identifiable in less than two minutes, during a visual inspection.

- Safety relief valves not tested or labeled.
- Levers and safety chains used to operate the relief valves not installed or cannot be operated.
- Kettles not hydrostatically tested and tagged.
- Pressure gauges damaged or not calibrated.
- The discharge pipe on the kettle relief valve missing or not extended inside the trough.



Unattended or broken steam kettles mean no food service for you and your shipmates. To paraphrase my hero “Man vs. Food” star Adam Richman, there is no letter “I” in “team,” but you can use those letters to spell meat and eat. Without good communication in the food service world, we may not get to enjoy either.

See “ROYSE, STEAMED” on page 14.

INTRODUCING



B2BPMS is your basic guide on how to not fall a victim of complacency. It is a common-sense approach to keeping your ship on the right course. Have you ever taken a short-cut to save time, but instead, cost you and your ship time, resources or people? Share your short story with our readers ... they will learn something from your experience. Submit your article to safe-seacompass@navy.mil. For now, Naval Safety Center surveyors share their "discoveries" during ship visits.

THE BLAME GAME IN THE GALLEY

**The cooks blame
A-gang and A-gang
blames the cooks.**

ROYSE, STEAMED

Continued from page 13

THE FIX

So who wins the blame game? Without communication and training, both sides are at fault. The cooks operate the kettles and A-gang provides the repairs and planned maintenance. It's just a kettle, you say. But if these two teams can't work together, you can't expect your meal served on time.

Ideally, auxiliaries technicians would hold training with culinary specialists and point out items they must inspect daily. They would emphasize the negative effects of allowing damaged or inoperable equipment to be operated in degraded status. In turn, duty culinary specialists would immediately report discrepancies to A-division. Doing this would allow both teams to identify problems and perform corrective actions before inspections. **SC**

*CWO4 Royse is the main propulsion/diesel
lead at the Naval Safety Center.*

(Tell Me Again)

How'd You Lose Your Life Raft?

BY LT EDWARD ALEXANDER

A great Navy day at sea starts out badly if you are called to the bridge because your ship just lost a life raft. If you're the one responsible for maintaining these lifesavers, be prepared to answer some hard questions from your chain of command:

- "How did you lose the raft?"
- "Could it have been prevented?"
- "Was it secured?"
- "What are you going to do to keep this from happening again?"

There may be many reasons why it happened, but the most common, based on our safety surveys, points to improperly completed or neglected PMS. The maintenance requirement card (MRC) provides step-by-step procedures on how to secure a life raft in its cradle. Losing a life raft is just one of the discrepancies our safety surveys have revealed. A good number of ships we visited had life raft PMS that have not been completed correctly:

- ▶ Sea painters were not terminated to the ship's structure.
- ▶ Rafts were not stowed in racks properly. The seam of the upper and lower halves should be positioned approximately parallel to the base line of the ship. In this wrong position, the drain holes will not be at the lowest point of the container, and water will not drain from the container.
- ▶ Hydrostatic-release devices were installed backward or upside down.
- ▶ Securing harnesses had cracked rubber coatings, and CRES material was not used to secure the harnesses.
- ▶ Incorrect type of lashing was used between hydrostatic-release devices and securing harnesses.
- ▶ Lashing on release devices was not properly terminated.

You are responsible for making sure that your life raft is cared for so it can do its job as a lifesaver. Deck division officers, LCPOs and the work center supervisors must know what requirements are contained in the MRC, and get out and inspect the ship's life-saving gear. **SC**

LT Alexander is a deck analyst at the Naval Safety Center. Read his article on head protection in the January-March 2011 Ships' Safety Bulletin.

WHAT'S WRONG WITH THIS PICTURE?



Email your response to safe-seacompass@navy.mil

The Cake No One Wants to Eat

BY APRIL PHILLIPS

March 2003. The USS *Harry S. Truman* (CVN 75) strike group was living on adrenaline and black coffee. Operation Iraqi Freedom was just underway and we were battle ready. In less than one month, our air wing flew more than 1,300 combat sorties and dropped more than 700 tons of ordnance. Anyone not directly involved in the primary mission was doing everything possible to support the pilots and aircraft maintainers. As shipboard journalists, my staff and I put in long hours covering the always-evolving story for the crew and a larger civilian audience. We were working around the clock.

I was in my office one evening, putting the final touches on a story about “Shock and Awe” and hoping to hit the rack soon, when the telephone rang. I picked it up in the middle of the first ring.

“Petty Officer Phillips,” I answered smartly. I had my notebook at the ready, prepared to head up to the bridge for a briefing or to a ready room to cover a preflight. My exhaustion slipped away. Whatever the mission, I was on it.

“JO1! Where’s my urinal cake?” the training officer screamed into my ear.

Cue the “game over” music at the end of a Pac Man game. My visions of journalistic grandeur evaporated like the steam off flight-deck catapults. In the few seconds

it took to be yelled at by the TO, my enthusiasm for reporting the news was replaced by my dread of handling a tedious collateral duty. Being 3M (Maintenance Material Management) work center supervisor for admin department was worse than being a urinalysis coordinator, and that’s saying something.

Still, 3M and associated PMS checks are important. We all need to know that in the unlikely event of a fire, we can go to the nearest extinguisher with confidence that more than a fizzled pffffff of powder will come out.

Most of the time our program ran beautifully. We were known for acing spot checks with the XO when other departments lived in fear of him. And yet, I was constantly hearing from the training officer about my guys gun decking the D-1 checks. The dreaded D-1s were daily “maintenance” on urinal cakes. In this case, maintenance usually meant a visual inspection of the existing deodorizers. When they were peed on, they got smaller over time and eventually had to be replaced. However, each day the lucky Sailor who’d been assigned the D-1s for the week had to get his rubber gloves and supplies, check the cakes, and fill out the maintenance log. It was a pain, and most of the guys would rather do a complicated bit of PMS than get stuck with D-1s. Let’s face it—no one writes home to mom from a war zone to brag that thanks to his efforts, the urinal smelled more like a chemical pine tree and less like a sewer.

Unfortunately, our training officer really enjoyed a fresh urinal. He had an uncanny ability to sniff out a urinal cake that was a millimeter smaller than the requirement. When he called, I had to find my maintenance worker, lecture him about the importance of being thorough, and send him off to fix the problem.



The reality is I only cared about urinal cakes insofar as they caused me problems, which should have been never since women’s heads lack this amenity. However, with eight years of hindsight, I realize that diligence in maintenance is a habit that must be formed and a standard that must be adhered to — no matter how unsavory the task. If too many urinal cakes are allowed to substantially disintegrate, eventually the fire extinguishers may be unreliable as well.

While I didn’t understand this at the time, I did learn the value of a regulation-sized disinfectant, and I can assure you that when the training officer rotated off *Harry S. Truman*, he received a sizable, if anonymous, collection of pine-scented urinal cakes as a parting gift. **SC**

April Phillips is the Naval Safety Center public affairs officer and editor of *Smart Ride* magazine.

NO ROOM FOR SHORTCUTS

Vertical package conveyors have been known to trap, cut, maim, and decapitate.

BY MMC (SW/AW) ESTERS WRIGHT

Are you one of those people who stick to the rules? If so, then you need not worry. But there have been unfortunate souls who didn't heed them and ended up losing their heads (literally).

When working with vertical package conveyors (VPCs), there's no room for shortcuts. You must be 100 percent aware of precautions while operating and maintaining VPCs, Navy requirements, and your responsibilities. You also must take the required training to operate the equipment.

If you get trapped in one of these machines, the results can be unforgiving. But Sailors still violate the rules and, worse, contribute to mishaps. Violating these rules is nothing less than playing Russian roulette. Yet some people do it because they don't want to be inconvenienced by taking a few seconds to establish proper phone communication. Maybe they don't like feeling rushed to get the job done.

When you take shortcuts, you increase the risks of a mishap. This utter disregard of rules also teaches bad habits to new or untrained personnel. If you are unsure of what is required of you or how the equipment works, ask a qualified person.

Common Discrepancies:

- ▶ Insufficient PMS records for the System Operability Tests (SOT II).
- ▶ Doors and controllers not locked when not in use.
- ▶ No nonskid on deck at each load/unload station.



Naval Safety Center File Photos

TWO MOST COMMONLY-IGNORED RULES

- ▶ The two-man-rule shall be adhered to at all times during conveyor operation to prevent injury.
- ▶ Don't place your head or other parts of your body into the conveyor trunk during operation of the conveyor.



Naval Safety Center File Photo

MMC Wright is the chief main propulsion/diesel analyst. Read more of his articles in the January-March 2011 Ships' Safety Bulletin.



USEFUL TOOLS AND RESOURCES ONLINE

References and Checklists

Helpful guides, instructions and checklists to keep you up-to-date. Also includes the 2011 Afloat Shipboard Equipment Shopping Guide:
www.public.navy.mil/navsafecen/pages/afloat/surface/references.aspx

Ships' Safety Bulletin

Summaries, research and data to assist in your mishap-prevention program. SSB back issues from 2010-2011 now available:
www.public.navy.mil/navsafecen/pages/afloat/surface/ship_safety_bulletin.asp

Top 10 Discrepancies

A collection of 10 most common deficiencies found during safety surveys from FY06-FY11. Do your part to not contribute to the list:
www.public.navy.mil/navsafecen/pages/afloat/surface/surfacewarfare_articles.aspx

Afloat Mishaps and Statistics

Class A mishap summaries and data tables that go back eight years: www.public.navy.mil/navsafecen/pages/statistics/afloat/afloat_stats.aspx

SPECIAL ORDER

No Grease Fire With My Deep Fat Fryer, Please

BY LT CHRISTINE DAVY



Naval Safety Center File Photo

If Martha Stewart lived in your home, I bet your kitchen would be spic-and-span. The vent hood above your deep fat fryer would never see grease (like the build up shown in the photo above). But, you're a Sailor who works on a ship, and even though you aren't Martha, her working space is a good example.

HOW DO YOU MEASURE UP?

- Is your galley's Gaylord wash system operational?
- Is PMS being performed daily when operating?
- Is the wash system aligned to all vent hoods?

If you can answer "No" to any one of these questions, your Gaylord vent hoods need a detailed inspection. Don't be afraid to open them and look inside. The hood that attracts the most grease build-up is above the deep fat fryer, but don't limit yourself to just looking there. If you find any signs of grease build up, you'll have to do PMS on the system. We know the cleaning requirements for ships with a manual wash system and automatic cleaning system. If you're the maintainer, you must open inspection doors and check inside the hood and drain for grease or dirt.

When we go aboard ships for safety surveys, it always amazes me to see the APC/Gaylord system out of commission, while they're using the deep fat fryer! This is a great ball of fire waiting to happen. In 74 percent of ships we surveyed last year, the wash system detergent tank was empty and the ventilation hoods had grease build up. Does yours look like the photo shown above?

PMS REQUIREMENTS

- MRC 5121/004 R-1D: ships with manual wash systems
- MRC 5121/004 R-5D: ships with automatic cleaning systems

These instructions are simple, and basic cleaning shouldn't take too much of your time. One of the notes says, "Presence of an area that has not been subsequently cleaned indicates one of the spray nozzles is clogged. To correct this discrepancy, remove nozzle cap and clean holes with small wire; reinstall nozzle cap," MRC 5121/004 R-1D, Note 4. You probably could do that in less than 10 minutes.

Don't wait until you fail an inspection or cause a fire.

Ship's fire marshals are responsible for making routine rounds of the galleys and ensure these problems don't exist. Take prompt actions to get them corrected before it's too late.

SC

LT Davy is the damage control lead. Read her article on evidence preservation in the January-March 2011 Ships' Safety Bulletin.

Room With a View

BY GSCS (SW) ESWORTH CARTY

Do you know of a space on your ship that's being used for unauthorized stowage? Do the right thing. Tell your chain of command about it and fix the problem. I know that stowage space is limited aboard ship. But look at what happens if the perfect mix of conditions occurs together.

The exhaust gases temperature could be as high as 1,600 degrees Fahrenheit. An alpha fire does

not need that much temperature to start, especially if the ignition point of the material is relatively low. The left photo shows



remnants of a stowage space after a fire.

You decide. Is the price of improper stowage worth the high price to be paid when you have a fire resulting from your lack of proper risk management?



Or maybe you were secretly trying to get an ocean view from the uptake spaces. In that case, you might have succeeded.

GSCS Carty is the main propulsion/gas turbine analyst at the Naval Safety Center.

GET MORE B2BPMS TIPS ON OUR WEBSITE

Go to www.public.navy.mil/navsafecen/pages/media/seacompass.aspx to read "Condition of Equipment a Reflection of You," an article about taking pride in your equipment by keeping it in good condition at all times.

By GMC (SW) Ramiro Salas

Same Ol' ORM Brief May Be Missing the Point

BY LT JENNIFER KNOTT

There's something unique about every evolution, even if it's one the ship has done a hundred times before. A combination of variables will always be present: weather, personnel and schedule changes. As a standard, safety briefings are a big part of this operation, in port or out to sea. Safety officers are expected to have operational risk management discussions.

For anyone who has seen many of these briefs, operational risk management (ORM) discussions could become monotonous and ineffective if the presenter doesn't take the time and effort to make them engaging. When building your brief, use current slides with up-to-date data. Have an interactive discussion about the unique aspects of the upcoming evolution. You may even ask your crew to contribute high-impact photos to include in your brief to make a point.

There have been preventable mishaps in the past couple of years you can address during these discussions. In 2009, a Sailor was lost over the side while trying to move shore power outriggers. For this ship, this was a task they did every time the ship pulled into port, usually after they were pierside. This time, however, they were moving them while underway. No one discussed whether this required any additional PPE or precautions.

At the time of this writing, LT Knott was the surface engineering assistant in the Afloat Safety Programs Directorate. She is currently attached to the USS Theodore Roosevelt (CVN 71).

Preventable mishaps have damaged equipment, as well. During the same year, a ship ran aground following a dry-dock availability. The ship had done these evolutions many times before. However, they had not done them with the current personnel or with the equipment they had available. Unprepared, ship personnel didn't recognize how the out-of-commission equipment would affect their ability to safely conduct an evening personnel transfer. The ship ended up running aground, producing \$20 million worth of damage.

These are just a couple of examples where it was a minor variation in the evolution that led to a devastating outcome. According to our mishap investigators, it is also very common for one of the causes to be complacency. By keeping your ORM slides fresh and briefings more interactive, you will encourage more participation and involvement.

Safety officers and facilitators can obtain training or briefing materials — data, numbers, photos — from the Naval Safety Center website (www.public.navy.mil/navsafecen). And for those ORM discussions? Invite personnel to ask the question or lead the discussion on what makes this time different from the other times a ship has done the same thing. **SB**

 **READ MORE ORM ARTICLES ON OUR WEBSITE**

Read more articles about ORM basics at www.public.navy.mil/navsafecen/pages/media/seacompass.aspx

Do you have an ORM story to share? We're looking for your personal experiences about risk management, risk prevention or lessons learned from things that went wrong because you didn't ORM it (on or off duty). Send your story to safe-seacompass@navy.mil.

ORM

on the web

www.public.navy.mil/navsafecen/Pages/orm/orm.aspx
browse – preview – download – sign up

- ▶ USN / USMC ORM Instructions
- ▶ Evolution ORM Assessment Sheet
- ▶ ORM Program Assessment Checklist
- ▶ Risk Matrix Postcard
- ▶ ORM Courses on NKO
- ▶ Web Tools and Resource Links
- ▶ Sign Up for Email Updates

WATCH OUT FOR THESE VARIABLES

- ▶ Weather
- ▶ Personnel turnover
- ▶ Schedule changes

IS YOUR ORM BRIEF UP-TO-DATE?

- ▶ Data and statistics
- ▶ High-impact pictures
- ▶ Current slides and charts

ASK IMPORTANT QUESTIONS

- ▶ What's different today?
- ▶ What's going on?
- ▶ What could go wrong?
- ▶ What resources do we need?
- ▶ How do we use them?

RELEVANT TOPICS

- ▶ Shipboard equipment and PPE
- ▶ PMS requirements
- ▶ Off-duty/liberty activities
- ▶ Duty watchbill rotations
- ▶ Flight-deck operations
- ▶ Other important topics

INCLUDE HANDOUT MATERIALS

- ▶ ORM matrix postcards
- ▶ ORM web resources
- ▶ ORM posters

ARE YOU GETTING FEEDBACK?

- ▶ Initiate audience discussions
- ▶ Encourage participation
- ▶ Invite question-and-answer forums
- ▶ Share been-there, done-that stories

About the photo: USS *Abraham Lincoln* (CVN 72) enters Dry Dock 6 at the Puget Sound Naval Shipyard in Bremerton, Washington. (U.S. Navy photo by SN James R. Evans)

This Deck Operation

Made the Hair On the Back of My Neck Stand

STORY AND PHOTO BY ETC (SW) JASON MOBBS

It was 0730 on a beautiful fall day when I went on my first survey as the lead combat systems assessor. My team and I had everything ready, including the coffee and donuts for “fuel,” of course. With our computers set up and in-brief completed, we were ready to get started and have a productive day.

The morning went well until we walked by deck department where Sailors were rigging the accommodation ladder for a static display. Halt! My brain immediately went into super-active gear. What grabbed my attention was the guy who was standing dead center texting on his phone. After taking a second to visually survey the scene below, I stopped the work.

There were just too many unsafe things going on to let their work continue: unauthorized safety lanyard, over-the-edge activity, downed lifelines, just to name a few. I called down to the deck and got the attention of the Sailor

who was texting. “Have your people come back within the lifelines and replace them,” I instructed. With that complete, I told them to stand by until I got down there.

I immediately scoured the deck for our senior chief boatswain’s mate (BMCS). With him and the ship’s first lieutenant in tow, we went back to the scene. During the next few minutes I learned a few things that contributed to these infractions:

- 1) The BMC billet had been gapped for about four months and would continue to be gapped until a replacement could be found.
- 2) The first lieutenant had only been in the position for about two weeks and was told that his priority for the day was the safety survey.
- 3) The person with some familiarity about this evolution wasn’t the safety observer; he was outside the lifelines on the accommodation ladder.

In addition to our scheduled safety survey, a verbal safety brief was definitely needed that morning. Referencing the ORM process, we explicitly identified falling over the side as the risk. To make matters worse, the quarterdeck was not aware that anyone was working over the side. These guys definitely did not meet the requirements for working over the side as set forth by the *Navy Occupational Safety and Health Program Manual for Forces Afloat* (OPNAVINST 5100.19E).

LACK OF PLANNING

I think the evolution went wrong during the initial planning. No one enforced the requirements for working over the side. If there had been an actual plan for the evolution and ORM applied, the trip hazards would have been removed from the deck, cell phones would have been put away, and the access and proper use of fall-protection equipment would have been discussed.

SEND US YOUR OPINION ABOUT THIS ARTICLE. WHAT OTHER ELEMENTS OF GOOD LEADERSHIP DO YOU THINK ARE NECESSARY TO ACCOMPLISH A MISSION? WHAT FACTORS CONTRIBUTE TO A BREAKDOWN IN COMMUNICATION?

Send your response to safe-seacompass@navy.mil and we will feature your viewpoint online. We will not publish your name, but please include your rate, rank, age, job function, and years in the service.

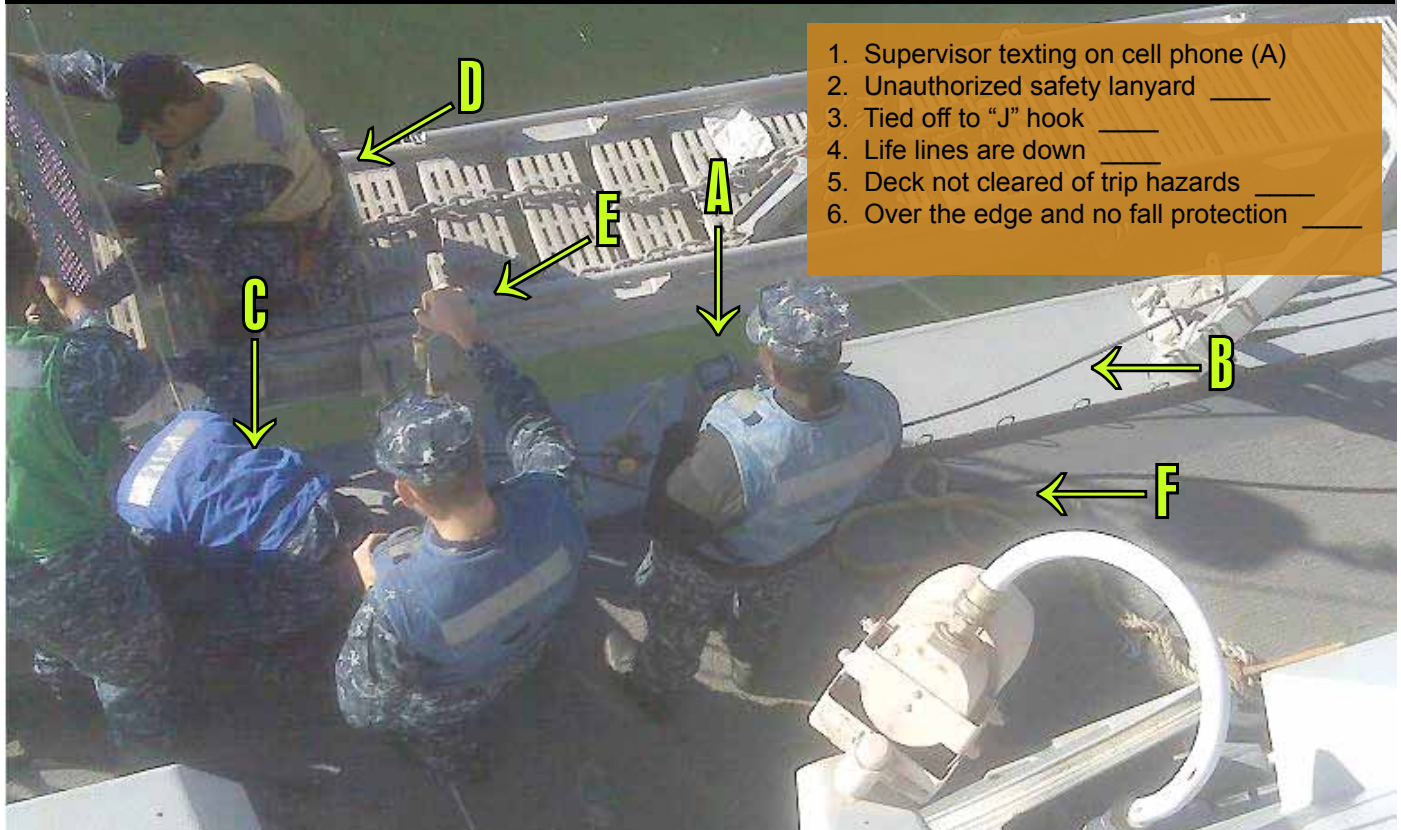
DO YOU HAVE A SITUATION AT WORK, AT HOME OR OFF-DUTY ACTIVITY THAT WOULD MAKE A GOOD CASE STUDY FOR SEA COMPASS?

Send your article to safe-seacompass@navy.mil. Please include your observations about the following points of interest:

1. What is the situation?
2. Who are the people involved?
3. What is the missing catalyst that could make it better (for example: tools, leadership, time)?
4. What is the worst-case scenario?
5. What can you do to fix the problem?

You may include a photograph to make your point or to help readers get involved.

YOU BE THE JUDGE



1. Supervisor texting on cell phone (A)
2. Unauthorized safety lanyard ____
3. Tied off to "J" hook ____
4. Life lines are down ____
5. Deck not cleared of trip hazards ____
6. Over the edge and no fall protection ____

WHAT'S WRONG WITH THIS SCENE?

Identify the six infractions and see if you're up-to-speed with your deck-operations safety checklist. To get you started we pointed out the texting bandit (A). Send your answers for items B-F to safe-seacompass@navy.mil. We will post the winning answers online at www.public.navy.mil/navsafecen/pages/media/seacompass.aspx.

LACK OF LEADERSHIP

Next, I wondered, where was the leadership? I had to scour the ship to find khaki representation for that department. I understood that the BMC billet was gapped, but where was the BM1 or even the BM2? For whatever reason, they were not where they needed to be. And why was the first lieutenant walking with the surveyor when this evolution was happening in his division? The biggest issue on deck was the lack of direct leadership.

LACK OF SUPERVISION

What bothered me the most was the texting bandit as the safety observer. Even in today's do-more-with-less Navy, we have to be smart about choosing who we put in charge of keeping our Sailors safe. Here's one way this

scenario could have played out: If the texting bandit had been assigned to the deck surveyor, instead of vice versa, the first lieutenant would have been available to supervise the evolution.

Remember that the safety observer does not always have to be the most evolution-savvy individual, but one who has the "hair on the back of the neck" gene. The one who could immediately sense something could go wrong. In my day we called it common sense. We have other words and programs for it now, but the main theme is still there. Eliminate risk where you can, control it when you can't, and always make sure that someone is looking out for Mr. Murphy's arrival. **SC**

ETC Mobbs is the fleet combat systems analyst. Read his article on safety lanyards in the January-March 2011 Ships' Safety Bulletin.

Taken-for-Granted Hazard

Strikes Back!

STORY AND PHOTO BY AM2(AW) JUSTIN ASPRER

My morning started off with a hot breakfast while embarked on the USS *Abraham Lincoln* (CVN 72). After getting a thorough passdown and doing a tool inventory, I settled into my normal routine of preparing myself for daily flight operations.

I was the leading petty officer of the troubleshooter work center, which was split into three shifts: day, flight schedule and night. I was the only one assigned to the day shift, so I had a lot of responsibilities.

After some admin duties, I donned my PPE and started to inspect the 10 aircraft before flight ops. I stepped out of my work center and ventured through a tricky non-watertight door, which had been slamming shut since the first day we started workups. There was so much force on the closing mechanism that the door bounced against the frame a couple of times before coming to rest. A berthing area was within feet of this door, so I'd always tried to keep it from slamming shut.

A few hours later, I headed back to the shop and greeted the oncoming troubleshooters for the flight-schedule shift. I gave them a thorough pass down and a detailed brief, describing their individual responsibilities. A glance at the clock showed we were ahead of schedule. I sent them up to the flight deck and gave the shop one last look before I headed up myself.

I noticed the SINS cables — you know that yellow, 50-foot cable that you hook-up to the aircraft's inertial navigation system? Yeah, that's it. Since I knew we might need them, I threw one set of cables over each shoulder and dashed up to the flight deck.

When I got to the tricky non-watertight door, I muscled it open using my right foot, shoulder and hand to keep the door open as I struggled through with both cables in tow. As my body and cables passed through the door, I removed my foot, which was acting as a brace. Slam!

The impact made enough sound to get the attention of a troubleshooter who saw my gloved hand get caught. I realized that my hand had slipped into the hinge side

AM2 Asprer currently works at VFA-122, NAS Lemoore, California.
Photos courtesy of the author.

of the door. I was wearing the required leather gloves, but one of my fingers had been pinched and felt numb. I continued up to the flight deck and deposited the SINS cables. My whole hand was starting to feel numb, coupled with intense throbbing. I took my gloves off to check the damage to my index finger. Blood spurted.

I raced to the flight-deck battle-dressing station. I passed my chief along the way and yelled to him, "I just ripped the tip of my finger off." The corpsman hustled me down to main medical.

The door had lopped off a half-inch of flesh, broken a bone, and gouged off my fingernail. I was placed on several months of limited duty, had two surgeries and experienced a whole lot of pain. Oh yeah, and I have become the butt of a lot of "nubby" jokes.

If only I'd made the trouble call to fix the tricky door, instead of accepting it, I could have avoided the mishap. **SC**



▶ READ MORE SEA STORIES ON OUR WEBSITE

Enjoy reading your shipmates' sea stories at www.public.navy.mil/navsafecen/pages/media/seacompass.aspx. If you want to share yours, send your article and a photo (if applicable) to safe-seacompass@navy.mil.



Listening to My Body Saved My Injured Knee

As an avid short-distance runner, I know the importance of stretching properly and warming up the muscles before a run. So, when I decided to step out of my comfort zone and train for my first marathon — the 2011 San Diego Rock 'n' Roll — I never thought I'd be nursing a sprained knee caused by my lack of stretching a few weeks before race day.

BY LT MICHELLE A. SIMMONS

With the exception of running a half marathon several years ago, I've embraced running shorter distances and have truly enjoyed a four or five-mile run a few times a week. But, with the increased intensity for my marathon training program, I found myself cutting corners on my stretching, warm ups and cool downs in an attempt to accomplish more.

On the day I sprained my knee, I was trying to fit an eight-mile run into an unusually short lunch break because I needed to stay on track with my training program. And, since I had a few deadlines at work and needed to be back by a certain time, I did the unthinkable: I skipped stretching and went straight into my run without so much as warming up.

During the entire run, my body kept nagging me to stop and walk. I did not listen and, although I met my goal of eight miles, I knew I'd made a poor decision when I had significant swelling a few hours later. A trip to the doctor confirmed my worst fear: a sprained knee that only time, rest and proper care could heal. I followed every instruction from my doctor and did not deviate, as I wanted so badly to accomplish my goal of running my first marathon. Four weeks after my injury, and exactly six weeks before the marathon, the doctor gave me the green light to continue my training.

On June 5th, 2011, I ran my first marathon in four hours and 11 minutes. I didn't push myself too hard; instead I ran at a comfortable pace because my goal was to finish, not re-injure myself. In addition to stretching properly, warming up and ensuring a proper cool down, I listened to my body during the entire run. I'd finally learned the importance of it! **SC**

LT Simmons is a services officer at COMNAVSURFPAC, San Diego, California. Photo courtesy of the author.

WHAT TO DO FOR A SPRAIN

A sprain is an injury to a joint, usually the ankle or the knee, involving the ligaments. When the joint is stretched or twisted beyond its normal limits, various tissues could tear. Always consult your physician before starting any physically demanding activity.

► **SEVERITY:** Sprains vary in severity from a minor twisting of the part to serious tissue damage of the joint (sometimes with an accompanying fracture). Some muscle damage may occur.

► **SIGNS:** Pain will vary with the degree of severity and increase with any movement or weight bearing on the injured part. There may be considerable soreness and swelling of the joint. If internal bleeding in the joint occurs, discoloration will appear.

► **TREATMENT:**

- Apply a cold compress or ice bag to the area. Do not apply ice directly to the part or immerse in iced water.
- Elevate the injured part 18 inches and secure the compress with a light-pressure bandage.
- Cold applications are used for a period of six to 48 hours depending on the severity of the injury.
- After cold compress treatment, apply a pressure bandage, elevate above heart level, and rest for 30 minutes. Repeat until the swelling goes down.
- Heat therapy will be helpful a day or two after the cold treatment.
- Visit your doctor for further evaluation.



Naval Safety Center File Photo

Source: Common Sense Outdoor Medicine and Emergency Companion, Third Edition, Newell D. Breyfogle, University of California, Santa Barbara.

The Short Ride that Cancelled My Holiday

BY EVELYN ODANGO

Although the accident happened years ago when I was 18 years old, I still remember the outcome everytime my knee hurts or my body aches when it's really humid or very cold. But my memory of the accident goes in and out like Polaroid snapshots. I remember going down Tidewater Drive. Then I was being pulled out of the driver's side and a white sheet being draped over me. I remember waking up in the emergency room and my dad looking down on me, trying not to cry. Then everything went black again.

Earlier that day, I had been on a mission. It was the annual gift drive for my high school's Angel Tree community project. I convinced my best friend to drive and help me pick up the gifts, then deliver them to the Christmas tree inside a local mall. Since the drive from my house to the mall was short, I did not buckle my seatbelt. I wanted to quickly get in and out of the car.

Everything changed in a split second when the sedan T-boned us on the passenger side. Jeanne and I (and the other driver) suffered only minor injuries. I spent a couple of days in the hospital. Aside from a lacerated knee, concussion, bruised kidney, broken ribs, and minor facial cuts, the doctors said I was lucky to be alive. It felt good to be alive; but I was sad that my bad decision ended up cancelling my family's holiday event. I felt worse later when I discovered that my mom had kept the bloodstained coat I wore that day. My friend wouldn't ride

It's almost lunch hour on a drizzly and cold Saturday morning in a busy shopping corridor in Norfolk, Va. It's Christmas Eve and people are rushing to pick up last-minute gifts or groceries for their holiday celebrations. In a nearby parking lot, a woman exits and maneuvers her sedan to cross the median. My friend and I were in her compact car going down the main road at about 40 miles per hour. Then everything went black.

in the same car with me for a good while. I then realized that my decision to not buckle up caused more than just physical trauma.

When my parents heard the news that I had been in a car wreck, but weren't told that I was alive, they didn't know what to think. And my friend? When she saw my body being pulled out of the car, with the white sheet covering my face staining with blood, she thought I was dead. My injuries seemed minor, but the long-term outcome of that accident has been constant body aches and pains that can sometimes be overwhelming.

In a couple of months, the holiday season will be upon us, and some of you will be rushing to pack your bags and go on a road trip to visit with family and friends. Before you leave your ship or quarters, make a pact with yourself to come back unharmed.

You've probably heard that car crashes happen close to home. Insurance researchers (www.carinsurance.com) reveal that most accidents occur within 10 miles from home. For most people, their comfort zone is within their neighborhoods. That's how it was for me. The Christmas-Eve car crash happened only three miles from my home.

No matter how short your trip will be, make sure you and your passengers buckle up. You never know when a distracted driver may cross your path and cause more than just a few scratches. **SC**



Prepare to Go to the Underside

**Flip now to explore
Sea Compass down below...**

U.S. Navy Chief Navy Diver Ryan Oakley adjusts his diving helmet before submerging underwater at the port of Umm Qasr, Iraq. Oakley (assigned to Commander Task Group 56.1), U.S. Soldiers, and Iraqi divers are attempting to raise a sunken pier. (U.S. Navy photo by MC1 Class Peter D. Lawlor)

Zapped and Lived to Tell About It ... This Time

BY ETC (SS) KEVIN DAWSON

Getting a minor shock is nothing, as long as you live to tell about it. When I attended my first Navy technical school, one of my instructors said, “A person who works with electricity and has never been zapped is either very lucky or extremely cautious.” My classmates and I looked at one another, knowing we either had already “been there” or knew someone who had.

MY FIRST “ZAP”

I got my first Navy “zap” doing PMS. I asked my LPO if he had tagged out a breaker on which I was planning to conduct a clean-and-inspect. He immediately replied yes. I started work by removing the side panel and pulling out the dusting brush, then I stuck my hand in the backside of the breaker. Instantaneously, I felt that 450-volt zap! After a quick check, I discovered that my LPO had tagged out the switch on the breaker, not the power to it.

Working in the electrical world, I quickly learned that I was not the first to experience a jolt after some form of miscommunication. When confessing to my lack of safety protocol, I found myself in a Navy “fraternity” that had zap-stories to share. I became privy to electrical-shock stories and legends — the worst involved a friend. Apparently, he once conducted a clean-and-inspect but failed to short out a capacitor. Well, he soon shorted it out when he reached into the cabinet and his finger made contact. Imagine a little blue spark traveling up his arm and out his elbow. Whew! He still has the scare factor today.



U.S. Navy photo

SHOCKING TALES

During my 19 years in the service, I have heard tales grow as though it was a contest to see whose zap story was the most amazing. Every story had a close call, but the notorious hero always walked away. I spoke with a master chief petty officer about his electrical history for this article. He openly admitted he had once taken a minor “hit.”

He didn’t report it, which brings up another problem. After most negligible incidents, the victims would not want to be perceived as an idiot by peers or superiors. Sometimes people don’t report mishaps

because they just want to avoid the paperwork. If they aren’t injured by the shock, they consider it a “free” warning.

YOUR LUCK COULD END

However, just because a particular zap doesn’t injure or kill, don’t think a similar future shock won’t be fatal. Our greatest shortcoming is that by failing to report electrical shocks (however minor), we don’t create accurate data, trend analyses, and subsequent warnings that could prevent a mishap or save a life. Every year, we receive reports of hundreds of these electrical shock incidents. However, the number of preventable electric shocks or fatalities is far much greater. Just imagine if all shocks had been reported; how many subsequent mishaps and deaths could have been prevented over the years?

ELECTRICAL OPERATION SAFETY MEASURES

With rare exception, shocks result from carelessness. When working with electricity, remember these safety hints and you can save yourself from the misery of an electrical shock or burn.

Mind the Voltage

- ▶ Know that both voltage and amperage can kill; even low-voltage circuits with amperage above 1 amp (current) will kill.
- ▶ Do not use two hands to complete the circuit. When taking voltage readings, use alligator clips and only one hand.
- ▶ Working in wet areas always increases the likelihood of shock because water is a good conductor and saltwater is an even better one.

Communication

- ▶ Never work alone. Make sure your safety observer is stationed at the emergency-cutoff switches for the equipment on which you are working. Communicate!
- ▶ Communication is also essential when performing tasks like tag-out procedures or other processes involving more than one person.

Personal Protective Equipment

- ▶ Work on a live circuit only when absolutely necessary and you have your CO's permission. Then follow all precautions and wear appropriately rated personal protective equipment.
- ▶ Wear electrical safety gloves. (It is very rare that someone using all the correct PPE gets shocked.)

Training and Awareness

- ▶ Pay close attention to the safety training and follow the rules. Some of these regulations are in place today because someone was electrocuted.
- ▶ The greatest threat facing those who work with electricity daily is their sense of comfort. After repeatedly working with electricity, they become procedurally lax and let memory guide them. They often forget the inherent dangers.
- ▶ Always report a shock. You could prevent an injury or might save someone's life. **SC**

ETC Dawson is the submarine electrical/mechanical analyst. His article on "Garbage Grinder and Vibration Detection Bracket" appears in the April-June 2011 issue of the Flash newsletter.

SITUATIONAL AWARENESS

Prying Eyes

BY MMCS(SS) ARTHUR SISK

As if navigating the spaces aboard a submarine is not hard enough, try responding to a fire drill as damage controlman. You will find yourself needing to keep your eyes wide open.

During a recent fire drill, damage-control personnel aboard a submarine responded in full gear, complete with environmental simulation. These firefighters wore vision-degrading devices over their self-contained breathing apparatus face pieces to simulate dense smoke.

After they put out the simulated electrical fire with portable extinguishers and fire hoses, an MMCM moved to secure the fire-simulating light. This put him into the path of a crowbar that firefighters were passing to the fire scene. The crowbar hit him in the eye and shattered his contact lens. Pieces of the lens scraped his cornea before he could get to sickbay and have a corpsman flush out his eye. The corpsman bandaged both eyes for 36 hours, which was enough time for the cornea to heal.

LESSON LEARNED: Vision-degrading devices improve the realism of a drill; however, they also increase the risk of injury and equipment damage. Everyone — from drill monitors to DC personnel — must remain alert at all times. Don't let your zeal for training cause an injury or a casualty.

MMCS Sisk is the submarine damage control analyst. He has also written "Top Damage Control Significant Issues" in the April-June 2011 issue of the Flash newsletter.

About the photo: U.S. Sailors assigned to the aircraft carrier USS George H.W. Bush (CVN 77) combat a simulated fire during a general quarters drill in the ship's hangar bay while under way in the Atlantic Ocean. (U.S. Navy photo by MC2 Nathan A. Bailey)



For Your Eyes Only

BY HMC (SS) CHRISTOPHER HARRIS

Imagine getting some foreign material in your eye. The first thing your instinct tells you is to head to the emergency eye wash station and flush it out (we're taught that the solution to pollution is dilution). Then imagine blindly getting there but the eye wash station doesn't work. Do you then hope that tears do the job? Unfortunately, many of the sites the safety-survey team visits didn't have eye wash stations meeting the requirements of the *Navy Occupational Safety and Health Program Manual for Forces Afloat* (OPNAVINST 5100.19E).

Our findings show that eyewash stations fail for a variety of reasons:

- Someone has secured the supply valve to prevent water from getting to the surrounding area when accidentally activated.
- Work is being done on the potable water system and no one recognizes the effect on the eyewash station.
- A nozzle is clogged.

When you're frantic to get rid of the burning in your eye, none of that matters — you just want to find a working eye wash station pronto! Ideally, your ship's PMS monitoring is up-to-date. More often than not, people don't realize the value of short bursts of fresh water into the eye until they're in dire need. Depending on the material they're trying to flush out, exposure may only cause irritation. Prolonged contact, however, could also lead to temporary or permanent vision loss.

Simple PMS and knowing the requirements will ensure an eyewash station operates appropriately when activated. You never know when you might need it.

HMC Harris is the submarine medical analyst at the Naval Safety Center.



OPNAVINST 5100.19E requires all (surface and submarine) eyewash stations to meet the following standards:

- (1) Have a minimum flow rate of 0.4 gallons per minute for 15 continuous minutes. The flow from both nozzles should meet equidistant at the center of the bowl. If the station is secured, two portable eyewash bottles shall be staged at the eyewash station.
- (2) Shall have a one-motion (e.g., paddle or pull strap), stay-open valve, such that when activated, the eyewash will remain on to allow the user to hold open their eyelids to facilitate flushing.
- (3) The travel route to the eyewash shall be free of trip hazards or overhead strike hazards, and positioned in such a way as to pose no hazard to the user (e.g., near electrical fixtures, down a ladder, through a door, obstructed, in a confined area).
- (4) Eyewash nozzles shall be protected from airborne contaminants and debris. Whatever means used to afford such protection (plastic caps, cups, cover), its removal shall not require a separate motion by the operator when activating the unit.
- (5) The eyewash shall deliver tepid flushing water (60-100 degrees Fahrenheit).
- (6) All emergency eyewash and shower equipment must be maintained through the planned maintenance system (PMS).



Lacking Sleep + Taking Shortcuts

BY FTC (SS) WILLIAM CAHILL

The underway submarine schedule seems to always go like this: wake up, stand watch, do after-watch clean up, do after-watch maintenance, carry out divisional and section training, conduct drills, then have field day.

With a schedule like this, who's got time to sleep? In your world, sleep is a commodity, and while you're still grumbling about your lack of rack time, a fellow shipmate comments, "You can sleep when you die and get lots of it."

"How do shortcuts and 'sleep when you die' fit together?" you wonder. So, you go about your day...

You take the watch and complete your rounds. You spot some dirt and oil next to the rudder ram. If you don't clean it now, you will have to do it after watch (more of your precious sleep definitely will be lost). You decide to take a shortcut on time critical risk management, or TCRM. You calculate how you can "defeat" and work around the protective features of the area.

You decide not to request permission because it will take even more time and, it only takes a few seconds to clean the trouble spot. Your hasty assessment tells you it looks safe enough, because you've cleaned it many times in port. You go for it. This time, something seems different. Before you know it, the submarine changes depth and you fall forward into the ram area. What's going through your mind now? I'll bet dimes to dollars it isn't TCRM.

LESSON LEARNED

A submarine is a harsh and unforgiving environment. The need for strict procedural compliance and continuous vigilance are lessons that were written in blood. If you know you're lacking sleep, don't throw your body into overdrive. Your mind and body will not work in sync, and it could ultimately bring disaster. **SC**

FTC Cahill is the submarine deck supervisor. Read his article on "MK-1 Commercial Auto Inflatable Life Vest CONAX Inflator" in the April-June 2011 issue of the Submarine Division's Flash newsletter.

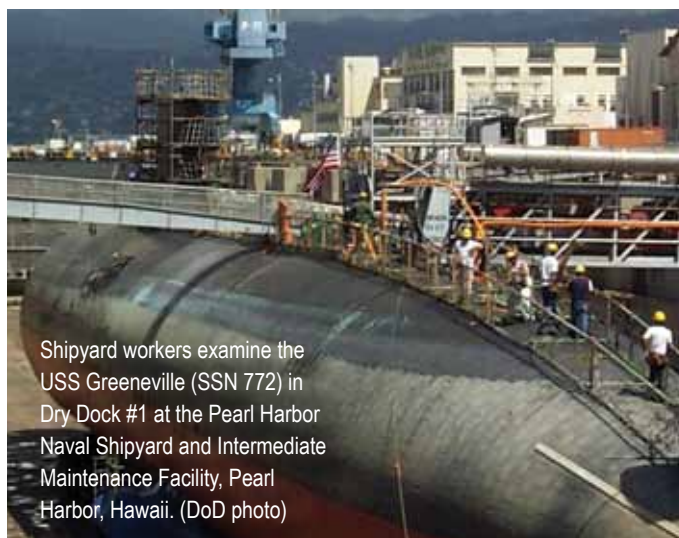
Learning the Hard (Hat) Way

BY MMC (SS) ISAAC INGRAM

Wearing a hard hat can make a huge difference between a crack in the hat or a crack in the head. Unfortunately, it's too easy to put our hard hat aside for a variety of reasons: "It's uncomfortable," "It always gets in the way," or "The job is only going to take a minute."

These excuses are weak. It only takes a second to become seriously injured or be killed. PPE standards should be in place not just as a command policy but also as a personal responsibility.

When my unit was in a shipyard, one Sailor learned the value of not making excuses the "hard hat" way. As he went down the brow, on what could have been his last liberty call, a 3-pound piece of angle iron fell 30 feet and struck him. Fortunately, he was wearing his hard hat and



Shipyard workers examine the USS Greenville (SSN 772) in Dry Dock #1 at the Pearl Harbor Naval Shipyard and Intermediate Maintenance Facility, Pearl Harbor, Hawaii. (DoD photo)

was not injured. The only damage was a minor dent in the hard hat.

While supervisors and shipmates should remind everyone to wear a hard hat when necessary, you must take it upon yourself to protect your head from the unexpected.

MMC Ingram is the weapons analyst for the Submarine Division.

Most collateral-duty submarine scuba divers don't get enough time to dive, causing gaps in training and proficiency.

Don't Wait Until It's Too Late

BY NDC (DSW/EXW) REBECCA JONES

The submarine fleet has one of the highest operational tempos of all vessels in the Navy. When they are not underway, crewmembers are training to be underway or doing maintenance to get underway. This heightened activity requires many submariners to perform multiple jobs on any given day.

Top that off with training requirements for scuba diving and you've got one very tight schedule. As hard as it is to fill the duties of a scuba diver for many SSN and SSGN submarines, once aboard this function is often assigned as collateral duty.

This function is valuable to submarines because it gives them the ability to conduct security swims, hull inspections and other required diving duties without relying on outside assets. However, this collateral duty is too often put on the back burner to other duties and responsibilities.

The Naval Safety Center diving survey teams have identified maintaining dive proficiency as one of the most often overlooked requirements. An important factor to consider is compliance with MILPERSMAN 1220-260: "Scuba divers must complete a minimum of four dives every six months in order to remain current and continue to receive diving duty pay."

Submarines must always remind themselves that conducting scuba dives is also a big part of the command's mission. The last thing any submarine CO would want on his watch is a dive gone wrong.

The goal is for a submarine to have a safe and well-maintained scuba diving program. We have discovered many reasons why dives were not being completed: "We do not have enough qualified divers on board," "It is not a priority right now," or "We are getting ready to deploy."

In reply, we ask these questions:

- ▶ "Are you prepared to respond if you have to get your stricken diver out of the water?"
- ▶ "What would you do if you lose your diver in the water?"
- ▶ "If you get the diver out of the water, do you know who to call for help?"
- ▶ "How do you get your diver into the recompression chamber?"

After a casualty is not the time to consider these questions. Remember, the absence of a diving mishap is not proof of proficiency. The most important thing to consider when conducting scuba diving operations is how to perform them safely and know how to react in case of a diving casualty.

U.S. Navy photo by MC1 Jayme Pastoric



This photo: Students at the Naval Diving and Salvage Training Center undergo various training scenarios to prepare them for duties involving underwater emergencies and procedures. The dive school graduates approximately 1,400 candidates per year in basic and advanced diving certifications. Students are assisting one of their classmates in preparation for a surface-supply dive in the vicinity of the complex. Opposite page: U.S. Navy Diver 2nd Class David Orme, center, assigned to Mobile Diving and Salvage Unit (MDSU) Two, ascends to the surface of a pool along with Colombian divers Chief Technician Aurelio Alonso, left, and Capt. Camilo Cifuentez during underwater gear familiarization in Panama City, Panama.

U.S. Navy photo by Chief Photographer's Mate Chris Desmond.

WHAT CAN YOU DO TO AVOID DIVING MISHAPS?

TIME: Make time in the ship's schedule to ensure the scuba divers are maintaining their diving proficiency.

QUALIFICATION: If the reason diving operations cannot be conducted is the lack of qualified divers, get with other submarines or local dive lockers to coordinate diving operations.

FREQUENCY: Practice makes perfect when it comes to scuba diving. The more scuba diving operations a submarine performs, the more comfortable their divers will be in preparing for a dive and conducting a dive.

NDC Jones is a diving analyst. Read more of her diving articles on diving gear and diving safety surveys in the Spring 2011 issue of the Diving Division's Diving Safety Lines newsletter.

QUALIFYING A SCUBA DIVER

To become a qualified scuba diver, the candidate must complete the submarine scuba diving course (CIN-A-433-0023). Each submarine is billeted to have five qualified scuba divers onboard, but a minimum of four is required to conduct a scuba dive. This is a challenging task to accomplish because of the difficulties in finding individuals that are able to meet the minimum requirements as stated in MILPERSMAN 1220-100, to even be accepted to go to the submarine scuba diving course.

Submarine scuba school is physically and mentally demanding. A large number of candidates fail because they were unprepared to be there. Common reasons candidates do not graduate from dive school include: failure to complete the minimum number of pull-ups, inability to tread water with scuba tanks on, and not being able to complete a timed swim using fins. **SC**

SEA COMPASS

DOWN BELOW

SUB & DIVE ARTICLES

S&D 1 Charting the Way Ahead

Leadership Focus

VADM John Richardson,
Commander, Naval Submarine Forces

S&D 2 Dive Locker

Don't Wait Until It's Too Late Scuba divers need ample time to maintain proficiency and ensure a mishap-free underwater operation.

By NDC (DSW/EXW) Rebecca Jones

S&D 4 Occupational Safety & Health

For Your Eyes Only What would you do if the shipboard eyewash station doesn't work?

By HMC (SS) Christopher Harris

Formula for Disaster: Lacking Sleep

+ Taking Shortcuts Don't be that guy who takes sleep for granted and finds out painfully that taking shortcuts spells bad outcome

By FTC (SS) William Cahill

Learning the Hard (Hat) Way

There's no excuse for not wearing a hard hat, especially when working in a shipyard.

By MMC (SS) Isaac Ingram

S&D 6 Sea Story: Shocking Tales

Zapped and Lived to Tell About It...

This Time Working around electricity can make you into a hero — or a number in the mishap stats.

By ETC (SS) Kevin Dawson

S&D 7 Best Practice: Situational Awareness

Prying Eyes Confined spaces, submarine, drill, and crowbar: these elements contributed to an MMCM's scraped cornea.

By MMCS (SS) Arthur Sisk

ON THE WEB NOW

Read more *Sea Compass* online articles at www.public.navy.mil/navsafecen/pages/media/seacompass.aspx:

► "Make Your Gear Seaworthy"

By EMCM (SW/AW) Frank Valdepeña

WE'RE LOOKING FOR A FEW GOOD WRITERS

Do you have a must-share submarine or diving story? If you believe that there's always something to be learned from someone else's experience, then you're what *Sea Compass* needs! Send your story idea, article or a photo essay to safe-seacompass@navy.mil. For more information, contact the editor directly at evelyn.odango@navy.mil.

COVER PHOTO: Divers use a lift bag system to move a sunken ship's propeller during an underwater lift with Mobile Diving and Salvage Unit (MDSU) Two. (U.S. Navy photo by MC1 Jayme Pastoric)

THIS PAGE: The submarine USS *Scranton* (SSN 756) pulls into Augusta Bay, Sicily, Italy. (U.S. Navy photo by Mass Communication Specialist Seaman Apprentice Cameron Bramham)

OPPOSITE PAGE: Master Chief Petty Officer Paul Davenport, Chief of the Boat aboard the Los Angeles-class submarine USS *Greeneville* (SSN 772), and his line-handling supervisors prepare to receive the Chinhae pilot during *Greeneville's* inbound transit to the Republic of Korea Naval Base in Chinhae, South Korea. (U.S. Navy photo by EM2 Noah DeLaughter)

CHARTING THE WAY AHEAD

LEADERSHIP FOCUS



COMMANDER, NAVAL SUBMARINE FORCES

Going to sea, and in particular submarining, is dangerous business. It's not natural to take a steel boat of several thousand tons, load it with weapons and other sources of tremendous energy, immerse that boat deep under the surface, sail it submerged for months around the globe, potentially release our weapons to destroy an enemy, and return safely home. No technology alone can make us completely safe and effective. Time and again it becomes clear that no matter how advanced and robust our boats become, no matter how elegant and efficient our designs and procedures, submarining is – at its essence – a human endeavor.

Doing it safely is only possible because of dedicated submariners with deep expertise and a deeper sense of integrity. We feel that we own this challenge – it is ours. It is the same thing with the new *Sea Compass* magazine - it is ours. The Submarine Force succeeds because of the creativity and initiative of our submariners. *Sea Compass* will succeed as well because it will be driven by the same forces - a magazine for us, written by us. So share your stories - with all the useful details - and help make us all safer.

Safety is a weapon. Your story may save a Sailor's life and keep them in the fight. The Submarine Force is all in - you'll be hearing from us. Please join us and use *Sea Compass* to make our Navy more safe.

Semper Procinctum.

VADM John Richardson





SEA **COMPASS**

FALL 2011

DOWN BELOW

SUBMARINE DIVERS NEED MORE TIME
ZAPPED & LIVED TO TELL ABOUT IT
BEST PRACTICE: DAMAGE CONTROL DRILL SITUATIONAL AWARENESS

SUBMARINE AND DIVING ACTIVITIES