





Commander, Naval Safety Center  
Deputy Commander  
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Department Head, Media and Public Affairs

RDML Christopher J. Murray  
Col Glen Butler, USMC  
CMDCM(AW/SW) Paul Kingsbury  
Jonathan Wilson  
Maggie Menzies

**EDITORIAL STAFF**

Head, Media Division	Derek Nelson
Editor	Evelyn Odango
Art Director	Allan Amen
Graphics and Design	John W. Williams
Webmaster	Darlene Savage
Social Media Manager	Christopher Jones

**EDITORIAL OFFICE**

Commander, Naval Safety Center  
Attn: *Decisions*  
375 A Street  
Norfolk, VA 23511-4399

Telephone: 757-444-3520, ext. 7220 (DSN 564-3520) / Fax: 757-444-6791  
General email: safe-decisions@navy.mil  
Editor's email: evelyn.odango@navy.mil

**Shore Mishap Line: 444-3520, ext. 7840/7145**

Shore safety email (USN): safe-code40@navy.mil  
Shore safety email (USMC): safe-ground@navy.mil  
OSH safety email: safe-oshfdbk@navy.mil

**ABOUT DECISIONS**

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**SHORE SAFETY PROGRAMS**

To contact a safety analyst by phone, call the main number 757-444-3520 and dial the extension at any time during the greeting.

Occupational Health and Industrial Safety Division	7820
Training Safety Division	7831
Traffic and Recreation, Off-Duty Safety Division	7842

**NAVAL SAFETY CENTER ANALYSTS AND CONTRIBUTORS**

Nika Glover, Media and Public Affairs  
Kevin Conroy, Lessons Learned Management  
Joseph Peretto, B.Sc, CPSI, Safety and Occupational Health  
Steven Geiger, Safety and Occupational Health  
Cindy Chester, Safety and Occupational Health  
John Scott, Data and Statistics

**FLEET CONTRIBUTORS**

LCDR James Faraco, VAW-125  
ENS Jason Buckley, Naval Education and Training Command  
MC2 Nicolas C. Lopez, Defense Media Activity  
Cpl Michelle Reif, II Marine Expeditionary Forces  
Ivan Garrett, Mid-Atlantic Region Maintenance Center Safety Office

**QUARTERLY ANALYSIS REPORTS**

In support of the Fleet Safety Campaign, NAVSAFECEN delivers a detailed analysis of safety data to the Fleet and TYCOMs on a quarterly basis. Each report includes a prioritized list of safety hazards and causal factors by community, as well as trending data with recommended course of actions. The quarterly reports are available on the Fleet Safety Campaign site via Intelink (<https://intelshare.intelink.gov/sites/navsafecen/SafetyCampaignPlan>).

**See the "Safety Resources" section on Page 19, for details on how to obtain credentials to access the Fleet Safety Campaign site.**



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**FY14 Annual Mishap Overview**

The Naval Safety Center has published its analysis of Navy and Marine Corps mishaps. This report focuses on areas of elevated risk that require increased or renewed prevention efforts. The 60-page report is available in PDF format.

► [/documents/media/FY14\\_Annual\\_Report.pdf](/documents/media/FY14_Annual_Report.pdf)

**Sleep/Fatigue Videos**

This latest series of videos demonstrates how lack of sleep and fatigue reduce performance and increase the risk of mishaps. Collaborators include OPNAV, COMNAVSURFLANT, Naval Personnel Command, the Naval Postgraduate School.

► </pages/video/sleep-fatigue.aspx>

**Safe Tips for Work and Off Duty**

Download quick and easy summaries with topics ranging from automotive, driving/riding/traffic, electrical, fire, health and personal safety, summer and water activities, and much more. Share these PDFs as printed or digital training resource for your next safety standdown.

► </pages/media/index-safetips.aspx>

**Seasonal Resources**

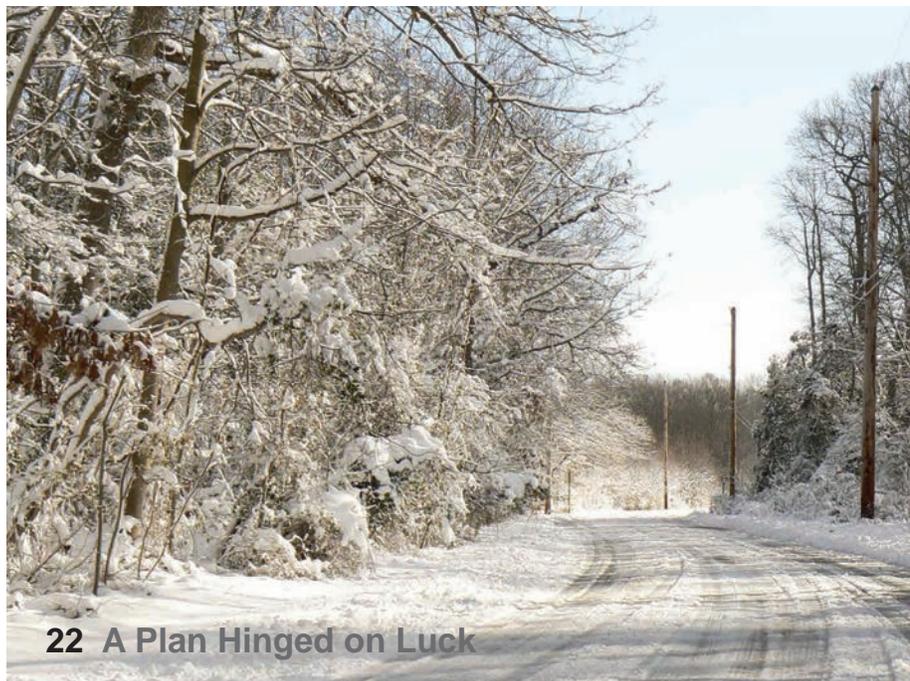
To help you prepare for your next safety briefing or standdown, we have stocked some materials including POD notes, ORM resources, seasonal statistics, safety tips, posters, videos, and more.

► </pages/media/seasonal/index.aspx>

**SOCIAL NETWORK**

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*By Evelyn Odango, Naval Safety Center*

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Look out for co-workers and shipmates who are oblivious to the dangers in the workplace, whether it's to themselves or the environment. Do what you can to recognize and correct them. *By Ivan Garrett, Mid-Atlantic Region Maintenance Center Safety*

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Have a survival story, a news brief, or safety tips to share? Send us an email at [safe-decisions@navy.mil](mailto:safe-decisions@navy.mil) or contact the editor at 757-444-3520, ext. 7220.

COVER: Photo illustration by Evelyn Odango. Photo by Eunjoo "Kim" Gallegos, MCIWEST Camp Pendleton Base Safety.

THIS PAGE: Photo by Perlick Laura, U.S. Fish and Wildlife Service.

*I'm skipping my regular column in this issue to pay tribute to my esteemed colleague and supervisor, Derek Nelson, who, for more than 35 years, has been a mainstay in the Naval Safety Center's Media Division. As he gets closer to closing this chapter of his career, he will tell you what a journey it has been to read, write, edit, or rewrite stories for all publications before they go to press and get in your hands. – Evelyn Odango, Ed.*

# Your Experience May Be Worth Sharing

BY DEREK NELSON  
Guest Editor

Let me tell you a story.  
I just need to pick the right one. That's the trouble with being around for so long – too many yarns mill around in my memory. I'm not sure what you'd like to hear.

Terror? I could tell you about the time I was a passenger in a brand new, little red Renault that a friend of mine in high school (sans driver's license) drove to school. With me and two other passengers, he totaled it (it rolled over three times and burned up).

Humor? There was the time I was perched on my slippery, steep front-porch roof, swatting wasps with a paint scraper (maybe you remember this one from the Friday Funnies).

You want pain? I've got a few trauma-induced scars here and there, each one a lesson learned the hard way. And I've logged a few hair-raising near-misses. In each case, except for a few seconds or a few inches, I wouldn't be here doing this editorial.

I've written a fair amount of stories in my time, but I've edited a thousand times as many articles. In case you aren't sure what "editing" means, here's a hint: nitpicking. Editors inhabit that murky, mostly subjective world between what an author meant, what that person actually wrote, and what the reader will understand.

It is a thankless but important task, because the articles

are important. The stuff in this magazine, the other Safety Center magazines, and every safety-related communication vehicle in the Navy and Marine Corps, aims at making sure our personnel are ready to do the jobs they have been trained for, not limping around on crutches thanks to an easily preventable and self-inflicted injury.

Taxpayers don't send Uncle Sam their money so that young Sailors and Marines can learn the hard way. They shouldn't have to rewrite lessons that were already written in blood once.

Strike one is that most young people (which, in the military, is most people) don't know their limitations. Strike two is that they don't particularly enjoy having their noses rubbed in that fact. The task of the people who are part of this magazine is a challenge.

We do what we can. Your part is to soak up as much as you can and share the wealth. If you can add a story of your own, so much the better. Add some knowledge the next time you're with a Sailor, Marine or a civilian worker who is starting an unfamiliar task. Your experience may become a lesson learned or a best practice. It might help that next safety stand down be less of a snoozer.

The point isn't a poorly managed risk from last month or last year. It is about what you are going to do today and tomorrow.

## LETTERS TO THE EDITOR

Decisions magazine invites letters from readers. Send your letters via email to [evelyn.odango@navy.mil](mailto:evelyn.odango@navy.mil); fax to 757-444-4791; or mail to Commander, Naval Safety Center, ATTN: Decisions Editor, 375 A St., Norfolk, VA 23511-4399. Please include your contact information. We reserve the right to edit letters.



## *Spotlight on Excellence*

# SECNAV Award Highlights Safety, Environment

BY MC2 NICOLAS C. LOPEZ  
Defense Media Activity

Sailors, Marines and civilians were recognized for their exceptional safety performance and environmental stewardship during FY14. Twenty-six Secretary of the Navy Environmental and Safety Excellence Awards were presented at the July 23 ceremony held at the Navy Memorial Heritage Center in Washington, D.C.

"This is the first that these awards have been presented at the same time," said Dennis McGinn, Assistant Secretary of the Navy for Energy, Installations & Environment. "I think it's really appropriate to do that because [with safety] we preserve life and health of all our Sailors, Marines and civilians, and [with environmental stewardship] we preserve the life and health of our natural environment wherever we operate."

Each command awarded was recognized as the best among the entire Navy.

"Being awarded the Emerging Center of Safety Excellence Award from the deputy secretary of the navy is an extreme honor," said CDR Stephen

Petras, Carrier Strike Group 4's safety officer. "I think it shows safety as a priority of the Navy, but also highlights not just me, but my command, as it's truly dedicated to maintaining their Sailors."

Awards were presented for accomplishments in natural resources conservation, cultural resources management, environmental quality, sustainability, environmental restoration, environmental excellence in weapon system acquisition, and environmental planning.

According to SECNAV Ray Mabus, the objective of the Environmental and Safety Excellence Awards is to highlight activities that have excelled in improving warfighting and mission readiness through professional risk management in the elimination of preventable deaths, injuries, occupational illnesses, infrastructure and material losses, and mission degradation. The awards emphasize the unique importance of safety as a top Department of the Navy priority.

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*Established in 2002 by former SECNAV Gordon R. England, the Safety Excellence Awards are designed to promote safe practices throughout the Department of the Navy and personally recognize those commands that have integrated an awareness of safety in everyday operations, reducing loss in man-hours, material damage, among other factors that may decrease Navy assets.*

# 'Unforeseen'? I Don't Think So

BY JOHN SCOTT

**O**n March 22, 2014, a massive wall of mud and debris slid down from the 800-foot Whitman Bench ridge on the banks of the Stillaguamish River near Oso, Wash. The mudslide killed 43 people, including two active-duty Navy personnel assigned to Puget Sound.

CDR John Regelbrugge and Chief Petty Officer Billy Spillers were killed, as was Regelbrugge's wife and three of Spillers' children.

Public officials initially stated that it was a "completely unforeseen" situ-

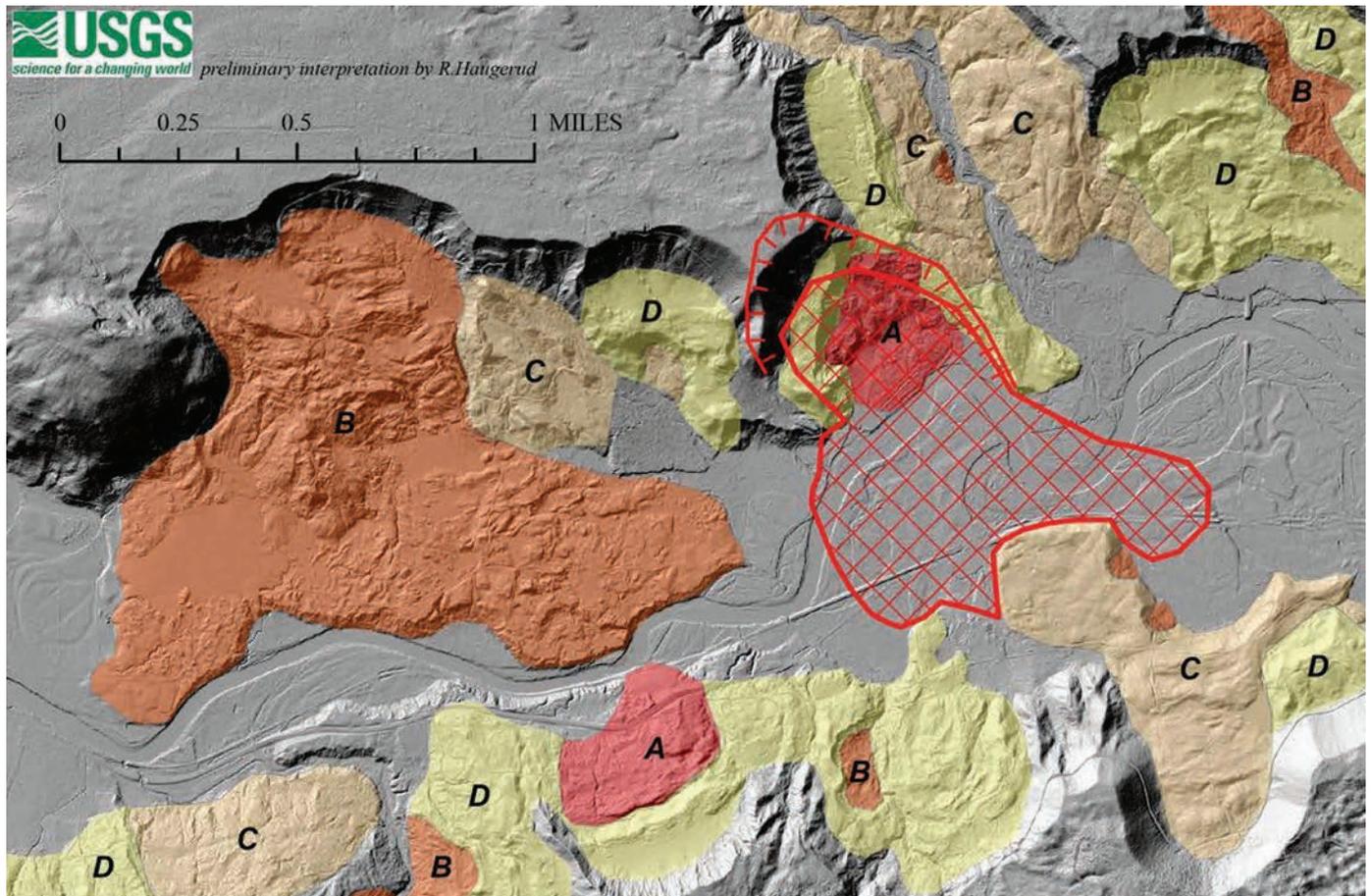
ation. This statement was subsequently shown to be extremely questionable, similar to if someone claimed that massive flooding was "unforeseen" in New Orleans following the levee breaks during Hurricane Katrina.

U.S. Geological Survey mapping shows that for miles along the ridge, there have been periodic slides. This specific area had documented slides in 1937, 1951, 1952, 1964, 1967, 1988, and 2006. In 2004 the county considered buying out existing houses. In 1962 a rock revetment was installed to prevent erosion at the base of the ridge, and in 2006 there was an attempt to

divert the river 430 away from the base. In 1999, a 26-page Army Corps of Engineers report documented the history of the area and warned of the inevitable next slide. According to a *Seattle Times* article, the local residents referred to the area as "Slide Hill."

So how could the Navy have helped to prevent the tragic loss of the two Navy personnel?

In 1910, only 90 miles away, two trains were struck by a massive avalanche that killed nearly 100 people. The Great Northern Railway had built a tunnel and snow sheds to protect trains. Slides hampered the construc-



Lidar base map and overlay of Oso landslide 2014. Lower "A" is Skaglund Hill slide area (2006 and 2011). Upper "A" is Oso slide of 2014. Red cross-hatching is approximate area of runout. (Photo: U.S. Geological Survey Open-File Report 2014)



Oso area of Snohomish County, Wash., during the March 22, 2014 search and recovery efforts. The mudslide covered a one-square-mile area in a rural community about 55 miles northeast of Seattle. (Photo: Defense Video & Imagery Distribution System, Third Army/U.S. Army Central)



This image of landslide debris and a barrier lake created by the landslide was originally published by the office of Washington State Governor Jay Inslee. It was taken on March 23, 2014 during an aerial survey by NASA's Landsat 8 satellite. (Photo: NASA Earth Observatory Website/Adam Voiland)

## WHAT'S YOUR POINT OF VIEW?

Do you have an idea for a safety viewpoint topic or an opinion about anything that you'd like to see in *Decisions*?

Send us an email at [safe-decisions@navy.mil](mailto:safe-decisions@navy.mil) or contact the editor at 757-444-3520, ext. 7220.

tion of the railroad. When the trains first got stuck on the track that tragic day, employees discussed the possibility of avalanches. The risk was well-known. The Washington state supreme court, however, ruled that it was an "act of God." The case stood as the test case for disaster-related lawsuits for many years.

That was more than a century ago, and what we feel we can affect has changed over the years. Until 1989 the DOD safety reporting instruction allowed for an "Act of God" exemption. Some Navy instructions carried the same language until 2005, and the philosophy of "we can't do anything about it" pervades safety mentality to this day.

We can do something about it.

The DOD Manual 4165.63-M ("DOD Housing Management") requires that "Service members shall obtain housing support services prior to agreeing to rent, lease, or purchase housing." The support should include "inspections of units for suitability based on environmental, health, and safety considerations." Perhaps as we progress to lower and lower thresholds of acceptable loss, it is time for housing inspections to join the long list of risk mitigations we have instituted over the years (e.g., seat belts, motorcycle training and PPE use, carbon monoxide detectors, helmet on bikes).

Maybe it isn't currently realistic to name all of California off limits for housing because of the risk of earthquakes, but permission to move into a house near a known mudslide zone is something we can control. **D**

.....  
*Mr. Scott is the head of data management and services division at the Naval Safety Center. He is a subject-matter expert in mishap statistics and data analysis.*

## People Making a Difference



Naval Surface Warfare Center Indian Head Explosive Ordnance Disposal Technology Division (NSWC IHEODTD) held their annual Honorary Awards ceremony, June 23, at the Indian Head Town Pavilion to recognize those individuals and teams who made significant contributions to fulfilling the command's mission during calendar year 2014. (U.S. Navy Photo/Matthew Poynor)

NSWC IHEODTD — Team members of the systems engineering department safety committee at Naval Surface Warfare Center Indian Head Explosive Ordnance Disposal Technology Division are the recipients of the Command Award for Safety Excellence. The committee (Amanda Spooner, Taylor Young, John Backes, Robert Hastings, Mike Deeds, Cynthia Manns, Pansy Cole, Allen Wilson, Rodney Lucas, Ed Hernandez, Wade Babcock, Zaeem

Husain, and Paula Greaser-Hayes) was recognized for encouraging employees to actively participate in the safety program. The members met regularly to discuss safety issues, publish newsletters to raise awareness of organizational safety issues, establish a system for employees to report hazards to management, and suggest how to correct hazards. Their efforts resulted in their department not having a work- or duty-related injury in 2014. **D**



File Photo

## Lessons Learned

QUANTICO – The Naval Safety Center and the Commandant of the Marine Corps (Safety Division) produce lessons-learned documents that provide examples and insights to mishaps and risk experiences throughout the Marine Corps and the Navy. The lessons learned aid in recognizing the indicators, causes and effects of these hazards. The Marine Corps Center for Lessons Learned (MCCLL) is part of the Marine Corps Combat Development Command, Marine Corps Training and Education Command, located at MCB Quantico, Va. Connect to MCCLL (CAC-enabled) at <https://www.mccll.usmc.mil>.

## Have You Got a Permit for That Turkey Fryer?



CNRMA — The holidays are approaching and you're probably thinking about a command-sponsored holiday luncheon. Commands need to be aware of the permit requirement for the use of an open-flame turkey fryer on a military installation. Commander, Navy Region Mid-Atlantic's Norfolk Fire Prevention Office offers a 20-minute instructional training on proper use of a turkey fryer and how to obtain a permit from a fire preven-

tion inspector. If a command calls for a permit and they have not received this training, the permit will be denied. A permit may not be authorized if weather conditions are not conducive at the time of the permit request. Training must be completed before a permit can be issued. Contact the fire prevention chief at 757-322-2416. For fire safety news and information, visit the National Fire Protection and Prevention Administration at <http://www.nfpa.org/education>.

Photo: PBS.org

FROM THE FAR EAST ...

Driving in Singapore



Photo: Wikimedia Commons

SINGAPORE MOU — Active-duty military personnel, DoD employees, and any dependent who will be driving in Singapore must complete the U.S. Forces-administered driver training before operating any vehicle in Singapore. A passing score of 70 percent is required. The training is offered every Monday by appointment (except local and U.S. holidays). Contact the Navy Region Center Singapore (NRCS)/ Singapore Area Coordinator (SAC) safety program manager at 6750-2535.

Japanese Road Signs

SASEBO – A Local Hazards Course is mandatory for licensing to operate any vehicle in Japan. The course provides local traffic safety information for the written test and for driving in the country. For questions about courses, call the traffic safety office at 252-3717 or 090-3669-9369.



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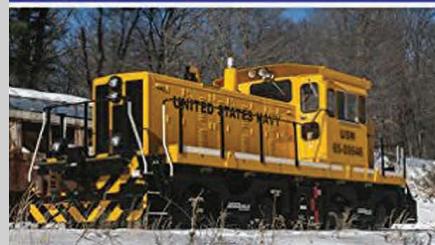
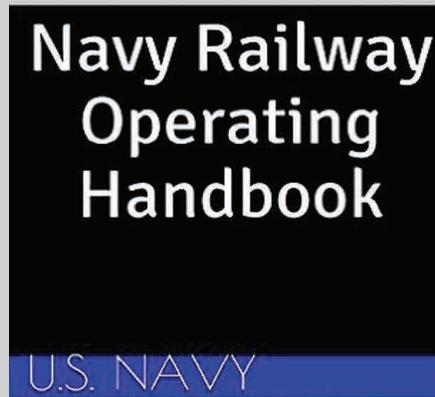
Rail Safety Policy Update

COMNAVSAFECEN — “NAVFAC P-301, Navy Railway Operating Handbook,” published by the Naval Facilities Engineering Command, has recently been updated. An ALSAFE message from the Naval Safety Center (R 151346Z JUL 15 ZYB) outlining the specific details of the update was released in July.

The changes have been initiated to enhance safety and are in alignment with the commercial and federal railroading industry. Sections 1 (Background), 3 (Operations, Practices and Procedures) and 8 (Railway Safety Requirements) of the handbook are affected by this update.

Updates include basic skills such as mounting, dismounting, riding, and climbing on railway cars and locomotives (Section 3, Part 1, Paragraph C). In this section, new wording can be found in areas like switching operations and general operations for signals. In the local railroading operating directive (Section 8, Parts 3 and 5, Paragraphs B and D), training and refresher training have been updated to reflect the following requirements: completion of initial 40-hour, Army conductor/engineer certification course or similar, and completion of annual conductor/engineer re-certification.

For more information, consult ALSAFE 036-15 “Rail Safety Update,” or contact NAVSAFECEN POC Steven Geiger at 757-444-3520, ext. 7151. **D**



U.S. Navy Photo

<http://www.public.navy.mil/navsafecen/pages/OSH/index.aspx>



U.S. Navy Photo

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**"Those who cannot remember the past are condemned to repeat it."**

– George Santayana, *The Life of Reason (1905-1906)*, Vol. I, *Reason in Common Sense*



# A PLACE FOR SHARING

## PROGRAM OBJECTIVES

BY KEVIN CONROY

The Naval Safety Center has received a pressing request from the Navy and Marine Corps communities for more efficient communication of safety lessons learned information. The primary reason for this demand is to establish effective relationships among safety enterprise participant organizations. The main objective is to promote the sharing of lessons learned throughout the Department of the Navy (DON).

The Naval Safety Center has established a new division to improve lessons-learned sharing and dissemination across the fleet. The Lessons Learned Division is the lead for collecting, analyzing, publishing, and archiving safety lessons learned information. This may include trend analysis and best practices.

These efforts will support safety training, planning and execution for both exercises and operations, and

ultimately improve mission readiness across the force. The safety lessons learned program will inform the operational and administrative chains of command, as well as adjacent and subordinate units, of significant lessons learned and/or safety issues related to execution of daily operations.

Stakeholders can submit lessons-learned issues and topics for further analysis and recommendation directly to the Naval Safety Center lessons learned program manager. The success of the program will allow Naval Safety Center analysts to better collect, analyze, and communicate findings from mishaps, hazards, assessments, and other fleet engagements. Our end goal is to prevent mishaps, preserve equipment and, most importantly, keep our personnel alive. **D**

.....  
*Mr. Conroy is the lessons learned program manager for the Naval Safety Center.*

- 1 COLLECT** safety information from operations, events, exercises, hazard reports, and mishaps.
- 2 IDENTIFY** best practices and/or potential issues requiring corrective actions.
- 3 DISSEMINATE** safety lessons learned for use by the DON units during planning and execution of operations, events, and exercises involving the naval force.

Safety Lessons Learned POC:  
Kevin Conroy, Program Manager  
Lessons Learned Division  
kevin.conroy@navy.mil  
757-444-3520, ext. 7192  
DSN 564-3520, ext. 7192

## F/A-18D CRASH IN VIRGINIA BEACH, APRIL 6, 2012

The engine from the wreckage of an F/A-18D Hornet (left) is lifted by a crane from Naval Facilities Engineering Command Mid-Atlantic for removal from the Mayfair Mews Apartment complex in Virginia Beach, Va. The Hornet, assigned to Strike Fighter Squadron 106 (VFA-106), suffered multiple engine failures just after takeoff on April 6, 2012 and crashed into the apartment complex. Both air crew safely ejected from the aircraft and there were no fatalities. (U.S. Navy Photo/John Washington/Modified)

### ▶ LESSONS LEARNED WEBSITES

- Navy Lessons Learned ▶ <https://www.jllis.mil/navy>
- Joint Lessons Learned NIPR ▶ <https://www.jllis.mil>
- Joint Lessons Learned SIPR ▶ <http://www.jllis.navy.smil.mil>
- Department of Homeland Security Lessons Learned ▶ <http://www.dhs.gov>
- Federal Emergency Management Agency Lessons Learned ▶ <https://www.fema.gov>
- Center for Army Lessons Learned ▶ <http://usacac.army.mil>
- Marine Corps Center for Lessons Learned ▶ <https://www.mccl.usmc.mil>
- Air Force University Lessons Learned ▶ <http://www.au.af.mil/au/awc/awcgate/awc-lesn.htm#writing>
- Naval Operational Medical Lessons Learned Center ▶ <http://www.med.navy.mil/bumed>

# Out-of-the



**SUPERMOM**  
Mother of three school-aged children. Day starts at 0500 with a cross-fit workout, a trip to daycare, then on to an 8-hour workday.

**OFFICIAL JOB TITLE**  
Safety specialist/  
training instructor/  
SNCOIC

**PRIMARY DUTIES**  
Lead, mentor, train, and represent the Marines under her command. Serve as enlisted safety representative for all students. Publish monthly safety newsletters and a special-issue "Critical Days of Summer" bulletin.

**FINEST MOMENT**  
Selection to the staff degree completion program and getting a master's degree.

# Energetic Learning

## Box Thinking

BY EVELYN ODANGO Photos by Eunjoo “Kim” Gallegos, Camp Pendleton Base Safety

On the job for more than a year as a safety specialist, GySgt Monica Cervantes knows a thing or two about role playing for safety and making a believer out of her flock. Sounds a bit evangelical? Perhaps, but Cervantes — with bachelor’s and master’s degrees in psychology and performance psychology — wants to create value in training by digging deep into people’s fundamental desire to learn.

Cervantes is a staff non-commissioned officer in charge (SNCOIC) at MCB Camp Pendleton Base Safety. She provides ground safety training, CPR instruction, and up to 30 hours a month of occupational safety and health courses. She focuses on exploring creative ways to train 30-40 Marines (E-2 to O-3) about risk management and personal responsibility. She uses case studies and best practices to develop scenarios for her students to act out.

That means less PowerPoint and more energy.

“I don’t want to oversaturate with so many slides that the brain shuts down,” she said. Instead Cervantes uses scenes from movies like “Spiderman” to teach about fall protection. She develops safety messages using free association with candy products like Lifesavers, Extra, and Nerds. To teach about distracted driving, Cervantes has students participate in a simulated driving activity that measures their reaction time.

Regarded by one of her colleagues as forward-leaning and out-of-the-box thinker, Cervantes asks a lot of questions — of her superiors and the Marines in her classrooms. “There’s always room for something better,” she said. “What can I bring to the table? What value can I add without changing the purpose of the training?”

Cervantes has high hopes for the Marines. She talked with *Decisions* about setting standards for herself and for the training she provides.

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**Decisions:** How do you maintain situational awareness and manage a healthy workload between classroom time and administrative work?

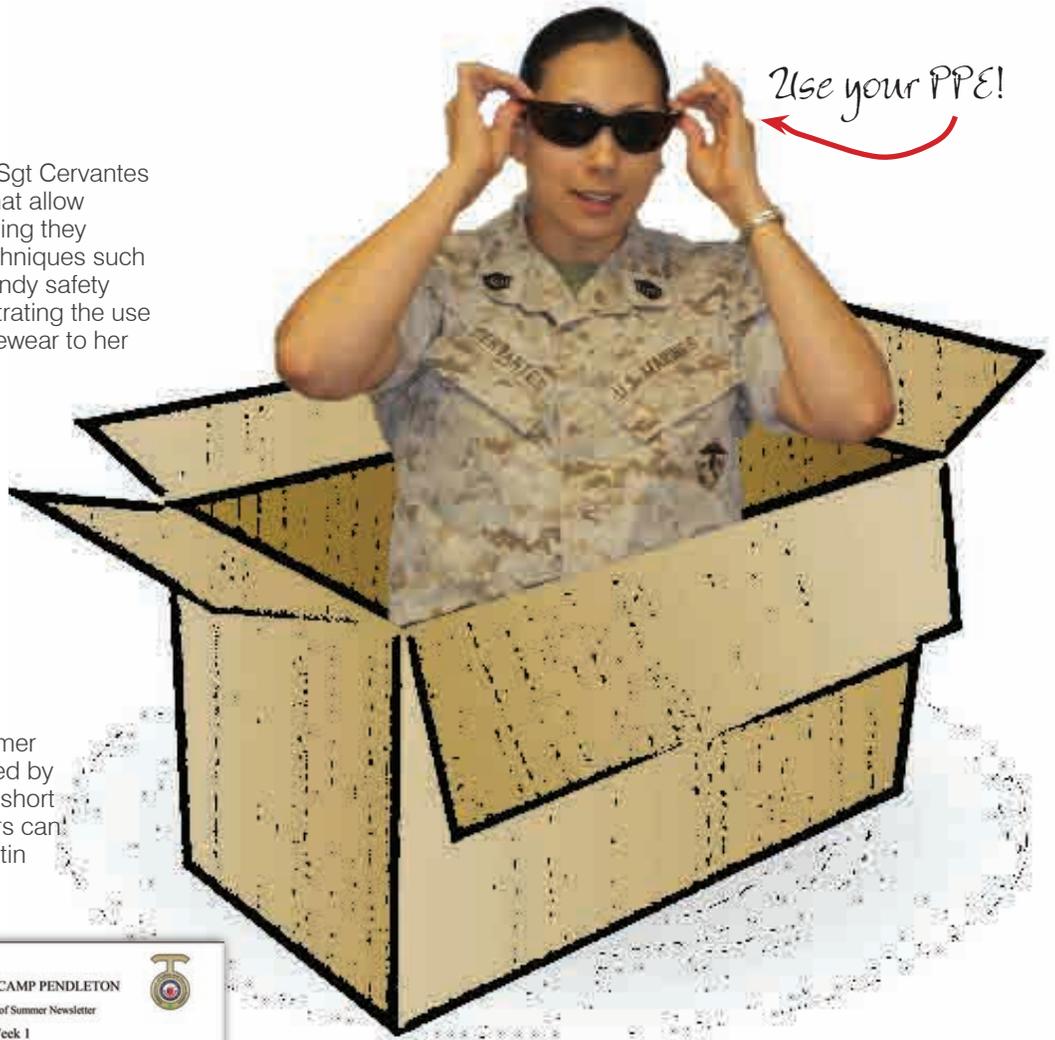
**GySgt:** Since 75 percent of my day is devoted to my work [training], I make deadlines for myself and prioritize. I make a task list and chunk it by categories — admin, training, coursework, etc. — then split up the work through the day or the week, depending on deadlines. My focus is not on worrying about the before and after; I focus on the moment. If I split my attention, I will not be able to give the task my full attention. I don’t try to do it all. I go to my resources (supervisors and colleagues) for support and follow-up. When I leave work, I leave all of that behind.

**Decisions:** What has been the most challenging experience you’ve had as SNCOIC?

**GySgt:** The biggest thing I wish I could change is getting [leaders] onboard for setting training standards. I want to get their buy-in by showing their commands’ mishap statistics and identifying the trends, or bringing to light

“ I don’t want to oversaturate with so many slides that the brain shuts down. ”

To make learning fun, GySgt Cervantes uses learning methods that allow students to retain the feeling they experience. She uses techniques such as object association (candy safety message) when demonstrating the use of personal protective eyewear to her students.



The Critical Days of Summer newsletters are segmented by topic each week and are short enough that safety officers can post them on safety bulletin boards.

**MCIWEST-MCB CAMP PENDLETON**  
2015 Critical Days of Summer Newsletter  
Week 1

**Seat Belt Laws and Regulations**

**FASTEN SEAT BELT**

<https://www.youtube.com/watch?v=rvcC-aB3hu0>

Vehicle crashes are the number one cause of death for children and young adults ages 5-34 (Center for Disease Control, 2015). They are the number two cause of deaths for adults 25 and older (CDC, 2015). The deaths are preventable, and everyone can make a change to reduce these statistics by being aware of the dangers on the road and wearing a seat belt. The National Safety Council message to all drivers is, "Slow down, make good choices, buckle up and watch out for children. It will save lives. And remember, you're setting an example for your children."

When worn properly, seat belts are your best defense. 49 states have laws that require people riding in vehicles to wear seat belts. Properly worn seat belts can also help reduce injury in crashes (CDC, 2015).

**Current Status**

Commanding General's Safety Hotline: (210)763-7233

**MCIWEST-MCB CAMP PENDLETON**  
2015 Critical Days of Summer Newsletter  
Week 3

**Motorcycle Safety**

The Marine Corps is striving to improve the motorcycle mishap rate by ensuring all Marines have the appropriate motorcycle training (safety.marines.mil, 2015). Motorcycles can travel as fast as cars do, but lack car safety features most people take for granted. Motorcycles don't have an exterior frame to absorb crash forces. Instead, the forces of a collision are born directly by the bike and the rider. Motorcycles also don't have seatbelts, which increases the rider's risk of being thrown off the bike in an accident.

**Motorcycle Personal Protective Gear**

Protective gear has two basic purposes: comfort and protection. Uncomfortable gear can distract you from riding. Properly fitting protective gear will help you stay comfortable when encountering various riding conditions. In the event of a crash, protective gear will help prevent or reduce injuries (enr.org, 2015).

**Helmets** Each year more than 2,200 people are killed and more than 55,000 are injured in motorcycle crashes (nhtra.gov, 2015). Many of those deaths and injuries could have been avoided if a helmet was worn (nhtra.gov, 2015). Helmets are a motorcyclist's most effective piece of equipment (nhtra.gov, 2015). Other important factors are a comprehensive motorcycle program, rider training, licensing, education, and motor awareness (nhtra.gov, 2015). Personal protective equipment will not prevent crashes, but they can help to cut down on the deaths and injuries associated with motorcycle collisions (nhtra.gov, 2015).

**Fact:** The value of motorcycle helmets in reducing deaths and serious injuries has been demonstrated for more than 40 years.

Commanding General's Safety Hotline: (210)763-7233

Candy Safety Message

Everyone here is special to me.

Sometimes we can be and don't wear our PPE.

some time off by wearing your PPE and if you see someone without theirs, be a and help them out.

Remember Safety pays

*What comes to mind?*

## Distracted Driving Activity

In this activity, students stand in a line facing one direction (one person in front of another). This facilitated exercise measures reaction times when the driver is distracted by phone activities such as texting and calling.

When the timer is started, the last person will squeeze the shoulder in front of him/her. This activity demonstrates a person's response to stimulus while driving.

The students are then given a number to call and simulate talking and driving. Next, they are instructed to dial a number and send a text message.

## Activity Debrief

After the exercise, students are given time to reflect upon what they had just experienced. They provide comments and describe what they felt during their reaction times.

- ▶ What could the difference in reaction times mean on the road?
- ▶ How could alcohol further affect the reaction time?
- ▶ As safety professionals and/or advocates, what can we do to help reduce driving mishaps?

Stock Photo

During a facilitated driving exercise, GySgt Cervantes lets students simulate driving distractions such as dialing a phone number, engaging in a phone call, and sending a text message. The students walk away with the knowledge and a better understanding of the dangers of distracted driving. The activity emphasizes the following: vision is the most important sense for safe driving, drivers look out the windshield but do not process everything in the roadway, and that the brain not only judges tasks but also juggles focus and attention.

“I like being able to teach in context my students can relate to.”

their problem and offering a solution. Continuity of training is the biggest challenge: people move, COs leave, budgets get cut. The most important question everyone should ask is: How valuable is the training to reducing risk? If personnel are not trained to the situation, mishaps win.

**Decisions:** Can you recall an event where appropriate training would have changed an outcome of a situation?

**GySgt:** We had an incident that required an ambulance transport for a heart-related situation. Before medical personnel arrived, no one was trained to perform CPR or to operate an AED had it been necessary. Fortunately, the indi-

vidual recovered later. But looking at the HFACS during the investigation, I wondered why people hadn't been trained to handle the situation. What led up to it? What could have been done differently? Training to the situation would have built confidence [for someone to administer CPR] and provided the basic skills to act properly. We are now making sure we have enough AEDs in appropriate locations throughout the base.

**Decisions:** How can you influence people's attitude toward safety training and risk management?

**GySgt:** I strongly believe that in certain situations we revert to our training, to what we've learned. Our response is driven by what's ingrained in our brain; we naturally act out what we know. That is why it is so important to set standards and train consistently to those standards. The most valuable takeaway I can give my students is that they must be prepared to act in real situations. During role playing in class, I give them ownership of the safety message. For



Confident in her role as a safety specialist, instructor and SNCOIC, GySgt Cervantes expands her duties and responsibilities from the classroom (left) teaching the use of PPE to site inspections (right) ensuring safety guidelines are met.

example, if it's about distracted driving, I set up scenarios where they actually feel what it's like to experience cognitive overload (driving, texting, reading, and thinking all at once). They feel it and realize it could happen in real life. They're more inclined to share that feeling with others. I hope they never have to experience it in real life.

**Decisions: What do you see as your biggest asset as a mentor and a supervisor?**

**GySgt:** From serving in Afghanistan and Iraq to supervising two junior Marines, I've had a lot of different opportunities. These have helped me draw examples from my personal life experiences and share them with my students. I've been working in safety billets since becoming an SNCO when I was an E-6. When I look at training, I like being able to teach in context my students can relate to. My responsibilities don't stop in the classroom. As a female leader, I constantly have to prove myself, especially in the

Marine Corps environment. In the safety environment, not so much; that's because of my knowledgebase and professional training.

**Decisions: Do you have a role model?**

**GySgt:** I aspire to be just like one of my psychology professors. I like the fact that this field is not clinical. I like that I'm working with individuals who are already performing at or above baseline and I'm helping them improve. I find that people who are already performing at their best need to focus more. I like showing them different ways to organize and get the job done. It's a different way to teach.

**Decisions: What is a successful day for you?**

**GySgt:** When I get my to-do list cleared off. But my day is "accomplished" when I get feedback from the students; that they are using the information we've given them. **D**

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 Ms. Odango is the editor of *Decisions* and *Sea Compass* magazines.

COMPLIANCE

# Get That GHS Label On!

BY CINDY CHESTER

To ensure workers are effectively identifying chemical hazards, OSHA initiated a change in 2013 to modify the Hazard Communication Standard (HCS). The Globally Harmonized System – or GHS – has been introduced to improve safety and health of workers. Manufacturers, handlers and users are expected to be in full compliance by the end of this year.

Employers began training workers on Dec. 1, 2013, on the new labeling elements and the format of the safety data sheets (SDS) to ensure workers recognize and understand the new chemical hazard labels.

Full compliance with the final rule began June 1, 2015, for chemical manufacturers, importers, distributors and employers. Distributors can't ship containers labeled by the chemical manufacturer or importer unless the containers have GHS labels.

During the phase-in period, employers need comply with either the existing HCS, the revised HCS, or both. OSHA recognizes that hazard communication programs will go through a period of time where labels and SDSs under both standards will be present in the workplace. This will be considered acceptable, and employers

are not required to maintain two sets of labels and SDSs for compliance purposes.

By June 1, 2016, employers are expected to update alternative workplace labeling and hazard communication programs. They must provide additional employee training for newly identified physical or health hazards.

It is important that when employees begin to see the new labels and SDSs in their workplaces, they will be familiar with them, understand how to use them, and access the information effectively.

A training video is available on the Naval Safety Center's YouTube channel (<https://youtu.be/EKAvxoramG4>). You may also request a DVD training video by emailing [cynthia.chester@navy.mil](mailto:cynthia.chester@navy.mil). 

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*Ms. Chester is a safety and occupational health specialist in the Shore Safety Programs Directorate, Naval Safety Center.*

<p><b>Health Hazard</b></p>  <ul style="list-style-type: none"> <li>• Carcinogen</li> <li>• Mutagenicity</li> <li>• Reproductive Toxicity</li> <li>• Respiratory Sensitizer</li> <li>• Target Organ Toxicity</li> <li>• Aspiration Toxicity</li> </ul>	<p><b>Flame</b></p>  <ul style="list-style-type: none"> <li>• Flammables</li> <li>• Pyrophorics</li> <li>• Self-Heating</li> <li>• Emits Flammable Gas</li> <li>• Self-Reactives</li> <li>• Organic Peroxides</li> </ul>	<p><b>Exclamation Mark</b></p>  <ul style="list-style-type: none"> <li>• Irritant (skin and eye)</li> <li>• Skin Sensitizer</li> <li>• Acute Toxicity (harmful)</li> <li>• Narcotic Effects</li> <li>• Respiratory Tract Irritant</li> <li>• Hazardous to Ozone Layer (Non-Mandatory)</li> </ul>
<p><b>Gas Cylinder</b></p>  <ul style="list-style-type: none"> <li>• Gases Under Pressure</li> </ul>	<p><b>Corrosion</b></p>  <ul style="list-style-type: none"> <li>• Skin Corrosion/ Burns</li> <li>• Eye Damage</li> <li>• Corrosive to Metals</li> </ul>	<p><b>Exploding Bomb</b></p>  <ul style="list-style-type: none"> <li>• Explosives</li> <li>• Self-Reactives</li> <li>• Organic Peroxides</li> </ul>
<p><b>Flame Over Circle</b></p>  <ul style="list-style-type: none"> <li>• Oxidizers</li> </ul>	<p><b>Environment (Non-Mandatory)</b></p>  <ul style="list-style-type: none"> <li>• Aquatic Toxicity</li> </ul>	<p><b>Skull and Crossbones</b></p>  <ul style="list-style-type: none"> <li>• Acute Toxicity (fatal or toxic)</li> </ul>

STANDARDIZED LABELS – Improvements align with the UN's Globally Harmonized System of classification and labeling of chemicals.

## Major Changes to the Hazard Communication Standard

The standard that gave workers the right to know, now gives them the right to understand.

**Hazard Classification:** Provides specific criteria for classification of health and physical hazards, as well as classification of mixtures.

**Labels:** Chemical manufacturers and importers will be required to provide a label that includes a harmonized signal word, pictogram, and hazard statement for each hazard class and category. Precautionary statements must also be provided.

**Safety Data Sheets:** Will now have a specified 16-section format.

### ONLINE RESOURCES

**GHS Toolbox**

<http://www.public.navy.mil/comnavsafecen/Pages/OSH/GHS.aspx>

**“The Purple Book,” Decisions, fall-winter 2013**

<http://www.public.navy.mil/comnavsafecen/pages/media/magazines/decisions/index.aspx>

# Daisy Chain Overload

BY JOSEPH PERFETTO, B.SC, CPSI

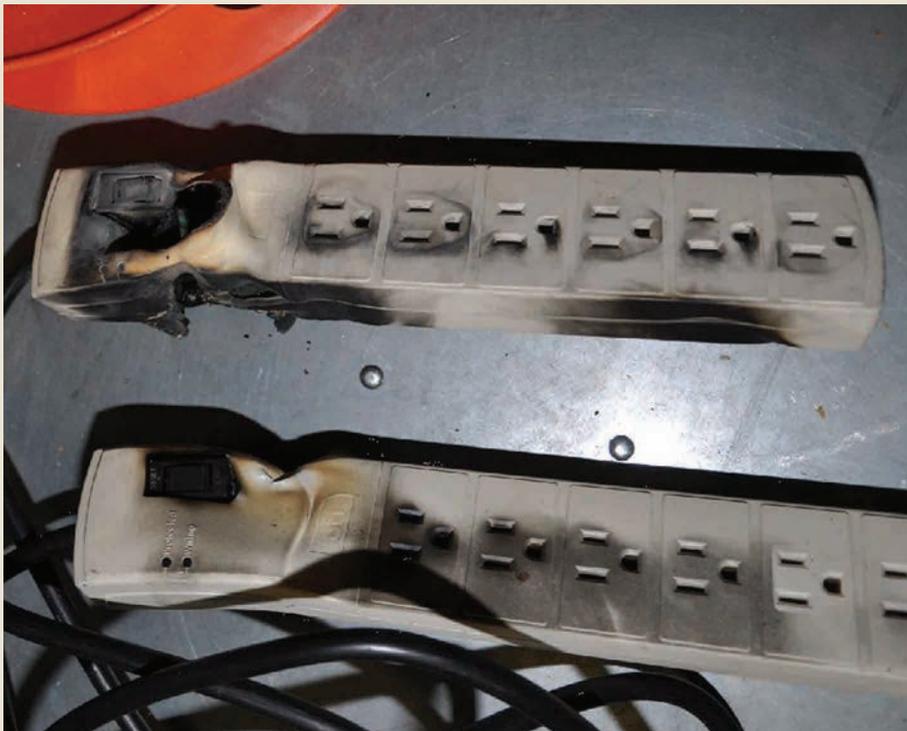
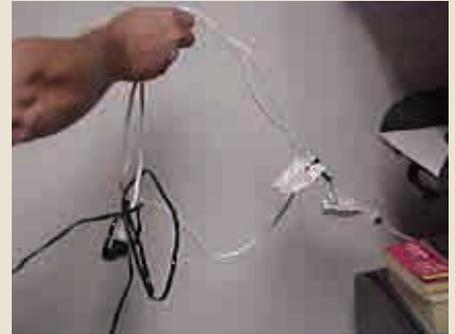
Some buildings, especially older ones, don't have enough electrical outlets. But there will always be a need to plug something into an outlet. So what do people do? Create a "daisy chain" or a "mixed daisy chain." As convenient as this may seem, this is a safety violation.

This quick-solution approach refers to extension cords or surge protected power strips that are often interconnected to readily provide more outlets and/or to reach greater distances. Another "solution" is to interconnect extension cords and

power strips (mixed daisy chain). Interconnecting these devices is a violation of Occupational Safety and Health Administration (OSHA) regulations and the National Electrical Code. This method can cause these electrical devices to overload, fail, and possibly catch fire.

During health and safety inspections, we've identified daisy chains and mixed daisy chains as some of the most common violations.

OSHA has specific regulations for conductors and electrical equipment. Most power strips are approved



Clockwise from top: Daisy chain-interconnected extension cords, mixed daisy chain-power strip energized by an extension cord, results from overloaded power strips. (Photos courtesy of the author)

for providing power to a maximum of four or six individual items; however, when multiple power strips are interconnected, the one directly connected to the building outlet is often supplying power to far more than the approved number. This electrical current overload can result in a fire or can cause a circuit breaker to trip, de-energizing computers and other equipment throughout the area.

The risk is magnified when another outlet in the same wall or floor receptacle is also overloaded in a similar manner. When other outlets on the same circuit are also overloaded, the risk increases.

Extension cords are sometimes used to energize power strips in locations far from outlets. Because electrical resistance surges with increased power cord length, interconnecting cords increases the total resistance and subsequent heat generation. This creates an additional risk of equipment failure and fire, particularly when paper and other combustible materials are in contact with the wires.

OSHA's regulations allow extension cords to be used only as temporary wiring for up to 90 days. Unfortunately, once in place extension cords tend to become permanent wiring and a fire hazard.

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*Mr. Perfetto is a safety and occupational health specialist in the Shore Safety Programs Directorate, Naval Safety Center.*

## SAFE SOLUTIONS

- Replace a power strip energized by an extension cord or another power strip with a power cord long enough to reach an outlet.
- Move desks and associated equipment closer to existing outlets.
- Use a power strip that is designed for bulky transformer plugs.
- Consider amperage and length when selecting a surge protector. Models vary in the amount of current that they are rated to safely carry. Consider the amperage requirements of the devices to be energized.
- Surge protectors also vary in length of power cord, typically ranging from 3-to-15 feet. Choose one whose length is most appropriate for reaching the intended room outlet.
- Avoid having too much excess cord and make sure the surge protector is set on its base. Some have swivel plugs which make them easier to connect to the outlet and protect the plug and cord from damage. Make sure each surge protector is in good condition.
- Only power strips equipped with internal fuses are acceptable as permanent wiring. Those lacking these fuses are equivalent to extension cords, and therefore may not be used as permanent wiring.
- When a power strip is installed, ensure that it is not suspended in mid-air by its power cord or cords plugged into it, resulting in excessive stress on electrical connections.
- When there are simply not enough outlets for your needs, request the installation of additional outlets. Their placement should avoid any need to run any wires across walkways, where they can create tripping hazards. **D**



### ONLINE RESOURCES

#### Office of Compliance

<http://www.compliance.gov/publications/fast-facts/>

#### Occupational Safety & Health Administration

[https://www.osha.gov/pls/oshaweb/owadisp.show\\_document?p\\_id=9911&p\\_table=STANDARDS](https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_id=9911&p_table=STANDARDS)

#### National Electrical Code

<http://www.nfpa.org/codes-and-standards/document-information-pages?mode=code&code=70>

### REFERENCES

Navy Safety and Occupational Health Program (OPNAVINST 5100.23G)

Code of Federal Regulations (29 CFR 1910.303(a))

# A Lesson in Communication

STORY AND PHOTO BY CPL MICHELLE REIF

The officer in charge of the range leaned over the terrain model, pointing out possible ambush points to the group of gathered Marines. He pushed the pinecones, representing the Humvees, across the ground and advised the Marines about the importance of handling the situation as a team and using their voices to convey information. **Their mission: clear a route infiltrated by enemy combatants, to an urban area in order to allow their fellow Marines to safely pass.**

Support Company, 2nd Combat Engineer Battalion, conducted a convoy live-fire range as part of a deployment for training (DFT) exercise at Fort A.P. Hill, Va. The Marines fired M240B Machine Guns and M2 Browning .50 Caliber Machine Guns mounted to armored Humvees in a five-vehicle convoy in order to increase their proficiency with the weapons and practice their communication while moving as a convoy.

“We are in the crawl phase still but it went well,” said 1st Lt Joseph Jamgochian, the company’s executive officer. “We have the Marines practicing using the medium day optic sights on the machine guns, engaging targets from an unknown distance, and increasing their proficiency in working together.”

The Marines not only needed to know how to effectively employ the weapons system, they also were required to yell over the boom of the machine guns to relay important information about enemy location to their fellow gunners in the turret of the vehicle next to them.

“The biggest thing I learned today is how important it is to keep relaying information to the other gunners and drivers,” said Lance Cpl Zachary Frantz, a motor transport operator. “Constant communication is so important.”

This range was conducted as part of the battalion’s deployment for training exercise. The purpose of the DFT is to increase the battalion’s combat engineering skills in a unique training environment to prepare the Marines for future deployments.

“The DFT is all about coming out here to train towards overall battalion readiness to deploy,” said Jamgochian. “One of the things that Engineer Support Company is expected to do is to operate and provide vehicles for the battalion, so us being proficient in convoy operations is key to that mission.” **D**

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 Cpl Michelle Reif (7 Aug. 2015), "Support Co., 2nd CEB, Learns Important Lesson in Communication During Convoy Live-Fire Exercise." Retrieved from <http://www.marines.mil/news>, 11 Aug. 2015. Cpl Reif is with II Marine Expeditionary Force.

Marines with Support Company, 2nd Combat Engineer Battalion, fire M240B Machine Guns and M2 Browning .50-Caliber Machine Guns at targets of an unknown distance from the turrets of armored Humvees as part of a convoy live-fire range at Fort A.P. Hill, Va., on Aug. 4, 2015. The company conducted the five-vehicle convoy in order to increase their proficiency with the weapons systems and to improve their communication skills.





## SAFETY RESOURCES

Whether you're a full-time safety manager or a collateral-duty safety officer, chances are you will be developing a command safety program. You will need tools and resources to satisfy the requirements and to execute your responsibilities. From program planning to mishap reporting, you will need help building your resource library. Look no further than the Naval Safety Center to collect information, link to lessons learned materials, and access mishap reporting tools and databases.

### TECHNOLOGY

#### WESS Search Feature



The Selective Mishap Analysis & Retrieval Tool, or SMART, lets users explore all of the mishap and hazard reports that have been reported through WESS. WESS users can easily find specific types of events by searching through narratives, dates, locations, classifications and many other filtering comparisons.

#### Comprehensive Searches

You can create complex queries using a robust search syntax that allows you to group search terms, exclude keywords, and use proximity searches. You can further refine your results by applying additional filters to your search criteria. Specify the classification, location, service, or event date you are interested in to limit what mishaps are displayed.

#### Manageable Data

Your data will display in interactive charts called Insights, based on mishap severity, location, keywords, and branch of service. You can also get mishap data out of SMART in multiple formats. You can subscribe to an RSS feed to receive search result updates for a specific query. Data for a query can also be exported in a comma separated values (CSV) file, which can be opened with Microsoft Excel.

### SMART Tutorials

The Brief-in-a-Box feature generates a ready-to-use Microsoft PowerPoint presentation file that can be downloaded and that contains all of the information related to the current query. A tutorial is at [http://www.public.navy.mil/navsafecen/Documents/WESS/SMART\\_Search\\_Tool\\_cs1.ppsx](http://www.public.navy.mil/navsafecen/Documents/WESS/SMART_Search_Tool_cs1.ppsx). For more information, contact the WESS help desk at 757-444-3520, ext. 7048 (DSN 564).

### STRATEGY

#### Fleet Safety Campaign



If you're interested in keeping tabs on the progress of the Fleet Safety Campaign, you'll find a wealth of material on Intelink: guidance for the campaign plan, meeting agendas, Safety Management System updates, and the Quarterly Analysis Report provided by the Naval Safety Center to CFFC/CNAP.

#### Intelink Access

You'll have to register for an Intelink Passport account at: <https://www.intelink.gov/passport/Login>. Click "New account registration," then click "Register" for a Passport account. You'll enter your email address and some personal information and create a password. Activate account using an email that they send you. The final step is to visit

<https://intelshare.intelink.gov/sites/navsafecen/SafetyCampaignPlan> and request access to the Fleet Safety Campaign site. The Campaign Document Library contains a folder holding the Quarterly Analysis Reports.

### PROGRAMMING

#### Safety Officer Toolbox



This comprehensive toolbox offers command safety officers and collateral duty safety officers the resources and training material necessary to start, improve and/or run a command safety program.

#### Online Resources

The Naval Safety Center safety officer web page (<http://www.public.navy.mil/navsafecen/pages/safety-officer/so-index.aspx>) provides general information about various communities of interest. If you can't find what you're looking for and need help, please e-mail [safe-oshfdbk@navy.mil](mailto:safe-oshfdbk@navy.mil). Your e-mail will be answered within one working day.

Valuable information and downloadable resources include guides, checklists, data requests, performance metrics, training materials, mishap-reporting manuals, marketing ideas, Navy and OSH annual reports, and course prerequisites. **D**

# Do the Right Thing

BY IVAN GARRETT

While walking the waterfront with my “Lead Jedi Knight” today, we discovered some preservation work being accomplished on the forward superstructure of a CG. A Sailor attached to the small floating city was in the basket of a boom lift wearing a fall protection harness. He was scraping the painted side of the forward superstructure. The lift was safely fastened to the pier by gravity, and he was precariously extended across the water. He had on a pair of “Mickey Mouse” ear muffs for hearing protection, and he was wearing standard, Navy-approved, almost clear and not-so-new eye and face protection.

My Lead Jedi Knight noticed the worker wasn’t capturing any of the paint chips, thereby producing a shower of gray debris. I noticed he did not have his anti-flying device attached to the lift basket D-ring. After some time (approximately five minutes) of trying to get his attention – signal flags, radios, flares, flash mirrors, jet noise from a fly-over, all sorts of stuff – he finally saw us.

Once he realized all the commotion was just for him, he took off his PPE and acknowledged us with a grin. We returned his cheerfulness with “Safety First!” smiles and began telling him all the things wrong with his present state of affairs. He was initially crestfallen but attentive, although still unable to hear us well. It was then we noticed he was wearing ear buds, which were attached to his phone, which was in his pocket, while he was wearing the ear muffs.

Heeding our instructions, a shipmate responded with a large roll of paper and some duct tape (the world leader in fastening stuff together) with which he proceeded to line the

basket. He attached his anti-flying harness to the appropriate D-ring/anchor and went back to work, making big paint pieces into little paint pieces.

Alas! We learned something from this evolution, my fellow Jedi knights:

- ▶ Watch out for workers who may be unintentionally endangering themselves by trying to fly from elevated heights, while trying to just get a job done that someone else thinks is extremely important.

- ▶ We are looking out not only for the safety of the workers but also for the environment. Remember, this environment is where our food comes from – in a round-about sort of way. Food has to come from somewhere before it lands in a nice little prepackaged container, complete with nonsensical labels, a lid that’s on too tight, and made of a substance that never degrades in the environment. Do the right thing and maybe you’ll enjoy some local food for next week’s cookout.

- ▶ Last but not least, the floating city is not in active continuous maintenance availability or under our current purview. But, if you notice something not quite right, take action even if the vessel is not under your direct cognizance. Don’t let the mishap take place before you react. Recognize the potential for hazard and make the right decision. **D**

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*Mr. Garrett is a safety specialist at the Mid-Atlantic Region Maintenance Center Safety Office.*



*Photo for illustration purposes only. U.S. Navy Photo by MC3 Charles Oki*

# A Plan Hinged on Luck

BY LCDR JONATHAN FARACO

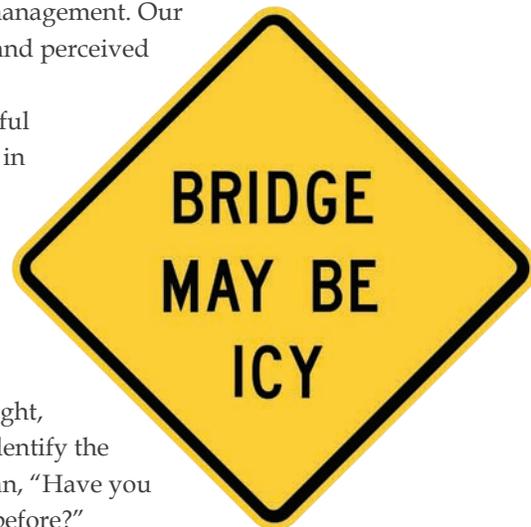
**H**ave you ever looked back at an event in your life and thought, “How did I survive that?” I often tell myself that if I knew back then what I know now, I would have never made that mistake. Thinking back to that winter day, I wonder what would have been different if I had made operational risk management (ORM) part of my travel plans.

Winter break was coming to an end, and I was due back to school in a few days. I had spent the break on the sunny beaches of Fort Lauderdale, Fla., and had bought a Ford Explorer to take back to school with me. I convinced my buddy Brian that he should cancel his plane ticket and ride back to school with me by promising him that we would make it an adventure that he would not soon forget.

**AS THESE TWO FLORIDA BOYS PLANNED THE TRIP BACK TO THE WINTRY MIX OF MARYLAND,** we did not think much beyond loading the SUV with the stuff we wanted to take back to school. As we packed the vehicle on a balmy Florida day, the impending nor’easter that was

predicted to slam the entire East Coast seemed out of sight. It was 1,200 miles to Maryland, we had a full tank of gas, half a bag of Twizzlers, and we had 20 hours of driving time ahead of us. We had never heard of any travel planning assessment or had been taught any sort of deliberate or time-critical risk management. Our plan hinged on luck and perceived common sense.

After an uneventful first day, we stopped in Florence, S.C., for an overnight stay to get some rest. To our surprise, we woke up to about three inches of fresh snow on the ground. I thought, “This is not good” (identify the hazards). I asked Brian, “Have you ever driven in snow before?”





*Photo for illustration purposes only. Creative Commons/Daniel Lobo*

He replied, “Yes, one time about five years ago” (assess the hazards). We decided to press on (make risk decisions). Having never driven in snow, I decided that Brian was the more experienced driver and would take the first shift (implement controls) while I navigated from the right (supervise). In our impromptu time-critical risk management, we unknowingly worked through the five steps.

**WE HEADED OUT SLOWLY, DRIVING BELOW THE SPEED LIMIT** and keeping plenty of distance between us and the cars ahead of us (implement controls). Everything was fine until we crossed over a bridge on I-95. As I was reading the sign aloud to Brian that bridges ice before roads (supervise), about 800 yards ahead of us we saw a car’s red tail lights illuminate and then turn 90 degrees and continue to slide sideways down the road. We quickly discussed that we should not brake or we would spin just like the car ahead of us (make risk decisions). We slowly closed on the sliding car in front of us until it was clear we were going to collide. I remember thinking, “I can’t believe I am going to wreck a vehicle that I have owned for less than

10 days.” Just before we hit, the airbags popped us in the face, and suddenly we were doing 360-degree spins in the northbound lane, bouncing from one guard rail to the other on a bridge about 2,000 feet above a river.

When all violent motion had stopped, Brian and I looked at each other and said, “Dude, how did we just survive that?” We got out of the vehicle and noticed that we had been hit from behind by a RAV-4. The impact was so hard that it blew out every window and smashed the cargo area of my Explorer’s trunk up to the back seats. Our belongings were scattered all over the bridge. I looked over the bridge to see some of our clothes hanging in the trees below, and one of my garment bags floating down the river.

The paramedics arrived and were amazed that we not only survived the crash, but walked away without a scratch. I do not remember most of what they said except that under no circumstances were we to return to the crash site. The local police gave us a ride to the next stop and left us to figure out our next move. Brian and I quickly decided that we needed to rent a car and get back to the river to collect

“ Looking back, we failed to implement and reassess the five steps of time critical ORM throughout the unforeseen twists and turns of our trip. If I knew back then what I know now about TCRM, we could have avoided the river incident.”

our belongings because everything we owned was now scattered along the highway. In retrospect: not the best decision or application of time-critical risk management (TCRM).

Arriving at the crash site, we collected our stuff along the highway. We were almost done when I saw my blue garment bag lying on the side of the frozen river. Deciding to recover my bag, we got to the river bank and tested the thickness of the ice. We decided that Brian, who was about 70 pounds lighter than me, should walk out to get the bag. He slowly walked over the cracking ice until he reached the bag. The ice held until the combined weight of Brian and the bag broke the ice, leaving him chest deep in frozen water. As I pulled him out, his skin had turned purple. We decided to get back to the car and out of the cold to avoid hypothermia. Although we had accurately identified the hazards, we fell well short of implementing the remaining steps of ORM.

We arrived at the car, but could not find the keys. Brian searched his pockets and realized that the keys had come out when he fell into the river. We tried to use our cell-phones to call for help, but our batteries were dead from the series of calls made after the accident. So there we were, stranded along the same stretch of highway for the second time that day, this time soaking wet in freezing weather with no way to call for help. Luckily a passing driver stopped just in time to help and offered a warm vehicle and spare clothes.

We were lucky to have survived the accident and Brian's subsequent polar plunge with only the loss of a few material possessions. Although our trip started with a rudimentary attempt to anticipate and manage risk, we could have avoided the car accident by performing the steps of deliberate ORM planning. At a minimum, I would have done the following things differently. The first step in my planning should have been to log onto the Travel Risk Planning System (TRiPS) website to fill out an online assessment form. This assessment would have helped me walk through the steps of deliberate ORM planning.

**Using common sense, I had used some of the mitigation tools that a TRiPS assessment recommends:**

- ▶ Wear a seatbelt at all times.
- ▶ Inspect the vehicle before traveling.
- ▶ Avoid consuming alcohol at least eight hours before or during the trip.

**Here are a few factors and mitigation tools that a TRiPS assessment would have helped me identify in my initial risk assessment:**

- ▶ Younger age brackets are statistically in a higher risk category.
- ▶ Plan to drive no more than 720 miles or 12 hours in one day.
- ▶ Planning the majority of a trip in the day is safer than at night.
- ▶ Checking the weather prior to departure provides an opportunity to reassess and change the plan.
- ▶ Planning to get at least eight hours of sleep the night before a trip and frequent rest stops at planned intervals during the trip help reduce driver fatigue.
- ▶ The type of route (two vs. multi-lane roads) factors into the risk assessment.

**Using a TRiPS assessment would have highlighted a few critical factors that were significant hazards.**

- ▶ I would have realized that the planned driving distance and time requirement needed a minimum of two days in optimal weather. Watching the weather a few days in advance would have allowed us to depart a day early and stay ahead of the weather for our entire trip.
- ▶ If I would have inspected the interior in addition to the exterior of the vehicle, I would have packed the vehicle better. I should have secured all loose items with straps to prevent injury from projectile objects in the event of an accident.
- ▶ The decision to wear our seatbelts, despite all of our deliberate ORM missteps, may have saved our lives.



Snowy and icy conditions in Florence, S.C. (Photo: Ken Baker via Jamie Arnold, WMBF News/www.weather.gov)

**LOOKING BACK, WE FAILED TO IMPLEMENT AND REASSESS THE FIVE STEPS OF TCRM** throughout the unforeseen twists and turns of our trip. If I knew back then what I know now about TCRM, we could have avoided the river incident. We should have properly identified and assessed the hazard of falling through the ice (assess the situation). We were fortunate that the river water was only chest deep and that the current was not strong enough to pull Brian away from the river bank.

Assessing the hazards, we should have made the decision not to walk on the ice because we had no way to prevent Brian from falling into the river if the ice broke (balance

your resources). Our only remaining options should have been to find a way to get the bag without walking on the ice or to leave the bag. Deciding to test the strength of the frozen river for a bag of clothes violated the ORM principles to accept no unnecessary risk and only to accept risk when benefits outweigh the cost.

Fortunately, we survived to tell the story and can now appreciate how properly applied deliberate and time-critical risk management could have prevented two potentially fatal incidents. **D**

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*LCDR Faraco flies with VAW-125.*



### ONLINE RESOURCES

**Naval Safety Center Motor Vehicle Safety**

[http://www.public.navy.mil/comnavsafecen/pages/shore/motor\\_vehicle/motorvehicle.aspx](http://www.public.navy.mil/comnavsafecen/pages/shore/motor_vehicle/motorvehicle.aspx)

**Travel Risk Planning System (TRiPS)**

<https://trips.safety.army.mil/>

## ANALYSIS OF HIGH-RISK BEHAVIOR

### Who's at risk?

E-3 to E-5 make up 59% of all Marines and 50% of all Sailors

However, they made up 86% of 2014 summer's fatalities (PMV, off-duty, recreation)

By looking at statistical data and analyzing military mishap reports, safety professionals have determined that the following common high-risk behaviors contribute to deaths and injuries. Naval Safety Center analysts target the 18-25 year-old male demographic. It has the highest number of fatalities and also represents the largest group of personnel in the Department of Defense. This fact produces the greatest impact on readiness. High-risk behavior is a complex mixture of variables that include emotions, maturity, skills, attitude, personal discipline, and leadership input. Keep all these factors in mind when developing your safety campaign.

#### PMV Leading Fatal Factors

- ▶ Driving between midnight and 6 a.m.
- ▶ Driving during the weekend
- ▶ Not using seatbelts
- ▶ Drinking and driving
- ▶ Speeding

#### Other factors that are under-reported:

- ▶ Aggressive and distracted driving
- ▶ Drowsy and fatigued driving

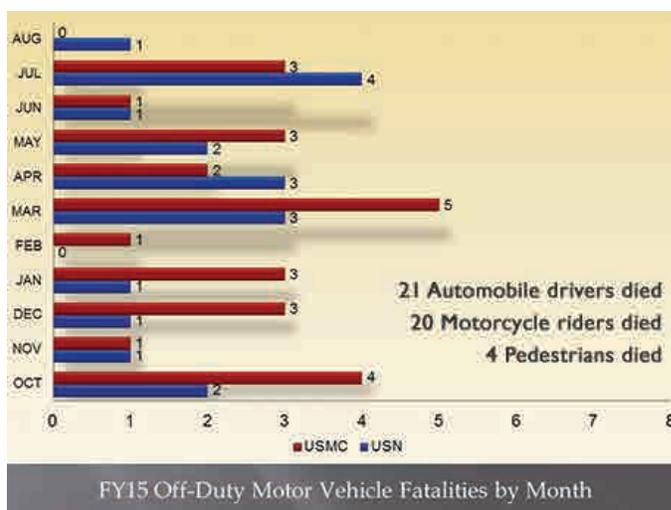
#### Recreation/Off-Duty Leading Causes of Injuries

- ▶ Unsupervised water activities
- ▶ High-risk outdoor activities or extreme sports
- ▶ Unsupervised home and playground activities
- ▶ Inadequate personal protective equipment
- ▶ Inadequate ability and skill
- ▶ Poor training
- ▶ Disregard of rules and regulations

## When are they most at risk?

Here is something that we do know from our analysis of PMV-related deaths:

- The majority of them happen at night, particularly weekend nights.
- In almost half of the mishaps, the people weren't wearing their seatbelts.
- More than a third of them were speeding or drinking.
- One-fifth of them were just too tired to be behind the wheel. In some of these mishaps, more than one of the above factors were involved.



NAVSAFECEN data as of Aug. 12, 2015  
Only military personnel are included in the fatality totals.

### SUMMER 2014 OVERVIEW

#### THE GOOD NEWS:

- 30% decrease from 5-year average
- 15% decrease from previous year
- 10% less as many motorcycle fatalities as previous year
- All categories (cars, motorcycle, pedestrian and rec/off-duty) 30% below 5-year average (22 vs. 31.4)

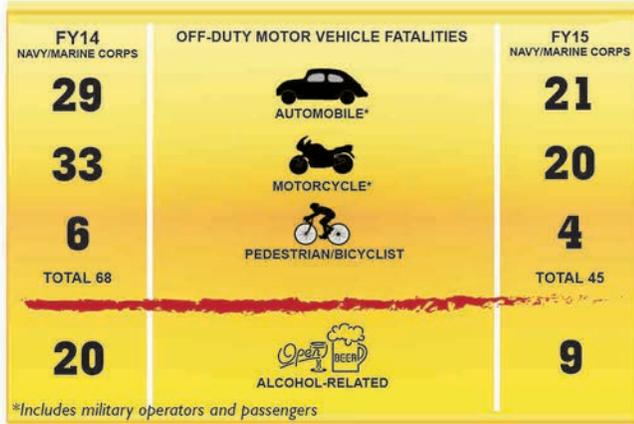
#### THE BAD NEWS:

- 13 fatal traffic mishaps
- 9 were motorcycles
- 9 died during recreational activities
- 4 drownings (2 kayaking, 1 cliff diving, 1 personal water craft)
- 3 falls (balcony, window, parking garage)
- 1 ATV wreck
- 1 private plane crash



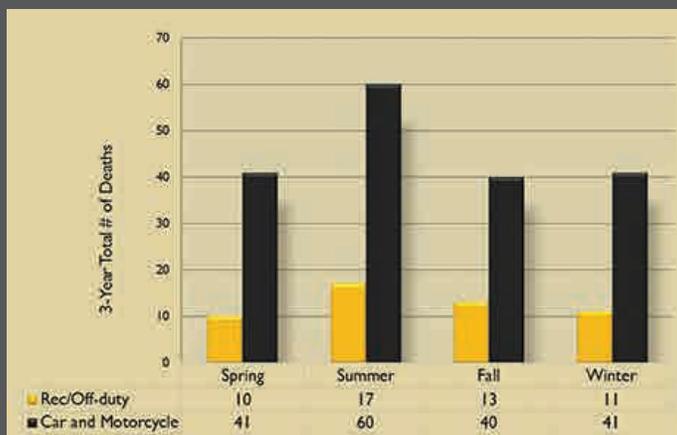
NEED STATS FOR YOUR NEXT BRIEFING? <http://www.public.navy.mil/navsafecen/pages/statistics/index.aspx>

## FY14 VS. FY15 COMPARISON TABLES



NAVSAFECEN data as of Aug. 12, 2015  
Only military personnel are included in the fatality totals.

## SUMMER TRAFFIC DEATHS DOMINATE



Off-Duty/Recreational Fatalities, FY12-14, Navy and Marine Corps

## SURVEY DATA AND SOCIAL MARKETING

# A Shift in Drinking Behavior

FROM CHIEF OF NAVAL PERSONNEL PUBLIC AFFAIRS

This summer, the Navy Alcohol and Drug Abuse Prevention (NADAP) Office launched the third annual Keep What You've Earned survey to gain insight on how alcohol use and abuse is perceived in the Navy.

More than 1,400 Navy personnel and their families completed the anonymous online survey last year. NADAP gained valuable insights about changes in Sailors' drinking behavior and awareness of alcohol abuse prevention efforts like the Keep What You've Earned campaign. This year, NADAP hopes to build on those insights to further improve the effectiveness of the campaign.

"The campaign has been shaped by feedback from Sailors and its efforts would not be successful without their input," said Dorice Favorite, director of the NADAP Office. "The survey allows our office to determine how well alcohol-abuse prevention efforts and messages are being delivered across the fleet. [It helps] shape the following year's plan to improve those efforts."

The anonymous survey takes five minutes to complete. It asks about your reasons for drinking, the likelihood that you or your fellow Sailors would seek help for alcohol abuse, and any recommendations you have for the campaign. Feedback from this survey will help the campaign continue to develop materials to encourage responsible drinking and remind Sailors to keep what they've earned.

"Understanding Sailors' opinions and attitudes toward alcohol use in the Navy is a critical component to the success of the Keep What You've Earned campaign," said Favorite. "[We get] a pulse check on how those attitudes and behaviors have changed in the past year, and how we can continue to develop an innovative strategy to promote responsible drinking."



THE NAVY'S FLAGSHIP RESPONSIBLE DRINKING CAMPAIGN  
[http://www.npc.navy.mil/bupers-npc/support/21st\\_Century\\_Sailor](http://www.npc.navy.mil/bupers-npc/support/21st_Century_Sailor)

TAKE THE SURVEY <https://survey.max.gov/167456>

# Hot Off THE Press!



BY NIKA GLOVER

**T**he famous actor (and avid motorcyclist) Steve McQueen once said, “One of the things that makes motorcycling so great is that it never fails to give you a feeling of freedom and adventure.”

Most motorcyclists would probably say that statement is spot on. The feeling of adventure and sense of freedom is hard to resist. So they take the risk with the pleasure of riding because for riders it’s an even trade-off. However, that doesn’t change the fact that motorcycle riding is dangerous, and riders must be vigilant and safe.

In response to the rise of motorcycle mishaps and fatalities, the Naval Safety Center has produced a special-issue magazine called *Ride*. The goal of the magazine is to inform motorcy-

The motorcycle safety magazine for the riding enthusiast.

clists about motorcycle safety through something called “covert learning.” No one wants to spend their time reading a bunch of sometimes boring facts and figures. *Ride* magazine was created to be enjoyable while informative.

For starters, the magazine has the look and feel of a commercial publication. There’s information on the latest products and gadgets for motorcyclist. Those products are cool but they also offer an upgraded level of protection.

There’s also a bucket list of some of the best roads to ride in the U.S. and overseas. Have you ever tried to ride “The Dragon”? This road boasts 318 curves and borders the Great Smoky Mountains. Most motorcyclists know about the famous Route 66, which is also featured in the magazine, but what about Gouliang Tunnel Road in China? While it’s only .75 miles long, it’s one big curvy tunnel.

One of the most interesting articles in the magazine is “The History of Military Motorcycles” by Aaron Cortez, a writer for the website Bike Bandit. If you’ve ever wondered where the word “chopper” came from, read the article and learn all about the bikes that were repurposed after World War II.

If you’re the type who has a need for speed, check out the article on the fastest bike Kawasaki has ever made. It’s a speed machine that you’ll want to test ride after reading about it. There’s also an entire spread on the best and most critical gear for motorcycle safety. A lot of bikers don’t even know there’s armor for the hips that help protect the pelvis during an accident.



With a commercial look and feel, *Ride* magazine was developed to be a fun magazine with rider safety in mind. The magazine is chock full of fun tidbits of information like the Motorcyclist's Bucket List

on Page 6 that shows riders the best roads to ride before they kick the bucket. There's also a showcase of the 10 Critical Pieces of Body Armor on Page 36. This showcase includes information on little-known pieces of body armor that protect important body parts. Read about the latest and greatest in sport bikes and motorcycle safety rules. If you are not a subscriber to any Naval Safety Center magazine, contact [safe-mediafdbk@navy.mil](mailto:safe-mediafdbk@navy.mil) to get on our magazine distribution list.

Harley-Davidson recently released its first electric bike, the LiveWire. It’s a quiet sleek bike that competes with the best gas bikes for speed and agility. You may think about going green after reading about it. Of course any good motorcycle magazine features the best bikes of the year, and *Ride* magazine is no different. The list of the 10 best sport bikes goes into detail on specs, safety aspects and price ranges.

*Ride* magazine has something for every bike enthusiast with safety in

mind. While we can only control some of the factors that lead to dangers on the road, we can definitely control how well we protect ourselves when we travel. By doing something as simple as wearing the proper body armor, we can limit our chances of getting seriously injured in an accident. That’s what the goal of the magazine is, to help keep you safe. **D**

*Ms. Glover is the editor of Ride magazine. She is also the editor of Approach and Mech magazines.*

**▶ ONLINE RESOURCES**  
**OPNAVINST 5100.12J & MCO 5100.29B:** “Navy Traffic Safety Program” and “Marine Corps Safety Program”  
**Navy Motorcycle Rider:** [www.navymotorcyclerider.com](http://www.navymotorcyclerider.com)  
**ESAMS:** [https://esams.cnic.navy.mil/esams\\_gen\\_2/loginesams.aspx](https://esams.cnic.navy.mil/esams_gen_2/loginesams.aspx)

This is an archived article that was published in the winter 2000-2001 issue of the Naval Safety Center's now out-of-print *Ashore* magazine. It is provided only for personal risk-management purposes.

# Did Someone Ski Over My Head?

BY LT TROY WILLIAMS

If you are acquainted with the San Juan and Skagit Valley areas of western Washington, you are undoubtedly familiar with the cold, wet dreariness associated with Northwest winters. As a resident of this area, the only ritual that keeps me from checking into the nearest asylum is a weekend trek to the Whistler ski resort in nearby British Columbia for 48 hours of heart-racing, ski-slapping moguls. The thrill of sailing through a sea of “bumps,” with just the slightest bit of stability, is indescribable.

On one of my weekend trips, the day was bright and sunny. The night before, the mountain had received an additional foot of fresh powder. The runs were smooth — even the bumps felt like feather pillows. I had fallen several times, but since the snow felt like down, I hardly felt the impact. Because of these great conditions, I thought this would be a great time to improve my skills and be more aggressive on the slope.

That’s what I was doing when I was halfway down the slope and planted my skis to “bunny hop”

around a specific mogul. My skis locked in the snow. Unfortunately, one ski disconnected, and my body kept driving down the slope.

When I hit the ground, I remember thinking for a brief second that it was simply another fall. I started to look up for my right ski when suddenly it found me. The extra powder had prevented the brake on the ski from adhering to the slope, and its momentum had sent it rocketing down the hill after me.

My head was facing uphill as the ski struck me just above my right eye. At first, I thought someone had skied over my head. However, as I rolled over to look down the hill, I saw my ski continuing on its own for another 50 yards. I grabbed the spot where the ski had hit my head, and, to my amazement, felt a knot the size of a tangerine bulging from under my ski hat. After about five minutes, I gathered my composure and hobbled down to my other ski, reconnected it and skied to the nearest chalet, where my ski partner was able to call a medic.

Although the knot wasn’t aesthetically pleasing, I had no lengthy headaches or blurred vision. However, I was downed from flying for four days because I couldn’t fit my flight helmet over the bump.

I realize I could have easily been knocked unconscious and have been downed from flying for several months. Now, before any ski trip, I not only bring my skis, gloves, and goggles, but also my new ski helmet. If I had been wearing one prior to the incident, I would have enjoyed the remainder of the day skiing and would have had a few extra hours of flight time as well. **D**

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*LT Williams was with VAQ-133 when he wrote this article.*

*Image source: 4-designer.com*

# Annual Safety Fest Attracts Thousands

BY ENS JASON BUCKLEY Photos by Janet Thomas

For the last eight springs, military and civilian personnel have gathered for the Safety Fest hosted by the Naval Aviation Schools Command (NASC) and the Naval Air Technical Training Command (NATTC). This past April 17 marked the eighth year of promoting safety awareness [and best practices]. NASC Safety Officer John Prince, event organizer, said it usually attracts up to 4,000 people.

"It gives the students and staff from the training commands a chance to talk about safety topics," said Prince. "During a safety standdown, we can only cover so much in the time we have."

Safety standdowns periodically cover major safety issues, usually occurring before long weekends or holiday breaks or as required. This event takes place during the normal training day and addresses more in-depth safety concerns.

Displays included on-base programs from the commands and the Fleet and Family Services Center (FFSC), as well as emergency services like the Florida Highway Patrol.

"We had 30 presenters covering everything from disaster to fire prevention to health and wellness. It gives us a wide variety," said Prince. Some of the booths featured demonstrations, including a beer goggles walk, which simulate vision problems when drunk, and a firefighting simulation.

According to Prince, the goal is to demonstrate safety in a way that better engages the young military members.

"Our students now learn in a more interactive manner. By getting here



AMAN Lauren Lucas watches as Paul Maxwell, an education services facilitator at NAS Pensacola Fleet and Family Support Center, spins a wheel to pick out a topic to discuss during the April 17, 2015 Health and Safety Fair.

and using the motorcycle trainer, the fire trainer, and visiting the booths, they get hands-on experience," Prince said.

The annual event gives the newest military members an opportunity to see many of the support programs established to support them.

"By bringing the safety issues out we can expose Sailors and Marines and their families to safety issues before they become a problem," said Paul Maxwell, the education service facilitator for FFSC.

FFSC had set up four booths for this event — addressing issues of suicide prevention and awareness, sexual assault prevention and response, new parent support and home visitation, and family advocacy. FFSC offers these programs year-round to serve military members and their families. Maxwell



AA Nicholas Riley discusses emergency preparedness with Kathy Sims from NAS Pensacola Fleet and Family Support Center during the annual fair.

engaged participants at the suicide prevention and awareness booth.

The Safety Office at NASC hosts the Safety Fest every year, inviting local businesses and organizations to join military-related organizations in their effort to promote awareness of safety issues. **D**

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*ENS Buckley works in the Naval Education and Training Command Public Affairs Office.*

QUICK REFERENCE GUIDE

# Hurricane Season Not Over Yet

All Atlantic and Gulf of Mexico coastal areas are subject to hurricanes. Parts of the Southwest United States and the Pacific Coast also experience heavy rains and floods each year from hurricanes spawned off Mexico. The Atlantic hurricane season lasts from June to November, with the peak season from mid-August to late October. The Eastern Pacific hurricane season lasts from May to November.

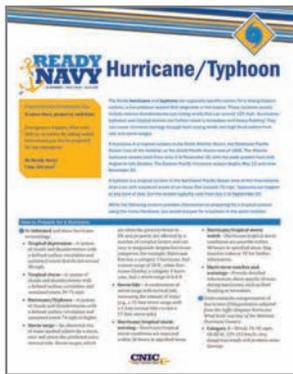
Use the emergency preparedness checklist on page 33 as a quick-reference guide for planning. Provide a copy to your personnel and family. Check with your local installation for information on tropical cyclone conditions of readiness (TCCOR) and

hurricane category conditions. Emergency preparedness websites are also available for detailed guidance.

To get ready for a hurricane, stay informed. Know likely emergencies and learn local emergency warnings. Have a plan and know what to do, where to go, whom to call. Share the plan with all family members and all personnel. Prepare essential supplies for survival. Practice and update your plan; check your kit every six months.

Update and verify your personal information with the Navy Family Accountability and Assessment System (NFAAS). All Navy military and civilian personnel are required to update their information twice a year.

## What to Do Before, During and After an Emergency



### Hurricane/Typhoon Preparedness Guide

Be informed before, during, and after an incident; make a written family emergency plan; and build an emergency supply kit good for at least three days. This three-page guide is handy for distribution to personnel and their family members. This disaster preparedness guide is available for download at [http://www.ready.navy.mil/be\\_informed/natural\\_hazards/hurricane\\_typhoon.html](http://www.ready.navy.mil/be_informed/natural_hazards/hurricane_typhoon.html).



### Pacific Coast Hurricane Readiness Guide

The May 2015 issue of Pacific Missile Range Facility's "Within Range" newsletter includes a preparedness guide for its personnel. The guide lists shelters in Kauai and Waimea, as well as local resources. The guide also provides information for the mandatory Safe Havens registration procedure for all personnel residing on base. Download at [http://cnic.navy.mil/regions/cnrh/installations/pacific\\_missile\\_range\\_facility\\_barking\\_sands/news/within\\_range.html](http://cnic.navy.mil/regions/cnrh/installations/pacific_missile_range_facility_barking_sands/news/within_range.html).

## TROPICAL STORM

A tropical cyclone in which the maximum sustained surface wind speed (using the U.S. one-minute average) ranges from 39 mph (34 knots) to 73 mph (63 knots).

A short guide to keep in mind:

TCCOR 5: Within 96 hours. Perform general house cleaning.

TCCOR 4: Within 72 hours. Identify outside items to be secured.

TCCOR 3: Within 48 hours. Secure outside equipment. Activate emergency management plan.

TCCOR 2: Within 24 hours. Shelters open. Relocate offices that are at risk. Back up computer hard drives. Fuel vehicles and generators.

TCCOR 1: Within 12 hours. Release non-essential personnel. Final preparations/actions by departments.

## HURRICANE

A tropical storm which has intensified to 75 mph and has high tides, strong winds, and heavy rainfall.

There are five categories of hurricane intensity:

Category 1: Winds of 74 to 95 mph; storm surge 4 to 5 feet; minimal damage.

Category 2: Winds from 96 to 110 mph; storm surge 6 to 8 feet; moderate damage.

Category 3: Winds from 111 to 130 mph; storm surge 9-12 feet; extensive damage.

Category 4: Winds from 131 to 155 mph; storm surge 13 to 18 feet; extreme damage.

Category 5: Winds greater than 155 mph; and storm surge higher than 18 feet; catastrophic damage.

**HURRICANE WATCH:** A hurricane may threaten an area within 48 hours.

**HURRICANE WARNING:** A hurricane is expected to strike an area in 36 hours or less.

Source: ReadyNavy, <http://www.ready.navy.mil>

# EMERGENCY CHECKLIST

## FOOD AND WATER

- One gallon of water per person, per day and canned or nonperishable food (3-day supply for evacuation, 2-week supply for home)
- Special food items for elderly members and infants
- Iodine tablets for water (available at sporting goods stores)
- Manual can opener
- Camp stove with fuel
- Plastic utensils, plates and bowls
- Cooking pots and pans

## MEDICINE AND FIRST AID

- Prescription medications for each family member. Make a list with information for dosage, frequency and administration.
- Pain relievers for both adults and children
- Anti-diarrheal and cough medicines; aspirin
- Insect repellent
- Compression stockings to prevent blood clots (especially in situations where people sit or stand for extended periods)
- First-aid kit with bandages in various sizes, sterile gauze pads, tweezers, antibacterial ointment, instant cold compress, oral thermometer (non-mercury/non-glass), non-latex gloves, scissors, antiseptic wipe packets, and first-aid instruction booklet

## PERSONAL HYGIENE AND SANITATION

- Toothbrush, toothpaste and soap
- Contact lenses and lens cleaner
- Antibacterial hand sanitizer
- Toilet paper
- Baby supplies (diapers, bottles, wet wipes)
- Breathing masks (for areas where air quality is poor)

## COMMUNICATION NEEDS

- Flashlight (helpful for sending signals)
- Battery-powered or hand-crank radio (NOAA Weather Radio, if possible)
- Extra batteries (radio, flashlight and cell phone)
- Cell phone with a charger that works in the car.

- Two-way radios
- List of family members and contact information (out-of-area relatives, work and personnel accountability roster – if you are a supervisor, include work and home numbers)
- Whistle

## BOATING AND WATER SURVIVAL

- U.S. Coast Guard-approved life jacket for each person
- Communication devices (flares, flag or smoke signals, flashlight, bell, whistle and horn/siren, cell phone, emergency contacts)
- Fire extinguisher
- Life raft or dinghy
- Ring buoys or reaching pole
- Personal locator beacon
- Food and water supplies
- Foul-weather gear
- First aid kit (onboard a vessel or near a pool)

## CLOTHING AND PROTECTIVE GEAR

- Emergency blankets or sleeping bags
- Towels
- Rain gear
- Extra clothing, hat and sturdy shoes
- Plastic sheeting or tarp
- Work gloves

## OTHER BASICS

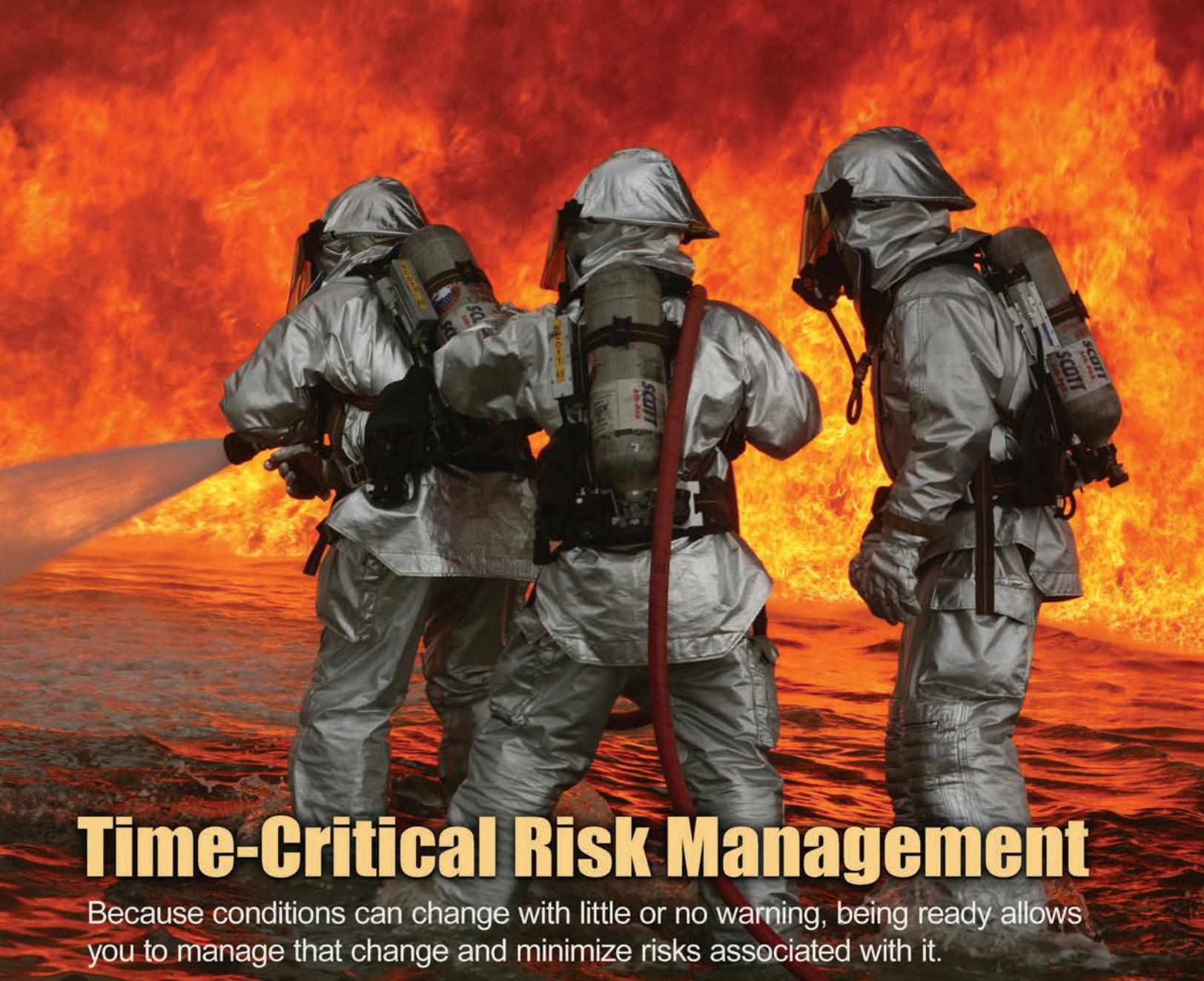
- Pet supplies (collar, leash, ID, food, carrier, bowl)
- Copies of personal documents (proof of address, deed/lease to home, passports, birth certificates, insurance policies)
- Extra cash
- Map(s) of the area
- Extra set of car keys and house keys
- Duct tape, rope, string or bungee cord (to secure tarp or loose items)
- Plastic garbage bags
- Chlorine bleach (to use as a disinfectant)
- Matches in waterproof containers
- Utility knife

## ONLINE RESOURCES

**Navy Family Accountability and Assessment System**  
<https://navyfamily.navy.mil>

**American Red Cross Disaster Preparedness Library**  
<http://www.redcross.org/prepare/disaster-safety-library>

**Federal Emergency Management Administration: Plan, Prepare and Mitigate**  
<http://www.fema.gov/plan-prepare-mitigate>



# Time-Critical Risk Management

Because conditions can change with little or no warning, being ready allows you to manage that change and minimize risks associated with it.

**Experience is the result of all learning events.**

The **ABCD** Model provides a common language and structure for a measured response when an individual, team or crew is executing a routine task or when they are under duress from a more complex situation resulting from additive conditions, crew factors, or task loading. Training to the **ABCD** Model will embed a set of patterns that will help personnel recognize and recall a set of actions to counter risk even when distracted. This simple and easy-to-remember mnemonic provides individuals with a means to evaluate risks and formulate mitigation strategies on-the-run and can easily be applied in both on- and off-duty situations.



- A** - Assess the situation.
- B** - Balance resources.
- C** - Communicate to others.
- D** - *Do* and *Debrief* the event.



Scan the code with your smartphone to visit the Naval Safety Center ORM page. Data rates may apply.  
<http://www.public.navy.mil/navsafecen/pages/orm/ORM.aspx>

About the photo: Aircraft, Rescue Firefighters (ARFF) aboard Marine Corps Air Station Miramar fight blazing fires during a controlled burn at the burn pit. (U.S. Marine Corps Photo/Lance Cpl Manuel F. Guerrero)