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We want to hear what you think about something we have published that you have read. Letters must include your name, email or phone number (for verification). Letters may be published anonymously.

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We do our best to cover stories, articles and information that may be helpful or necessary to manage your safety program and/or promote safety awareness on and off duty. If you have a question or opinion about anything you read, send us your comments.

360° Sea&Shore
THE NAVAL SAFETY CENTER PUBLICATION FOR AFLOAT AND SHORE SAFETY
2017 Vol. 1 | No. 1

We have moved!

We have gone digital. While this is bittersweet for those of us in the Naval Safety Center Media group, we plan to continue bringing you in-depth articles and relevant mishap-prevention information.

By now, most of you have received the final printed copies of Approach, MECH, Decisions, and Sea Compass. We understand the value of a printed format in certain aspects of your job, but we also know you understand our effort to reduce cost. We are increasing our presence on the web so you can still read your favorite stories – whenever and wherever you want.

Our transition from print to digital is a work in progress and we appreciate your patience. We will leverage electronic and social media to give you quicker access to each current issue, printable articles and past issues. Our digital magazines are available on http://safety.navylive.dodlive.mil.

You can also find current and archived issues on our website: www.public.navy.mil/NAVSAFECEN/Pages/media/mag_index.aspx.

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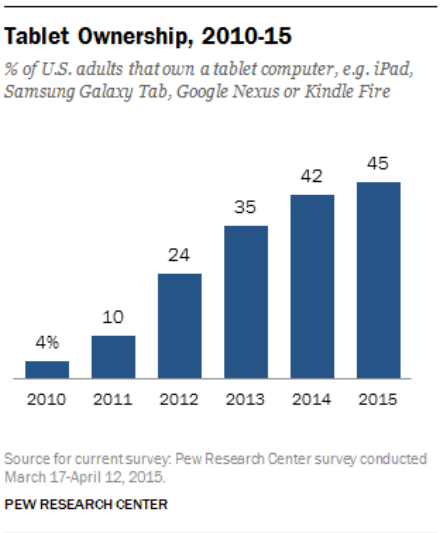
We thank you for understanding.

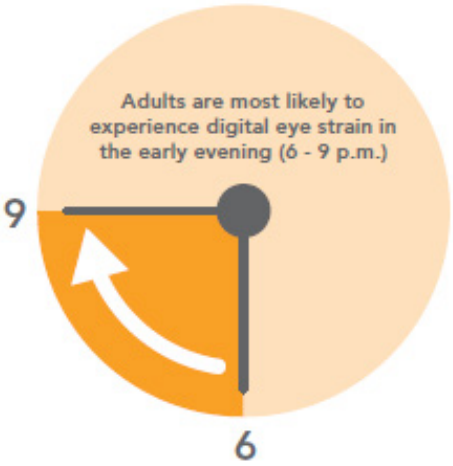
– The Editorial Staff

Technology Awareness: Digital Eye Strain and Text Neck

By Cindy Whitehead

Living in the modern digital age certainly has its benefits. How did we ever live without the endless amounts of information, instant results and ability to interact and communicate, all at our fingertips? We all enjoy the conveniences electronic technology offers, especially our mobile handheld devices. However, with all the advantages we gain from mobile technology comes the risk of serious and permanent health problems. According to the Pew Research Center, 68 percent of U.S. adults owned a smartphone in 2015. That's almost double mid-2011 numbers! With new products hitting shelves every day, the market for digital devices continues to grow. This means more time spent looking at electronic screens and digital content.





An average person checks the phone every 6.5 minutes in a 16-hour waking cycle (Nokia, 2012)

The intention of spending five minutes checking your email can easily turn into an hour browsing the web on your smartphone. Your eyes become dry and irritated, your vision blurred. Your thumb, wrist, and neck have been held in the same unnatural position the entire time. Before long, your thumbs have been typing in an awkward position and they start

hurting. Your wrists have been bent over and tendinitis can set in. Your neck aches from looking down at your phone for a long time. Many Americans average six to nine hours a day in front of digital devices; 76 percent of us are still looking at our devices the hour before we sleep!

Since it's unlikely that we'll unplug any time soon, awareness is one way to fight the onset of lasting eye strains and muscle sprains.

Digital Eye Strain

Digital eye strain is now a common repetitive strain injury among workers, surpassing rates for carpal tunnel syndrome and tendinitis. Eye redness or irritation from staring at the bright backlight of screens for long periods, dry eyes due to reduced blinking, blurred vision and general fatigue from staring at screens and straining to see small fonts and images are all symptoms of digital eye strain. The percentage of people experiencing digital eye strain increases with the number of devices used simultaneously. Headaches may occur from repeated eye strain.

While irritation and discomfort can be temporary, there is potential for long-term effects such as age-related macular degeneration or cataracts. Studies show that long-term due to overexposure to blue light, or high-energy visible (HEV) light could damage the retina, the part of the eye that brings objects into focus.

Strain is often caused by the distance between the eyes and a digital screen. Our eyes are designed for near vision and far vision rather than the mid-range viewing distance needed to focus on words and images on laptops and desktop screens. As many as 90 percent of patients don't discuss their digital viewing habits with their eye doctors. Computer eyewear is designed for the mid-range viewing distance of reading a computer screen. Lens technology can cut glare, block HEV, and decrease brightness with or without a prescription. Talk to your eye care provider about your digital viewing habits to determine what options are best for you.

Only 7 percent of U.S. adults have tried computer glasses to reduce digital eye strain.

Strain can also occur when overhead and surrounding light compete with your device's screen, flooding your eyes with blue light. Viewing in total darkness is just as bad, forcing your eyes to constantly adjust to lighting levels. Balance the light in the room with your primary viewing device for best results. Adjust the brightness of your device, or the size of the text, as necessary.

Give your eyes a break. Follow the 20-20-20 rule to avoid dry, tired eyes. Every 20 minutes, take a 20 second break and view something 20 feet away in the distance. Blink more often to rehydrate your eyes. Keep your screen clean to make text and images clearer and easier to read.

Text Neck

We are exposed to devices that cause "text neck" the majority of the day, almost every day!

People of all ages spend countless hours daily hunched over numerous types of handheld devices with their heads flexed forward. They are all in constant danger and at risk of developing "text neck." For every inch of forward head posture, the weight of the head increases force on the spine by an additional 10 pounds. Among the chief complaints associated with text neck are neck, shoulder, back, arm, finger, hand, wrist and elbow pain, as well as headaches and numbness and tingling of the upper extremities. A Mayo Clinic study found that long term forward neck posture leads to "long term muscle strain, disc herniation and pinched nerves."

Only 7 percent of U.S. adults have tried computer glasses to reduce digital eye strain.

Leaning over any object, not just smartphones and tablets, for an extended period of time (a sink full of dishes or caring for a newborn baby, for instance) can strain joints, muscles, and soft tissues causing pain. Is your home television mounted high above the fireplace or have you read your phone while lying on a couch or bed? Have you checked text messages under a table at a meeting or read a tablet in an economy airplane seat? This is not how we would set up our desk space at work, yet we may spend another few hours on our devices when we leave the office.

Try the same principles as if you were in an office:

- *Sit in a neutral position. Try resting your arms on your desk as you work.*
- *Hold your smartphone a little higher to decrease the amount of stress on the neck (so you don't have to look down as much).*
- *Give your neck a rest by looking up and bending sideways. Stretch every five to ten minutes.*
- *Switch to a telephone call or your laptop if the texting (or web surfing) session starts getting too long.*

Flexing the neck and head to look at a PDA in the lap requires isometric contraction of neck extensor muscles to hold the head in an imbalanced posture.

Bringing the PDA up to eye level relieves the stress on the neck. *Note:* it's important for the (upper) arm to be relaxed.

If adults are suffering from neck problems after only a few years of texting and cell phoning, imagine what's in store for our kids, who may start having physical problems much younger than we are. Do your kids slump at the computer, hang their necks as they look down on their cellphones and tilt their heads to the side as they hold the phone between their neck and their ear as they type? You can tell them to sit up straight, use a headset or speakerphone, and they'll roll their eyes like when your parents told you to stop slouching.

Most of us see our personal electronic devices as electronic security blankets, keeping us safe and ever-connected. But there is such a thing as being too connected — especially when a little bundle of glass, electronic circuitry, and plastic has the power to cause undue pain.

Cindy Whitehead is a human systems engineer at the Naval Surface Warfare Center in Dahlgren, Virginia focusing on human-centered design of the operation and maintenance of systems in Defense acquisition lifecycle and is the Program Manager for the Navy Ergonomics Program.

Safety AWARENESS & PRACTICES

Important at Sea, in the Air or Ashore in the Office

By Jane Bush

Safety awareness and practices follow us everywhere. All personnel should be in tune with their work environment and be cognizant of safety at all times. Just as fleet Sailors must be aware of the flight deck, underway replenishment or engine room hazards, all personnel working ashore must be aware of office safety issues.

Working in an administrative command's safety office has shown me not only the hazards that exist, but also the false sense of security displayed by staff members. Personnel tend to get complacent ashore and forget what they've learned in the fleet with regards to safety. Consider the basics of an office. Desk chairs tend to have wheels and can lean back. Standing on a chair with wheels to reach an object, leaning far back in a desk chair, and using the chair to haul boxes are a few potential injury-causing actions. I'm still amazed when personnel stand on rolling chairs to reach something right in front of the safety staff. Popular today, although not supported by the Department of Defense, is the use of stability balls as chairs. Originally designed to prevent musculoskeletal injuries, research has shown that they may actually cause injury when used for long periods.

The importance of breaks for office workers can never be over-stressed. Breaks enable your body to rest and help prevent musculoskeletal injuries, to say nothing of your need to periodically rest your brain. File cabinet drawers left open present hazards for personnel walking into them or tripping over them. Opening several cabinet drawers at once can lead to cabinet tip-over. Worn carpets with holes and water on tiled floors are potential trip and slip hazards. Power cords crossing aisles can also be a trip hazard. Office clutter limiting exit aisle width could become a hazard in case of an emergency. Good housekeeping means a safer environment.

Electrical safety should always be a priority. Many office spaces do not have sufficient power outlets to supply all the power gadgets used today, resulting in personnel using several power cords plugged together. "Daisy chaining" of extension cords is a frequent safety issue, especially during the holidays. Combining appliances such as coffee pots, microwaves and refrigerators on one circuit can easily overload the circuit. Overloading circuits greatly increases the likelihood of fires as the increased power consumption translates into heat in the wiring, the circuit breakers and the connected devices. Securing power on an overloaded circuit may suffice to remove the electric shock hazard, but it does not put out the fire caused by melting wires or sparking breakers!

Mold is a hazard that brings fear to many individuals and the truth is mold exists everywhere. There are numerous kinds of mold with varying degrees of toxicity. Certain molds can be dangerous and that is why every effort should be made to prevent mold growth and decrease mold exposure. Additionally, individuals have varying sensitivity levels or conditions that make them more susceptible to mold. There are plenty of damp spaces in an office building where mold can grow, especially older buildings that suffer from leaks, particularly in inaccessible or confined spaces.

"Senior leadership support is essential in reinforcing the importance of safety training, practices and the safety of the organization."

Safety training should not be overlooked. The assumption of "I know how to be safe," is often proven otherwise just by looking at the mishap list. Safety training should be on-going, but should also be appropriate to the worker's surroundings. Senior leadership support is essential in reinforcing the importance of safety training, practices and the safety of the organization.

Working in an administrative environment ashore may be a relaxing break from a shipboard/overseas tour, but it is not an opportunity to disregard potential safety hazards or to defer safety training. The mission and the tools may be different, but the wisdom of vigilance still prevails. The office environment can harbor many hazards that personnel should be aware of. Safety first is always a good rule, no matter where you are.

Ms. Bush is a safety & occupational health specialist for the Office Safety Ashore, PERS-53Z.

ONLINE RESOURCES

Office Environment
▶ https://www.cdc.gov/niosh/topics/officeenvironment/default.html

Ergonomics and Musculoskeletal Disorders
▶ https://www.cdc.gov/niosh/topics/ergonomics/default.html

Occupational Safety and Health Administration
▶ https://www.osha.gov/SLTC/etools/computerworkstations/index.html

Indoor Environmental Quality
▶ https://www.cdc.gov/niosh/topics/indoorenv/

The National Institute for Occupational Safety and Health (NIOSH)
▶ https://www.cdc.gov/niosh/index.htm

ARTICLE CORRECTION

Electrical Workbench Grounding Straps

By EMC(SW) Michael Lavergne

How many times have you been in an electrical/electronic shop and noticed that there were single, green wires with something attached (that looked like an alligator clip) coming from the work bench?

It isn't just an ordinary wire. It is a lifesaving device known as a "grounding strap," and it connects that piece of equipment to the hull. Electric current likes to flow in the path of least resistance. When there's a problem, the current will flow to ship's hull instead of shocking (or killing) the worker.

Grounding straps are covered by PMS MIP series 6652/006(or L06) A-1+ and NSTM 300. You must have one grounding strap for every four feet of work bench. Grounding leads and grounding straps must have green insulation or be marked with green-colored tape or green-colored adhesive labels. Grounding straps must be at least 40 inches long and able to reach every part of the work bench.

A 50-amp, blunt-nose, battery-type clip and insulating sleeve must be installed at the free end. The Servit post must be sealed with two coats of varnish (A-A-1800) or other suitable preservation to protect from moisture or corrosion. The ground stud should be welded to the hull (if feasible) or to a main member on the bulk head. The grounding stud should be connected to ground using three nuts or a collar stud with two hex nuts.

A ground bus serving a row of workbenches must be continuous (unsliced) cable no longer than 50 inches.

Resistance from the ground (battery type) clip to a point beside the deck grounding stud must be less than or equal to 0.1 ohm. If greater than 0.1 ohms resistance, tag out the disconnect switch and test panel, notify work center supervisor, repair or replace as necessary, remove safety tags and return equipment to readiness condition.

NSTM 300, Electric Plant-General, states ships shall have a minimum of one electrical workbench maintained all times.

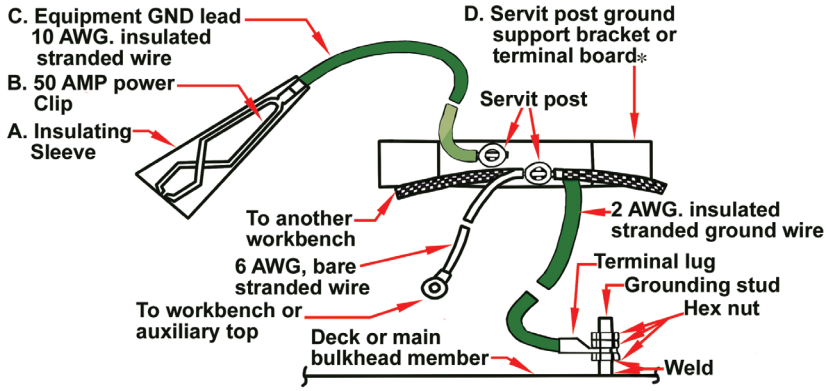
More information on standardizing electrical workbenches/requirements can be found in:

- *Sea Compass, fall-winter 2013 (http://www.public.navy.mil/comnavsafecen/documents/media/magazines/sea-compass/fall-winter2013.pdf)*
- *Naval Ship's Technical Manual (NSTM 300 Appendix H)*
- *PMS MIP 6652/006(or L06) A-1+*

EMC(SW) Lavergne is a fleet electrical analyst in the Afloat Safety Programs Directorate.

This article was originally printed in Sea Compass Vol. 5, No. 1 with a content error. We would like to apologize to our readers for the inaccuracy and have reprinted this article with the corrected information.

300-H.1.2 Grounding Requirements. Metal workbenches shall be grounded to the hull and have equipment grounding leads. Refer to Figure 300-H-1

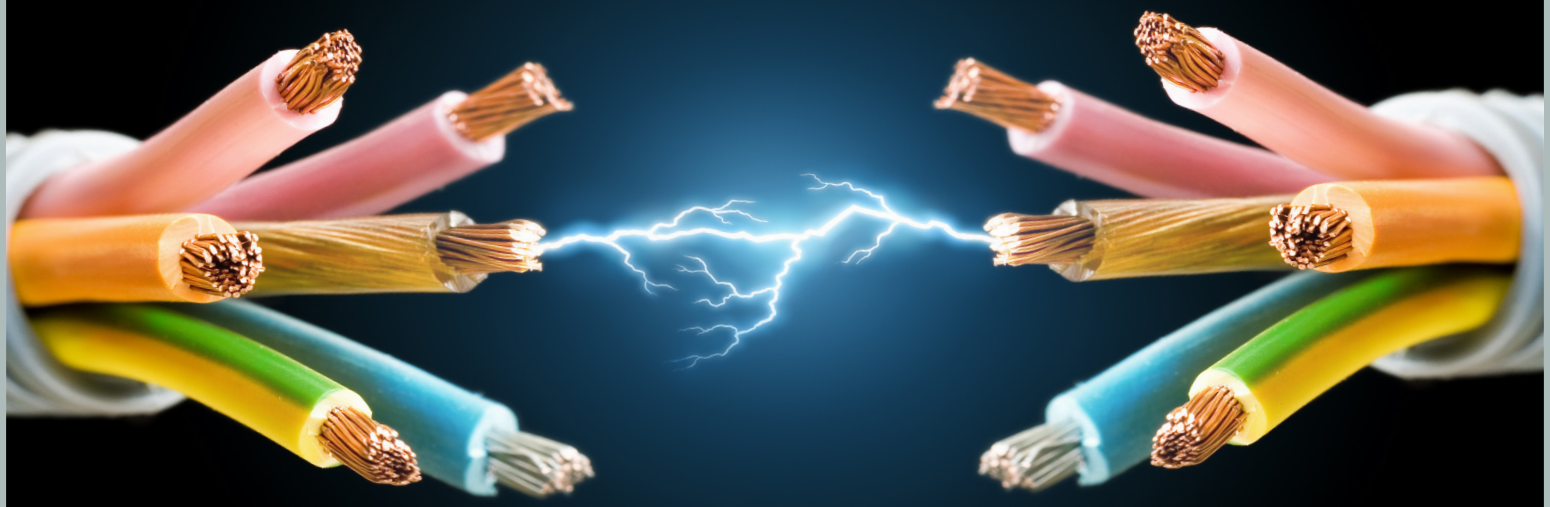


*Servit post ground support bracket (terminal board) shall be installed on the back panel assembly of the electric power panel (see NAVAIR drawing No. 63A114F12)

Figure 300-H-1 Workbench Grounding

Source: NSTM 300, Page 300-H-1

ELECTROSTATIC DISCHARGE PROTECTED WORK AREA GROUNDING ISSUES



By Robert Dale Tate

The implementation of a common electrostatic discharge (ESD) program should not be rocket science. Air systems electromagnetic interference corrective action program (ASEMICAP) agrees with that assessment, but like most things, we believe the devil is in the details. In this article we will explore one of the more perplexing details of the ESD protected work area (PWA).

Having public works install a certified hard ground for your ESD PWA is great, but can be costly, especially when in most cases, you have good equipment grounds throughout your spaces that if properly verified, will serve this purpose. Also, the certified hard ground that public works set up requires 24-month verification in accordance with MIL-HDBK-274A. So what is an EMI/ESD program manager supposed to do about grounding?

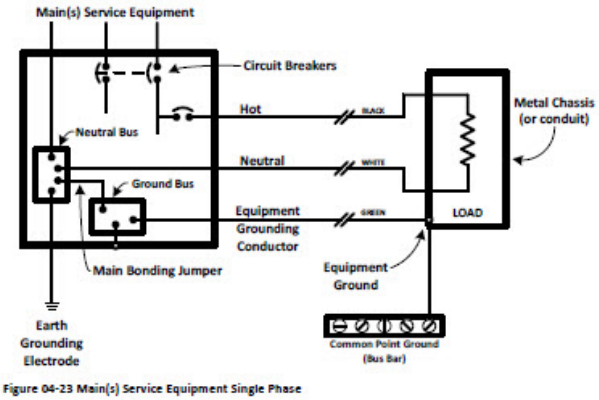
Grounding should be basic to an ESD program. The Commander Naval Air Forces (CNAF) 4790.2B, Section 10.21.4 lists procedures for the conduct of an ESD program. This naval aviation maintenance program standard operating procedure (NAMPSOP) needs improved, and before we make that happen we decided to first introduce some physical changes (ESD

finger cot and ESD PWA earth ground checker) that we believed were needed.

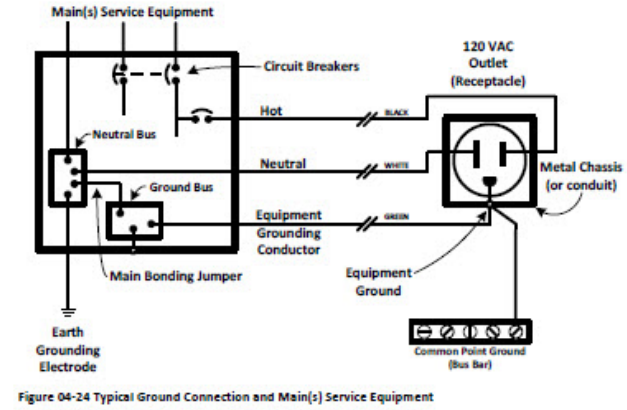
The CNAF 4790.2B Section 10.21.4.2 states "to handle unprotected ESDS items only at ESD PWA that comply with requirements in MIL-HDBK-263B, Naval Air Systems Command (NAVAIR) 01-1A-23, and NAVAIR 17-600-193-6-2." The MIL-HDBK-263 although still accurate has become is a bit antiquated. The NAVAIR 17-600-193-6-2 will be deleted with the next naval aviation maintenance program (NAMP) change. That leaves the NAVAIR 17-600-193ESD-6-1 the ESD PWA (pre-operational checklist card) and it points to the NAVAIR 01-1A-23 for configuration guidance. The NAVAIR-01-1A-23, work package 004 00, Section 4-4.9 presents grounding in a clean and concise manner. Reading the NAVAIR 01-1A-23, Section 4-4.9, it uses terms such as ESD common point ground (Figure 1), common point ground barrier strip, and others all of which are connected to equipment ground.

Figure 1: Common ESD/ordnance grounding point

That is a key factor because that point is electrically equivalent to ground in your AC outlets. Below are figures 04-23 and 04-24 from the NA 01-1A-23 that point is clearly illustrated. The bottom line is equipment ground is already present throughout all work centers and it is the ground wire of the AC outlet.



Main(s) service equipment single phase. (04-23)



Typical ground connection and main(s) service equipment.(04-24)

The third wire green ground of a common AC outlet in your circuit is equipment ground. I should point out here that I spent four years in the Naval Safety Center and understand that we must be very careful with electrical safety. I am also a trained aircraft electrician and have been in this field for over thirty years. The concern with the third wire green ground is only to prevent personnel from connecting the wrist straps directly to an unverified circuit and I agree that connecting directly to any unverified circuit cannot happen!

However, I am convinced that we can provide the user a device that will allow for the ESD PWA ground in an AC outlet to work safely and doing this will achieve an equipment ground as identified in the NA 01-1A-23 easily. The device I am speaking of is the ESD earth ground checker (Figure 2).

Figure 2: The Static Solutions SP-101 plugged-in and indicating "CORRECT" configuration.

This tester, sold by Static Solutions (P/N SP-101), when connected to an AC outlet will check the outlet for failures and determine if the ground is safe for use (two yellow lights). All that is left to do then is to configure the ESD PWA with a banana plug and connect it to the earth ground checker. No more mystery about ground find an AC outlet use the earth ground checker, plug the ESD PWA into it, and perform a pre-operational check.

Last year ASEMICAP verified this device in many locations. The results were overwhelming favorable that our activities are configured to meet National Electrical Code (NEC). Once briefed by ASEMICAP, CNAF aviation maintenance management team (AMMT) members agreed that this would be the best way forward. This device is designed to be plugged into the AC outlet so it does not constitute plugging directly into ground and if used correctly verifies your ground as functional. If equipment ground is essential to the proper application of the ESD control program then that is exactly what this action will complete.

ASEMICAP recently released a naval message authorizing the use of these devices which was subsequently endorsed by CNAF avionics (160014Z MAY 16). This message is available on our website (https://asemicap.navair.navy.mil).

In the very near future, ASEMICAP will submit a change to the CNAF 4790.2B EMI/ESD NAMPSOP via the AMMT. Once this change is submitted, we will monitor the CH 10.21 for a change that will close this action.

ASEMICAP would like to invite you to visit our ASEMICAP website. It is a 24/7/365 one-stop shop for electromagnetic environmental effects (E3) issues and information.

Mr. Tate is the Air Systems Electromagnetic Interference Corrective Action Program (ASEMICAP) program manager for Naval Air Systems Command, Electromagnetic Environmental Effects (E3) Division.

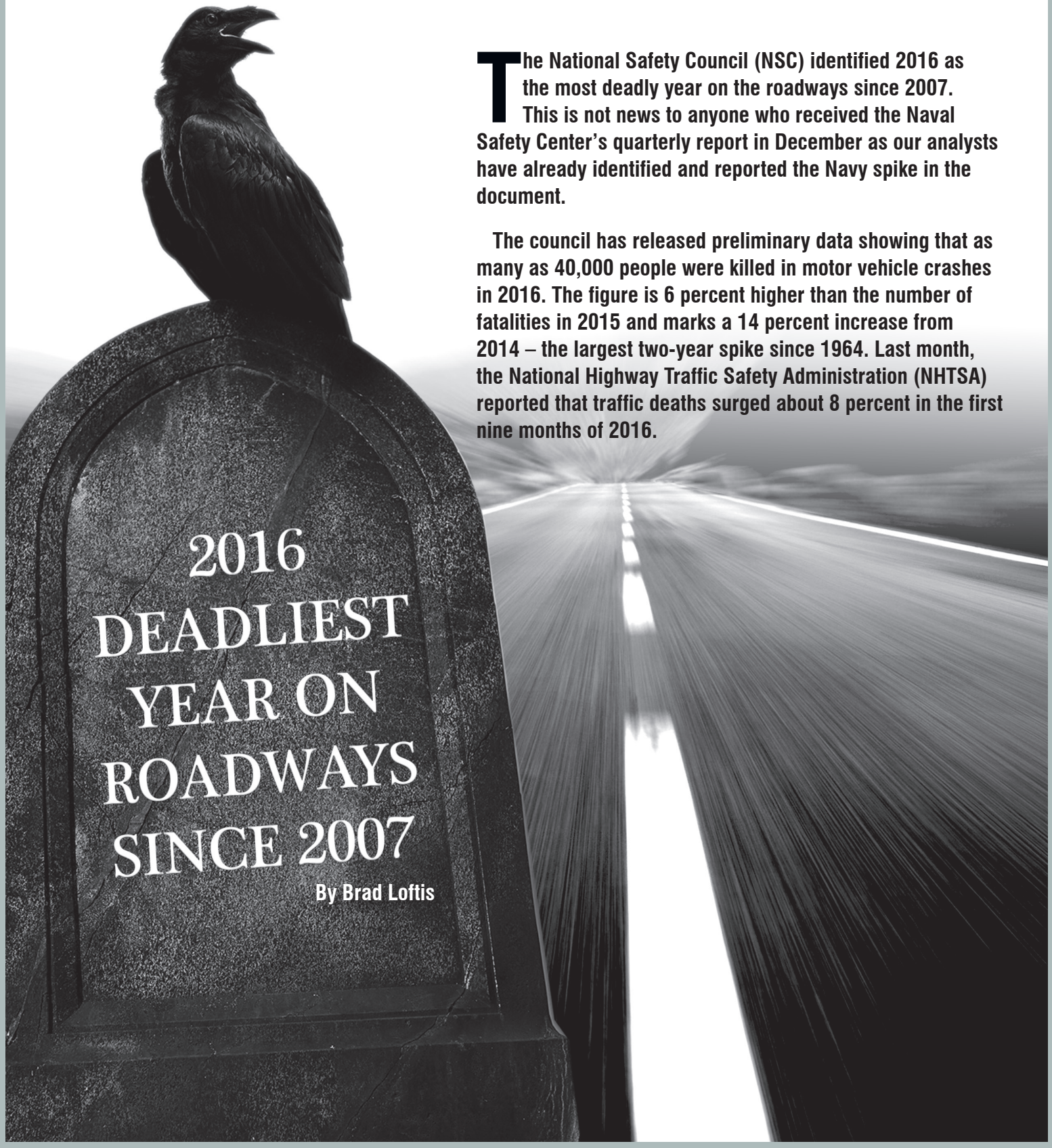
ONLINE RESOURCES

Air Systems Electromagnetic Interference Corrective Action Program

▶ https://asemicap.navair.navy.mil

Naval Safety Center

▶ http://www.public.navy.mil/navsafecen/Pages/media/asemicap.aspx



2016 DEADLIEST YEAR ON ROADWAYS SINCE 2007

By Brad Loftis

The National Safety Council (NSC) identified 2016 as the most deadly year on the roadways since 2007. This is not news to anyone who received the Naval Safety Center's quarterly report in December as our analysts have already identified and reported the Navy spike in the document.

The council has released preliminary data showing that as many as 40,000 people were killed in motor vehicle crashes in 2016. The figure is 6 percent higher than the number of fatalities in 2015 and marks a 14 percent increase from 2014 – the largest two-year spike since 1964. Last month, the National Highway Traffic Safety Administration (NHTSA) reported that traffic deaths surged about 8 percent in the first nine months of 2016.

How does all of this compare to the Navy? The Navy saw a 78 percent increase from FY 2015 to FY 2016. This percentage may seem high, but when looking only at the numbers of fatalities, nine Sailors in FY 2015 and 16 Sailors in FY 2016. We see that the Navy's fatality rate has been consistently and considerably lower than that of the national average – almost 50 percent over the last five years.

What is driving these numbers? An improving economy and low gas prices, which increase driving (e.g., going out on the weekends or taking long trips on unfamiliar roads) are all contributors. Additionally, "teens [with their high fatal crash rates] are also back on the road after the recession when many of them could not afford to drive as much," said Adrian Lund, president of the Insurance Institute for Highway Safety.

Several other factors have been noted by Safety Center analysts and NSC reports, which were summed up by the executive director of the Governors Highway Safety Association, Jonathan Adkins, who stated "belts, booze and speed" are contributing to these deaths. However, his statement does not cover the newest element that has begun to plague our nation's roads ... distracted driving.

"The good news is the Navy's fatality rate is consistently and considerably lower than that of the national average by almost 50 percent over the last five years."

Distracted driving is not easily captured in mishap data, especially with fatalities due to the lack of firsthand accounts of events. Due to this issue and the fact that the Web-Enabled Safety System (WESS) does not specifically capture distracted driving, the Safety Center analysts had to infer this through other items listed in the human factors (HFACS) portion of WESS (e.g., attention failures, timing errors, etc.).

Digging deeper into the HFACS levels provided more granularity into these distractions by listing specific driver actions (e.g., drifted out of lane [not due to falling asleep], did not keep eyes on the road, reacted too slowly, etc.). Each of these actions could have attributed to the operator being distracted. More in-depth data would need to be collected in WESS or NSC data files to include possible use of a cell phone or texting as an unsafe act before a true determination of the extent of distracted driving on our roads could be made.

The bottom line is electronic devices are increasingly playing a role in motor vehicle fatalities and their mitigation must be addressed in a more robust way.

Mr. Loftis is the Shore Safety Program Directorate, Traffic and Recreation, Off Duty Safety Division Head for the Naval Safety Center.

ONLINE RESOURCES

National Highway Traffic Safety Administration
▶ https://www.nhtsa.gov/

National Safety Council
▶ http://www.nsc.org/pages/home.aspx

Naval Safety Center, Traffic Safety
▶ http://www.public.navy.mil/NAVSAFECEN/Pages/shore/motor_vehicle/motorvehicle.aspx

Reporting Tools
▶ http://www.public.navy.mil/navsafecen/pages/wess/wess.aspx

"It Was Just..."

It was just a quick call
It was just a short trip
It was just one drink
It was just a picture
It was just an email
It was just a glance
It was just a text
It was just a bite

'Just' is all
it takes

http://www.nsc.org

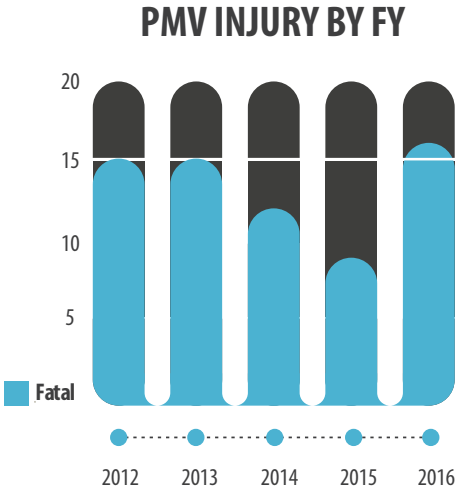
PRIVATE MOTOR VEHICLES FATAL MISHAP ANALYSIS SUMMARY

By Michael Borkowski

The Naval Safety Center conducted an analysis into Navy private motor vehicles with four wheels (PMV4) fatal mishaps during the FY 2012 to 2016 timeframe to identify FY associated factors. The analysis also focused on the dramatic increase in fatal mishaps from FY 2012 to 2016.

Between FY 2012 to 2015 the Navy experienced a steady decrease in service member deaths due to fatal PMV4 mishaps. However, from FY 2015 to 2016 the Navy saw a single FY increase of 78 percent.

This analysis identifies alcohol, lost control and speeding violations as top contributors to fatal crashes. Based on these, as well as time of day, type of crash and day of the week, there are two items that this subject matter expert with over 20 years of crash investigator experience identified as requiring focus – fatigue and distracted driving:



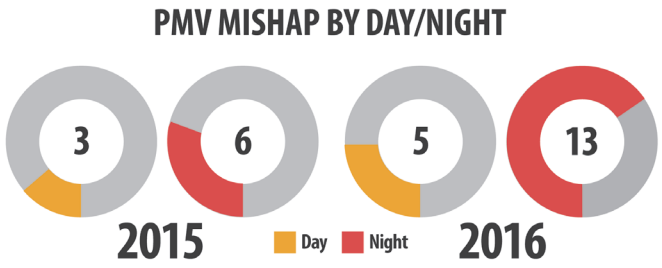
NAVSAFECEN data as of 03/16/2017.

- Fatigue: This can be captured as either an adverse mental state, or adverse physiological state (mental or physical). Fatigue was noted at least 57 percent of the time due to an adverse mental state, and 43 percent of the time due to an adverse physiological state. The data identified lost control, specifically roll overs, drifting out of a lane, and not keeping eyes on the road as causes to these fatal mishaps. These crashes are occurring at night, involve a single vehicle, and some type of fatigue. It also appears that fatigue is being underreported as a personnel factor in the mishap data, which could be due to the difficulty in identifying fatigue/drowsiness as a factor after a fatal mishap. Fatigue may also play a role in crashes attributed to other causes such as alcohol.

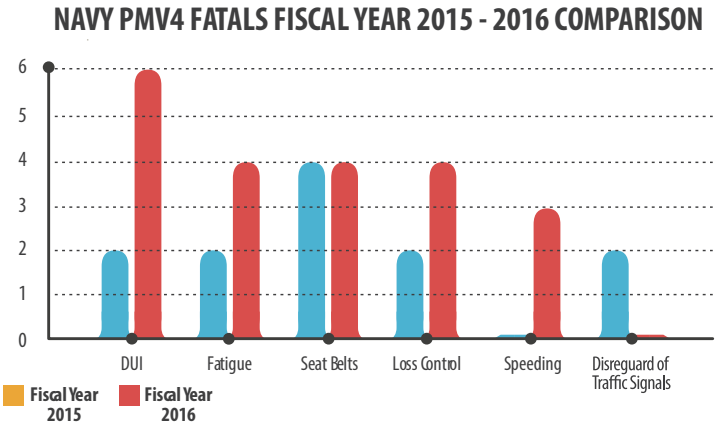
- Distracted Driving: While Human Factors Analysis and Classification System (HFACS) data does not specifically identify distracted driving as a separate precondition or act, one can infer this through the items that are listed in level I (e.g., attention failures, timing errors, etc.). Level II provides more granularity into these distractions by listing driver actions (e.g., drifted out of lane [not due to falling asleep], did not keep eyes on the road, reacted too slowly, etc.). Each of these actions could be attributed to the operator being distracted. Because HFACS data fields currently do not capture distracted driving as an unsafe act or a precondition that information would need to be articulated in the narrative. More in-depth data would need to be collected to include possible use of a cell phone or texting as an unsafe act.

FY 2015 to 2016 Comparison

When looking at the last two FYs for what led to the sharp increase in PMV4 fatal crashes from nine in FY 2015 to 16 in FY 2016, there was over a 100 percent increase in the number of fatal crashes occurring at night. DUI crashes took a dramatic trend upward along with fatigue, lost control and speed as crash factors.



NAVSAFECEN data as of 03/16/2017.



NAVSAFECEN data as of 03/16/2017.

Outside Data

After reviewing similar data from the National Highway Traffic Safety Administration's Fatality Analysis Reporting System regarding traffic crashes in calendar year 2015, it should be noted that human factors continue to contribute to the majority of crashes. Some key findings that closely parallel Navy trends are noted below:

- The number of civilians killed in traffic crashes ended a five year trend of declining fatalities, specifically a 7.2 percent increase over the previous year.
- Almost half of all passenger vehicle occupants killed were not wearing seat belts.
- One in three fatalities involved drunk drivers, with the 21 to 24-year-old age group in the highest percentage.
- One in 10 fatalities involved some type of distraction.

Recommendations

Based on both Navy and national data in this report, there is an alarming upward trend in fatalities. We must reiterate to our personnel that people can die when they drive under the influence, speed, do not wear seat belts, drive fatigued or are distracted while driving. There have been several vehicle improvements (e.g., side air bags, electronic stability control, lane departure warning systems, etc.) over this reporting period that have no doubt reduced traffic deaths. However, even with these improvements in place there continues to be a negative trend in fatalities.

We recommend top down involvement and intrusive leadership to promote targeted training and focus on areas where increased awareness can make a difference.

- Zero tolerance for noncompliance with both DoD & OPNAV policy regarding seat belt use and driving under the influence.
- Use of Travel Risk Planning System (TRiPS) with a plan to reduce fatigue behind the wheel.
- Adherence to current laws and use of a common sense approach to not texting or using a cell phone while driving.

Learn from the mistakes of others. Be smart and drive safe.

Mr. Borkowski is a traffic and recreation off-duty safety specialist for the Naval Safety Center.

Spring Forward with Safety

The National Safety Council (NSC)

Daylight Saving Time begins every year on the second Sunday in March. Clocks are set forward one hour, except in Hawaii and most of Arizona. Now that we have sprung forward, be sure to check the batteries in your smoke alarms and carbon monoxide detectors. Batteries in smoke detectors should be replaced yearly. It's also a good time to review your family emergency plan, take unwanted or expired medicines to a prescription drop box and update your first aid kit.

Getting the Urge to Clean?

With the warm weather comes a desire to shine and polish your home. But did you know that 90 percent of poisonings occur in the home? When warning labels are ignored or chemicals fall into the wrong hands, disaster can occur. Learn what you can do to keep your family safe while utilizing poisons in the home by visiting the National Safety Council website at http://www.nsc.org/learn/safety-knowledge/Pages/Poisonous-Household-Products.aspx.

Window Safety

With warmer temperatures arriving, it's important to practice window safety - especially in homes with young children. Learn about window safety and other safety materials presented during Window Safety Week, which is the second full week in April, at http://www.nsc.org/learn/safety-knowledge/Pages/about-national-window-safety-week.aspx.

Like to Play Outside?

There is so much to do and enjoy when the weather gets warm, and outdoor activities are a great way to be active and stay in shape. Make sure you don't put an end to the fun because of an injury. The National Safety Council website contains a number of resources/tips for staying safe outdoors at http://www.nsc.org/learn/pages/be-safe-when-being-active-outdoors.aspx :

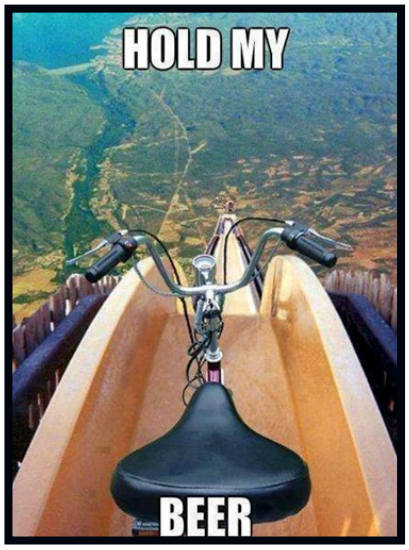
- Water safety
- Canoeing safety
- Bicycle safety
- Skateboarding safety
- Surviving the heat
- Fireworks safety
- Pedestrian safety
- Playground safety

DANGER BY DESIGN

By Stu Hutchinson

ALCOHOL: UNDERESTIMATING RISKS AND POTENTIAL CONSEQUENCES

With the coming of warmer weather, many of us will be seeking high adventure in the great outdoors. For us thrill seekers, the picture below may look like great fun. It may also look too risky, and personally it looks a little Photoshopped to me.



The point here is that the use of alcohol may (and by "may" I mean "will") cause you to underestimate the risks and potential consequences of many activities. This is why all the really stupendous stories of injury and death often start with "Hey, hold my beer and watch this."

Of course with alcohol, there is a catch-22. Since it impairs your judgment, it's almost impossible to exercise good judgment once you've started drinking. But there's an easy way around this problem. All you have to do is exercise good judgment beforehand.

For you unpracticed drinkers, you may be wondering how to put this into action. Well, all you have to do is separate your drinking activities from your outdoor adventure activities. I know that may sound foreign to some, but it's really not as hard as it sounds. Plan your zip lining, cliff-diving, rope-swinging into the lake, ATV steep hill climbing adventures as alcohol-free events, and save your beer drinking for later around the camp fire.

After all, beer really does taste better when someone else doesn't have to hold it for you because you have two broken arms! Not to mention the continuing consequences of needing help with eating and other less glamorous life functions.

So if you must drink, or do high-risk activities, please do so responsibly.

Mr. Hutchinson is the Business Operations Lead for Naval Surface Warfare Center, Occupational Safety & Health Division.

LOST ON THE RUNWAY

By SN Mateo Diaz

Everyone has been lost at least once in their lives. For many of us, being lost usually happens while we're driving. This typically only means that we're getting to our destination a little later or perhaps having to stop and fire up our GPS to get turn-by-turn directions. For me, it meant finding myself on a runway at the same time that an airplane was touching down.

On Sept. 28, 2016, I was working in the VAW-116 line shack when a Seaman from a visiting E-2 squadron came over and asked to borrow the MSU-200 Air Start Unit (ASU). The visiting squadron was on detachment to Point Mugu, California from Norfolk, Virginia, and needed to borrow equipment from time to time. I checked the equipment out to the Seaman and began driving to the transient line area. Since they were visiting, I was unfamiliar with the location of the transient line area, and the Seaman had low situational awareness because he was unfamiliar with the airfield. This would have been a good time to double-check and ask questions about where to go, but everyone involved assumed that the other person knew where to go. And you know what happens when you assume.

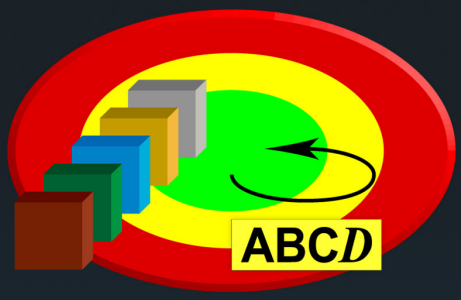
Without clarifying the best route to get there, we began driving and navigating to the transient ramp. While driving on what I thought was a taxiway, the hair on the back of my neck began to stand up and I looked around and saw the markings for a runway. The next thing I saw was a Hawkeye do a touch-and-go on the same piece of concrete I was on. Afraid for the lives of everyone on that piece of concrete, I put the pedal down and continued across the runway until we got to the transient ramp. We dropped off the equipment and I returned to the VAW-116 line shack, this time taking the appropriate route.

When I returned to the line shack, my leading petty officer (LPO) pulled me aside and informed me that I had, in fact, driven across an active runway. The tower had contacted VAW-116's maintenance control desk and told them of the incident. For the second time that day my heart started racing; this time for fear of losing my job. I eventually sat down with my master chief and discussed how the event unfolded and what learning points we could pull from it. Some immediate actions involved me taking a flight line driver's course as well as debriefing each shop about the incident.

Driving across an active runway has the potential to have fatal consequences; we were lucky that no one was hurt or any equipment damaged. The visiting squadron's Seaman and I should have both taken time to acquaint ourselves with our surroundings and verified the appropriate route to take. Utilizing deliberate operational risk management (ORM) or simply asking ourselves "What is different?" would have greatly reduced the likelihood of this happening. We all receive yearly ORM training and sometimes it's easy to gloss over the steps, but it's times like these that highlight how important and relevant the process truly is to a safe evolution.

SN Mateo Diaz is assigned to VAW-116 Sun Kings located in Point Mugu.

Time-Critical Risk Management



A - Assess the situation.

B - Balance resources.

C - Communicate to others.

D - *Do* and *Debrief* the event.

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

The ABC***D*** 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 ABC***D*** 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.

USS Shiloh Leadership Put Their Baks into Reducing Heat Related Injuries

By ENS Jennifer Pendleton

As the cherry blossoms fade and Golden Week in Japan approaches, temperatures soar on Naval Base Yokosuka and USS Shiloh (CG 67) prepares for its summer patrol. Statically, most safety-related work injuries occur in the summer months, the majority of which are heat stress and dehydration. Knowing this and anticipating the intense heat of the South China Sea and port visits in Southeast Asia, Shiloh leadership sought to mitigate the risk of heat-related injuries. They wanted to ensure every Sailor was equipped with the tools and resources they needed to stay hydrated throughout the summer months. The solution: Camelbaks®.

Small and lightweight, a Camelbak® is essentially a water bladder in a backpack. Each Cambelbak® is equipped with an easy to access fill port, a flexible drinking tube, and an insulated bag to keep water cool for hours. Additionally, the internal water bag is removable for easy cleaning and replacement.

At first, Shiloh ordered enough Camelbaks® to outfit members of the crew who worked in the hottest spaces due to the nature of their job, such as the Engineers in the main spaces, Boatswain Mates working topside, and Food Service Attendants in the scullery. Shiloh leadership received positive feedback from Sailors outfitted with Camelbaks®, and soon Bridge watchstanders, flight deck crew members, and eventually the whole crew were issued their personal hydration pack.

These 2 liter bags hold enough water to keep a Sailor in a hot environment hydrated for several hours. “Having the Camelbak® is useful because it means less trips back and forth to get a drink,” states BMSN Blake Pierce from Round Rock, Texas. “It is definitely nice to have during work.”

Designed to be used completely hands free, the Camelbaks® eliminate the hassle of carrying a cumbersome water bottle around the ship. The 2 liter water bladder in a backpack design can also hold more water than the typical water bottle with weight evenly distributed on the shoulders of the wearer. Worn like a backpack, it is easier than ever to get a quick drink of water during work. “And we can always remove the pack if we feel it is unsafe [while performing

maintenance in the main spaces],” added EM2 Kevin Parker from Colona, Illinois.

While using their newly issued hydration packs has certainly been a necessity to the engineers and topside Sailors, the readily accessible Camelbaks® have also proved unexpectedly useful to personnel during special evolutions. GMC (SW) Russellette Lambert from Marion, South Carolina, comments on the impact of her Camelbak®: “I hydrate more topside, especially during gun shoots. It helps out a lot.” Valley Center, Kansas, native GM2 (SW) Sidney Lang also noted its usefulness while manning SCAT for hours at a time during sea and anchor evolutions.

“Shiloh leadership received positive feedback...eventually the whole crew were issued their personal hydration pack.”

Overall, the addition of the Camelbak® to the working uniform has been a positive change on USS Shiloh. At the conclusion of the ship’s summer patrol and port visits to tropical locations, Sailors are staying better hydrated and are more attentive to their fluid intakes than ever. The use of the Camelbak® hydration pack has resulted in an increase in the warfighter’s health and ability to stay focused on the task at hand, directly improving Shiloh’s combat readiness.

USS Shiloh is forward deployed to Yokosuka, Japan, in support of security and stability in the Indo-Asia-Pacific region.

ENS Jennifer Pendleton is a safety management assistant on USS Shiloh (CG 67).

The Ticonderoga-class guided-missile cruisers USS Shiloh (CG 67) and USS Chancellorsville (CG 62) sit pier-side at Fleet Activities (FLEACT) Yokosuka. FLEACT Yokosuka provides, maintains, and operates base facilities and services in support of 7th Fleet's forward-deployed naval forces, 83 tenant commands, and 24,000 military and civilian personnel. (U.S. Navy photo by Mass Communication Specialist 2nd Class Peter Burghar)

ONE COMMAND'S EFFORT TO REDUCE DUI INCIDENTS

By ENS Rachel Blankenship

Besides the danger of Sailors causing harm to themselves and others, there are the legal consequences associated with DUI/DWI infractions. In Japan, a Sailor may be under the U.S. BAC limit; but in violation of Japan's limit of 0.03 percent.

On USS Shiloh (CG 67), leadership sought to alleviate the risk of Sailors getting behind the wheel after consuming alcohol, even if it is the morning after. Long after drinking, the effects of alcohol can still be in one's system. To raise awareness, Shiloh requisitioned and issued single-use, self-breathalyzer tests to each crewmember. The breathalyzer can help a Sailor determine if they should get behind the wheel after drinking alcohol; whether used upon leaving a bar or before getting in the car to drive to the ship the morning following a night of drinking. More importantly, if a Sailor thinks they should try the breathalyzer, it is probably time to make a better decision and call the command.

To encourage Sailors to make the call, USS Shiloh leadership instituted a policy that Sailors who believed they are too drunk to drive could call the quarterdeck and inform the command duty officer that they were unable to safely commute to the ship. The Sailor could be late without consequences, rather than attempting to drive and risk getting pulled over or into an accident. The policy is reinforced during all-hands calls and plan of the day notes to call the command when they could not make it to muster in time.

This program has already been used by a few members of the crew with great success. Additional breathalyzers are available to replenish the ones used by crewmembers. Since instituting the breathalyzers and call in policy there have not been any DUI/DWI incidents for USS Shiloh Sailors.

Shiloh is forward deployed to Yokosuka, Japan, in support of security and stability in the Indo-Asia-Pacific region.

ENS Rachel Blankenship is the Public Affairs Officer for USS Shiloh (CG 67).

RUNNING INTO THE GROUND

By PO3 Jordan Osmera

I run every morning before work. I love to. It helps me wake up plus I get my workout done early so I have the rest of the day after work to myself. On July 30, 2016, I woke up to run as usual, but this time I was running behind. I run the same path every morning because it's generally clear of traffic.

About two miles into the run, I came to an intersection with rattle grates on either side of the road. As I approached the intersection, I noticed two vehicles driving toward me with their lights on. The lights temporarily blinded me as I ran over the grates, and I tripped and fell on my knee.

At first I didn't feel any pain, so I stood back up to make sure I was okay, dust myself off, and keep going. I was more worried about the embarrassment of falling in front of two groups of people. When I looked at my knee, it was a different story. I moved the palm of my hand when I saw the blood running down my leg into my shoe and saw the bottom of my knee cap and the tendon attached to it. It looked like a large chunk of my knee just fell on the ground. Both of the vehicles just sat there with their lights shining on me and I realized no one saw how bad it was. I used my phone's flashlight to signal to someone that I needed help.

Someone immediately drove toward me and got out to help once they saw what my knee looked like. The other car drove by once I was in the first vehicle and left. They took me to the Air Force security building and called an ambulance, my husband, and my squadron. At the ER, I got a tetanus shot, antibiotics, and pain medication. The doctor checked to make sure I could still move my knee and that I didn't damage the tendon. In the end, I received 36 stitches and couldn't bend my knee for four weeks, but thankfully avoided any major injury.

What was supposed to be a routine morning run, turned out to be a painful trip to the emergency room. It was unfortunate that the drivers blinded me at the exact moment I ran over the grates, but also lucky that they were there to give me a ride to the medical facility. In hindsight, I wish I had either slowed down or stopped running until the vehicles passed and I had a clear field of view of the obstacles. When routine tasks become atypical, it's never a bad idea to slow down and take the conservative approach. I learned this lesson while off-duty, but we can all apply this to our professional environments as well.

PO3 Jordan Osmera is an aviation electronics technician with VAW-116 Sun Kings located in Point Mugu.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