A diver in a black wetsuit and mask is in the water, holding a thick yellow cable. The water is dark and choppy. The diver's hands are visible, gripping the cable. The overall scene is cold and industrial.

# SEA COMPASS

WINTER 2011-2012  
[www.public.navy.mil/navsafecen](http://www.public.navy.mil/navsafecen)

CHARTING THE COURSE TO A MISHAP-FREE NAVY

## Into the Cold

Hypothermia is a major threat to divers but can be prevented with training, knowledge and risk management.

**PLUS** wild weather driving tips from a former NASCAR race driver





Winter 2011-2012 / Vol. 1, No. 2  
www.public.navy.mil/navsafecen/

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**DEPUTY COMMANDER**  
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**John Mahoney**

#### SEA COMPASS MISSION STATEMENT

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

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**STORIES WANTED FOR SPRING 2012 PRINT EDITION:**  
We want your stories for the next issue of *Sea Compass*.  
**Copy and photo deadline is Feb. 1, 2012.**

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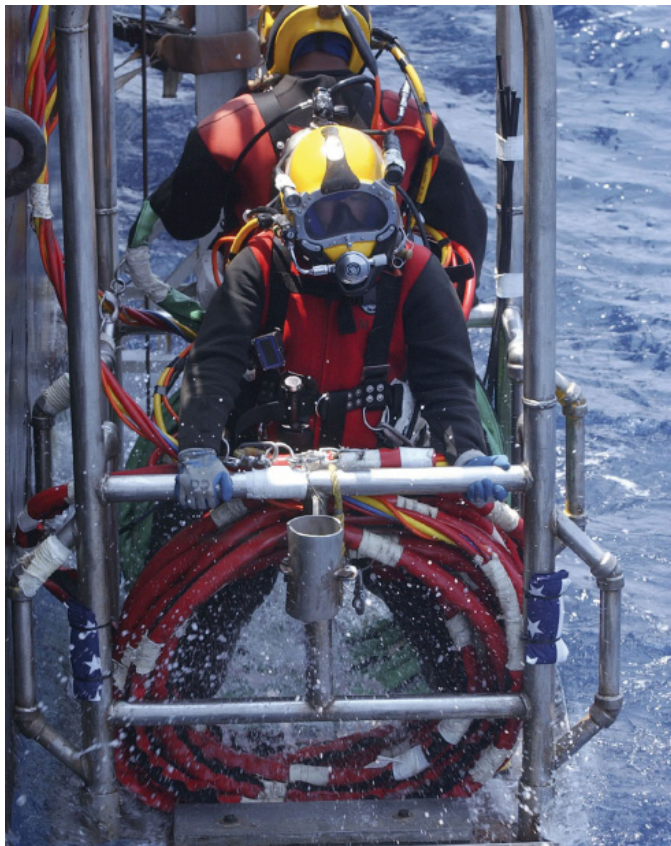
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# What's Inside ONLINE EDITION / WINTER 2011-2012

## COVER STORY



### 10 INTO THE COLD

By HMC (DSW) Dean Del Favero, Naval Safety Center

Hypothermia – know how to prevent, recognize and treat it. Plus: do you know if your medical equipment is properly maintained?

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Our winter safety campaign addresses the "Fatal Four" elements that claim lives in car wrecks.



Access to the digital version of *Sea Compass* is now online. The digital version is a downloadable PDF. Articles may be printed individually by going to the "Table of Contents" button on the index page (right panel).

<http://www.public.navy.mil/navsafecen/pages/media/sea-compass/index.aspx>

Send us your feedback and comments: [safe-seacompass@navy.mil](mailto:safe-seacompass@navy.mil)



COVER PHOTO: Navy Diver 3rd Class John Seagraves gets ready to start his dive off the back of the dive boat. Seagraves was part of Naval Submarine Support Facility dive locker and was attached to the Los Angeles-class fast attack submarine USS *San Juan* (SSN 751). Colder than normal temperatures cause ice to form on the Thames River at Submarine Base New London in Groton, Conn. (John Narewski/USN)

THIS PAGE: Divers for the USS *Monitor* salvage operation wear heated hot water suits for cold, deepwater dives. (Naval Undersea Museum).

BACK COVER: Sailors aboard the guided-missile cruiser USS *Bunker Hill* (CG 52) guide a refueling probe during an underway replenishment with the Military Sealift Command dry cargo and ammunition ship USNS *Washington Chambers* (T-AKE 11). (MC3 John Grandin/USN)

## EDITOR'S CORNER

### Our First **Green** Issue

**I**t's the best time of the year to celebrate and enjoy the company of family and friends. It's also the time to reflect on goals we have managed to achieve and work on new ones for the coming year. Let us all make a promise to keep each other safe and work toward a more productive 2012.

This edition is our first digital issue. It's short and only available as a downloadable PDF. Follow the "current issue" link on our *Sea Compass* home page to view the text version. The afloat and sub-surface team and I hope you enjoy the articles featured here. The cover story by HMC (DSW) Dean Del Favero will open your eyes to the dangers of cold water diving. Even though the winter months are upon us, there will still be activities involving water and diving – whether at work or at play. Your skills, knowledge, abilities, and situational awareness are valuable to any type of activity you do this winter.

Depending on where you live and how the winter climate affects your region, road conditions will significantly impact the way you drive. A former race car driver and tire safety expert shares some wild weather tips. One thing you don't want to miss is the Naval Safety Center winter safety campaign. It is now available online (<http://www.public.navy.mil/navsafecen/pages/media/seasonal/winter2011.aspx>) and provides essential home and personal safety tips for the winter season. We've featured one of the topics ("Fatal Four") in the off-duty section of this issue.

I hope you enjoyed the first issue of *Sea Compass* last fall. Much thanks to commanding officers and safety officers for endorsing stories written by their crew. As always, you can check us out on the web (<http://www.public.navy.mil/navsafecen/pages/media/sea-compass/index.aspx>). If you want to get back issues, send your requested number of copies to [safe-seacompass@navy.mil](mailto:safe-seacompass@navy.mil).

Have a happy and safe New Year!



**Evelyn Odango**

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### 2011 Afloat CNO Safety Award

Submissions for calendar year 2011 Afloat CNO Safety Awards and the Ship's Helicopter Safety Awards are due to the Naval Safety Center, via TYCOMs, no later than Feb. 15, 2012.

We had some great submissions and fierce competition last year, and hope to receive equal or greater submissions this year.

Additionally, the VADM Bulkeley and RADM Buie Awards submission packages are due to ISICs by March 15, 2012 and to the NSC by April 1.

The point of contact for the awards submission is LT Christine Davy. She can be reached at [christine.davy@navy.mil](mailto:christine.davy@navy.mil).

Please refer to OPNAVINST 3590.24E for package submission criteria.



Since 1955, the Naval Safety Center has been telling stories that matter to mission accomplishment. Some of those have been about lessons learned, success stories and best practices. If you have a story to share, *Sea Compass* can help you tell it.

# Write All About It

Whether you choose to write about a challenge at work you managed (or perhaps failed) or a personal experience away from the job, you will be amazed by the power of your story. As long as someone learns from it or uses it as a resource, you have done something good.

The editorial focus of *Sea Compass* is mishap prevention. Our mission is to offer a comprehensive source of information on risk management, lessons learned from personal experiences, and best practices for home and work safety. The core target audience includes military personnel and civilian employees. Topics may address safety issues in the following job functions and off-duty activities:

- combat systems
- flight deck
- engineering
- damage control
- electrical
- weapons
- safety management
- occupational safety and health
- tactical operations
- training
- diving
- personal safety and health
- off-duty traffic safety
- off-duty recreation

You may write for any of the magazine sections including a cover story, feature, viewpoint, PMS, off-duty story, ORM, spotlight on excellence, or news briefs. The opportunity is endless.

Now and then, we will feature a special call for entries, such as a photo essay about a specific theme or a safety quiz. We hope to hear from you.



[Click here to download the writer submission form.](#)



(MC3 Scott Pittman/USN)

## EXTRA: Submit a photo essay

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

### Photo essay requirements:

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

**IMPORTANT:** Make sure your entry has been approved through your chain of command.

For more information on writer and photographer guidelines, visit [http://www.public.navy.mil/navsafecen/documents/media/magazines/writer-photo\\_guidelines.pdf](http://www.public.navy.mil/navsafecen/documents/media/magazines/writer-photo_guidelines.pdf).



## viewpoint

commentary, opinion and point of view from *Sea Compass* readers

# Slow down. Back off. Take control.

By John Mapp

**A**ny given weekday morning, usually right around the crack of dawn, several thousand people clamber out of bed and into their cars and try to get to work. If you live near a military base, I guarantee that twice a day, tens of thousands of civilians, Sailors and Marines fill the same few highways and surface streets at just about the same time. Every weekday, rain or shine.

During bad weather conditions, the situation gets worse for most drivers. Many of those drivers will be tired, angry, annoyed, distracted, or a combination of all these things. If you live in an area where you experience harsh winters, you may be suffering from these conditions as well – even if you are doing everything right – just because those other drivers will inflict their problems on you.

You cannot control the actions and attitudes of other drivers. What you can control are your actions. You can minimize the risks of driving in bad weather by being proactive. Better still, this practice will absolutely reduce the risks of getting rear-ended – or of rear-ending someone else. All you have to do is back off. That's it. It really is that simple. Give the car in front of you some room. If you stay at least two seconds behind the car ahead of you, you'll have more time to react and stop.

*"Wait a second!" I hear you objecting. "How is that going to prevent the idiot who's tailgating me from hitting me?"*

Try slowing down a little more. Extend your following distance to three seconds (or more). Then you have even more time to react, which means the idiot behind you has more time to react, too.

There are a few other tips that can help reduce the risks. Not talking on the cell phone. Keeping your eyes on the road

ahead and the traffic around you. Not allowing yourself to get distracted by changing the radio station or CD player. Not trying to eat, shave, or put on make-up. All of these things should be done before you get in the car or after you get out of the car.

*"But I don't have time to do all that before or after driving to work,"* you complain. Hogwash! Worried about getting to work on time? Leave earlier. Can't find a good parking spot? Leave earlier. Running late because you overslept/daycare was late/whatever? This one is a bit tougher, because it goes against every instinct you possess: Slow down.

I know, I know. You're already running late and I'm telling you to take your time. Hear and believe. The worst thing that will happen if you're late for work is your chief or LPO might yell at you. Maybe you'll get a counseling chit. If you're late getting home to make a spectacular dinner, you might have to microwave a TV dinner tray instead. These are inconveniences. You have to be alive to be inconvenienced. These minor worries are nothing compared to the joys of appearing in traffic court, the pleasure of examining the décor in all the finest emergency rooms, and the adventure of that entertaining ambulance ride. And let us not speak of the comfortable confines of the luxurious coffin you can get fitted for at government expense.

Driving during the winter months is dangerous, but you can manage the risk by planning ahead and staying alert. It's much more comfortable to watch the calamities on the roads on TV than to experience those incidents first-hand. Why spend the winter recovering from a lack of planning?

Hear and believe. Slow down, back off, take your time, don't multi-task while driving, leave earlier, and – most important





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

– RADM Brian Prindle, Commander, Naval Safety Center

of all – keep your cool. If you get ticked off while driving, you’re more likely to break one or more of the basic survival rules already listed. If you’re driving the latest, hottest, most tricked-out wonder from the very best car builder and someone in a beat-up Bondo special passes you, let them. There is no challenge involved. If you’re driving a 10-year-old station wagon and some idiot blows by you in an overpriced and overpowered Egomobile, it doesn’t mean anything. If you’re running behind, and traffic on the highway is moving at the speed of glaciers, relax and keep calm.

Driving to work is not a contest. It is not a race. But you can lose. All you have to do is lose your temper or lose your cool. Losing your head while driving can lead to losing your license, your car, a huge portion of your paycheck, and even your life.

.....

Mr. Mapp, a retired Sailor, is a safety specialist assigned to Norfolk Naval Shipyard. His articles have previously appeared in *Sea&Shore* magazine and his command safety newsletter.

## Are you prepared to drive in wintry conditions?

### Loss of traction and braking

No matter what you drive, your only means of controlling the vehicle are dependent on four tiny patches of rubber – each about the size of the palm of your hand. If those small patches of rubber lose their grip with the road surface, you have lost control of your vehicle.

When driving in conditions where loss of traction is likely (heavy rain, snow, sleet, ice), do everything slowly.

- ▶ Reduce your speed.
- ▶ Make no sudden changes in direction unless absolutely necessary.
- ▶ Accelerate and decelerate slowly.

Jamming on the gas or the brake in bad conditions is a quick way to lose traction – and therefore control.

### Route planning

When travelling in severe winter weather, plan your route in advance.

- ▶ Try to stay on highways and freeways as much as possible – there are more services available and more chance of assistance should anything go wrong.
- ▶ Do not take shortcuts.
- ▶ Do not rely on your GPS to find the best route. GPS devices have been known to direct people onto sub-standard roads and into rivers.

## What's Your Point of View?

**Do you have an idea for a safety viewpoint or maybe a burning issue with a process or day-to-day routine?**  
**Send your commentaries, opinions and views to [safe-seacompass@navy.mil](mailto:safe-seacompass@navy.mil).**

## Safety Professionals to Meet in Virginia

The 20th Annual Safety Professional Development Conference (PDC) hosted by Naval Safety and Environmental Training Center (NAVSAFENVTRACEN) for Navy, Marine Corps, Army, Army Corps of Engineers, Air Force, and Coast Guard will be held in Hampton, Va., from March 12-16, 2012.

More than 1,000 safety professionals from around the world are expected to attend. This venue affords military and civilian safety professionals a chance to receive the most current and up-to-date safety information and training. This year's theme is "Mission First, Safety Always."

As with past conferences, all services including the Navy Echelon-2 commands will host break-out sessions for their activities on Monday, March 12. Tuesday will be an all-hands general session featuring a keynote and motivational speaker followed by concurrent sessions and training seminars the rest of the week.

This year will feature approximately 70 seminars covering a broad range of safety topics. The majority of seminars will be open seating and is based on a first come-first served basis.

The conference schedule and registration page will be posted January 2012. Visit the Naval Safety and Environmental Training Center website for updates.

### CONFERENCE INFORMATION

#### Registration and schedule

<http://www.public.navy.mil/navsafecen/navsafenvtracen/pages/default.aspx>

#### Conference venue

Hampton Convention Center  
1610 Coliseum Dr., Hampton, VA 23666

#### Accommodations

Embassy Suites Hampton Roads - Hotel, Spa & Convention Center  
1700 Coliseum Drive, Hampton, VA 23666

For hotel reservations call 757-827-8200 (reference group block code "Safety PDC"). For direct on-site hotel reservations please click [here](#).



[Visit the Naval Safety and Environmental Training Center](#)

## Need to share quick information with our readers?

If you have an important announcement, news brief, or safety information that can't wait until the next issue, you can be proactive and use *Sea Compass* to chart the way ahead.

In an effort to provide you with up-to-date and timely information, *Sea Compass* will also publish online news briefs for your convenience. You don't have to wait for the printed issue to get your announcements out to the fleet.

As with anything you submit for publication, please follow your command protocol for releasing information.

### Here's what you need to do:

1. Get approval from your chain of command, safety department or PAO.
2. Provide submission POC's name, email and phone number.
3. If referring to websites, please provide the full website URL (including the "http" or "https").
4. Provide as much information as you can including the who, what, where, when, and how to access the information.
5. Include photos, if available.
6. News briefs should be no longer than one page, double spaced.
7. Submit news briefs to [safe-seacompass@navy.mil](mailto:safe-seacompass@navy.mil).

For more information, contact the editor at [evelyn.odango@navy.mil](mailto:evelyn.odango@navy.mil) or call 757-444-3520, ext. 7220.



## SC Asked: What's wrong with this picture?

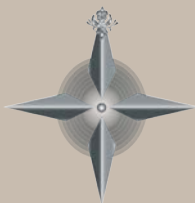


This picture appeared in the inaugural issue (Fall 2011) article by LT Edward Alexander, entitled "(Tell Me Again) How'd You Lose Your Life Raft?" in the B2BPMS section on page 15.

### The correct answer:

The life raft should be tied off with 1/4 inch nylon double braided line with the line run through five times and finished off with a clove hitch two half hitches.

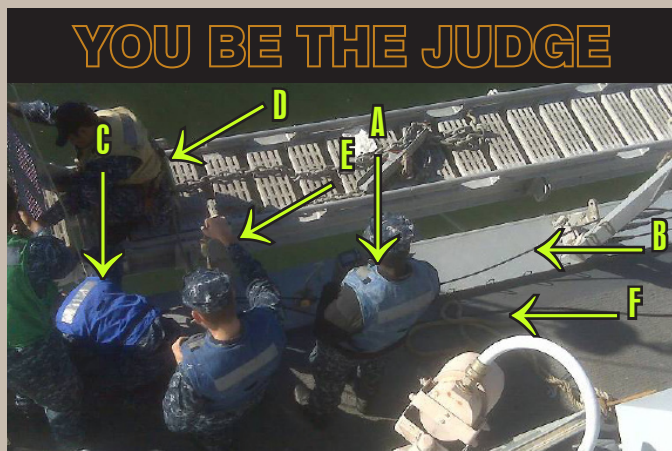
**Congratulations to BM1 Ben Mata, COMNAVBEACHGRU ONE.**



*Thank you for sending us your comments and feedback. If you have any quiz ideas, send us your suggestions with pictures and correct answers. You can do your part to keep the mind as sharp as it can be. This is one way to ensure personal safety and well-managed operations.*

*– Sea Compass Editor*

## SC Asked: What's wrong with this scene?



A case study about a deck operation appeared in the Fall 2011 issue, entitled "This Deck Operation Made the Hair on the Back of My Neck Stand" by ETC (SW) Jason Mobbs on page 20.

**You be the judge:** Identify the six infractions and see if you're up-to-speed with your deck-operations safety checklist. To get you started we pointed out the texting bandit (A).

**Congratulations to ABH1 John W. Jacob, USS Iwo Jima (LHD 7).**

### The correct answers:

The answers to infractions B-F are:

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



## ORM Essentials

Operational risk management (ORM) is a tool for making smart decisions at all levels. Each person has a role to play in managing risk for the unit, and each role is vital to success. These roles require different skills and knowledge.

- Leaders use the ORM process to plan unit operations.
- Junior personnel manage risk while they're actually doing tasks.

You already use ORM every day. When you follow a checklist, you're doing step four ("Implement Controls"). When you watch for changes, you're doing step five ("Supervise"). There are many other ways to apply ORM – both at the deliberate and time-critical levels.

Sailors aboard the amphibious assault ship *USS Bonhomme Richard* (LHD 6) test the aqueous film forming foam countermeasure wash down system. (MCSC Joe Kane/USN)

### What ORM Is

- A mindset and methodology that applies to any activity
- Accomplishing the mission with acceptable risk
- Planning using a standard, five-step process
- A continuous process
- Based on people's experiences
- Following procedures
- Watching for change
- Flexible
- Best when applied as a team
- Asking "What's different today?"
- A process that depends on skill and knowledge
- Sharing experiences and lessons learned
- Using available tools and resources
- Applied, standardized common sense
- "Looking before leaping"
- As in-depth as you have time for

### What ORM Isn't

- A way to avoid risk
- A safety-only program
- Limited to complex, high-risk evolutions
- A program rather than a process
- Only for on-duty tasks
- Just for your boss
- Just a planning tool
- Automatic
- Static
- Difficult
- Someone else's job
- A fail-safe process
- A bunch of checklists
- A bullet in a briefing guide
- TQL

**ORM**  
on the web

browse  
preview  
download  
sign up

[www.public.navy.mil/navsafecen/pages/orm/orm.aspx](http://www.public.navy.mil/navsafecen/pages/orm/orm.aspx)

- USN/USMC ORM instructions
- Evolution ORM assessment sheet
- ORM program assessment checklist
- Risk matrix postcard
- ORM courses on NKO
- Web tools and resource links
- Sign up for email updates



# Looking Back

highlights and events



Part of what we do at the Naval Safety Center is analyze the reports you submit about mishaps. The information we gather helps us determine the problem areas in the Navy and Marine Corps and provides our program managers strategies to prevent mishaps. So, how did we do in 2011 and how can we do better in areas we missed? The NSC afloat safety programs directorate provides some insight on our overall performance.



[Visit the afloat safety programs web page for more updates.](#)

## SAFETY SURVEYS

Are surveys  
getting better?

Shipboard safety surveys are improving. This does not imply that the Naval Safety Center afloat division is discovering fewer discrepancies. It means the team is becoming more proficient and has adopted a cross training perspective. For example, all surveyors – regardless of their area of expertise – have all been trained to look for common discrepancies that apply to all areas of the ship. Electrical safety, general damage control, and general safety are areas that each surveyor assesses and documents on the ship's safety survey final report.

## MISHAPS

What were the  
leading causes?

During calendar year 2011, there were three Class A mishaps. Unfortunately, the Navy lost one Sailor during an on-duty mishap. Two engineering casualties and one navigation casualty resulted in \$2 million or more in damage to a Navy asset. The common thread in all three mishaps was a combination of lack of deck plate leadership during major shipboard evolutions, lack of forceful back-up from junior to senior leadership, and lack of deck plate training of junior Sailors entrusted to operate multi-million dollar equipment.

## TOOLS

What resources  
are available through  
the afloat safety  
programs?

The Naval Safety Center afloat subject-matter experts have dedicated an impressive amount of time developing distribution lists throughout the fleet. Fleet leaders can become a member listed on a massive distribution list of SMEs for combat systems electronic material officers (EMOs), and electrical for electrical officers and enlisted electricians. If you wish to be added to these distribution lists, e-mail ETC Jason Mobbs at [jason.mobbs1@navy.mil](mailto:jason.mobbs1@navy.mil) for combat systems/electronic. For electrical, email EMCM Jim Burke at [jim.burke@navy.mil](mailto:jim.burke@navy.mil).

Additionally, the shipboard afloat division conducts safety seminars in fleet concentration areas to inform Sailors of the common discrepancies they may encounter aboard their own ships and how to correct them. The Naval Safety Center website also has links to the survey check sheets, the safety catalog, a comprehensive list of instructions and references, and links to training presentations.

## COVER STORY

# INTO THE COLD

By HMC (DSW) Dean Del Favero

**A**s the winter season rapidly approaches, the water temperatures are beginning to decrease. One of the biggest hazards associated with diving in cold water is hypothermia. Hypothermia, by definition, is an abnormally low body temperature. Most people will show signs of hypothermia when their core temperature drops below 95 degrees Fahrenheit. Water conducts heat away from your body 25 times faster than air does, so you cool more rapidly in water versus air. A low body temperature can affect your brain function and create a major hazard while diving.

Recognizing hypothermia is critical because it can be life threatening and needs to be treated immediately. The major signs and symptoms of hypothermia include excessive shivering, fatigue, confusion, loss of coordination, slurred speech, memory loss, and drowsiness.

Treatment always consists of re-warming, but be careful of how quickly you re-warm the victim. In severe cases

of hypothermia, re-warming too quickly can cause “after drop.” After drop occurs when cold blood returns from the extremities back to the core, causing the hypothermia to become worse. For this reason, always re-warm the core, not the extremities. You also want to minimize rough-handling the victim or allowing them to walk around on their own to prevent after drop and or a cardiac arrhythmia (abnormal heart beat). The first step in treatment is to remove the victim from the source of the cold and put them in a warm environment. Remove any wet clothing and wrap in warm sheets or clothes. If the signs/symptoms are severe, transport to a medical facility immediately for advanced care and observation.

The best way to treat hypothermia is by preventing it from occurring in the first place. Proper dress (wetsuit, dry suit, semi-dry suit, hot water suit), based on water temperature, should be carefully considered during the operational planning phase of your dive. Dehydration and poor nutrition





are predisposing factors, so stay well hydrated and eat a well-balanced meal prior to diving in cold water. Due to its vasodilating effect on our bodies, alcohol can be a contributor to hypothermia so stay away from alcohol when exposed to a cold environment.

Remember, hypothermia is a real threat when diving in cold water. The ability to recognize when you or one of your divers is stricken with hypothermia is critical. Prevention of hypothermia is of the utmost importance when planning your dives in a cold environment. Remember, dive safe!

## Medical Equipment Maintenance

A common discrepancy found while conducting our diving surveys is the lack of PMS coverage for medical equipment. MIPS for medical equipment can be found under the 6521 series. Here are some examples of this often overlooked equipment:

6521/582 Medical O2 Cylinders

6521/R48 Hand Operated Resuscitators (AMBU Bags)

6521/R43 Stretchers

6521/348 Zoll Plus AEDs

6521/606 Zoll Pro AEDs

Also remember to keep all your paperwork on equipment that is sent out for maintenance.

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HMC Del Favero is a diving analyst at the Naval Safety Center. This article originally appeared in the Fall/Winter 2011 edition of *Diving Safety Lines* newsletter.

To prepare for their cold water dives, EODCS Isaac Callicrate dons a hood before a hazard sweep (top photo). GM1 Shannon Hall, right, wears boots during underwater maintenance training (*Naval Undersea Museum*).

Opposite page photo: Sailors aboard the Navy hospital ship USNS *Comfort* (T-AH 20) spot a life raft at sea near Bermuda after being called for assistance by a Coast Guard that was responding to a distress-call from a fishing vessel shortly before capsizing. In this raft, Robert Lambe, one of the three Bermuda citizens believed to have been on the fishing vessel when it sank, awaits rescuers. Lambe was treated aboard *Comfort* for minor hypothermia. (JO2 Ellen Maurer/USN).

## Extra Coverings

Uncovered heads, hands, and feet lose heat more rapidly than other parts of the body because in cold water, the heart pumps extra blood to the torso to keep the body functioning normally. To combat this heat loss and to provide physical protection, divers wear hoods, gloves, and boots with their diving suits. As with diving suits, divers choose this type of equipment based on the conditions in which they will work.



# Wild Weather

A driving expert shares his hard-won wisdom for tackling the roads in the worst kinds of weather. **By Mac Demere**

**W**hat do rain in California, snow in the Carolinas and ice in Connecticut have in common? Each can wreak traffic havoc. Unfamiliar roads can surprise anyone, and even locals can be caught off guard by sudden weather shifts.

As a race car and test driver, I've driven all kinds of cars in all kinds of conditions in all kinds of ways – with both good and bad results.

I've learned that anticipation is the key to good driving. Racers traveling the distance of a football field in a second know better than to rely on reaction time; you have to be ready for what's coming. So, to prepare for bad weather, anticipate that you'll need new tires, that a blizzard is coming or that there could be black ice on the next corner. A little foresight paired with experience goes a long way. Here are some wild weather tips that I've tried and tested so you don't have to.

## SNOW

When driving on plowed snowy roads, be sure to stay in the wheel ruts created by the cars ahead. Often, the grip in a rut is almost as good as on a road that's merely wet. Most importantly, watch your speed.

Snowy roads demand proper tires. (Tire and wheel specialists at Tire Rack says the minimum tread depth for snow traction is 6/32 of an inch.) If you live in a snowy area, a good set of winter tires is a wise investment. Otherwise, near-new all-season tires are fine – most start with a tread depth of at least 10/32 of an inch.

There's a big difference between driving in snow and on ice. With the correct tires and attitude, millions drive safely on snow. Any good driving school will teach you the basics. There are good driving schools in most cities around the country. Ask your local car dealership to suggest one near you.

## ICE

Ice is trickier to handle – even just a little black ice can trigger a skid. First thing to know: Black ice isn't black. What you're seeing is asphalt under a sheet of clear ice. It usually occurs when temperatures hover around freezing. Snowmelt flows across the road and freezes into ice as slick as a hockey rink.

With headway, you can avoid black ice by slowing and steering smoothly. But if you hit an ice patch and start to slide, your tires have little grip and your options may be limited. The most important thing to do is remain calm and not overreact by slamming on the brakes or turning the wheel too much. To maintain control, make only small steering adjustments to help keep the car moving straight ahead until you move through the icy patch and back onto the road surface that allows you to regain traction.

## RAIN

To stay in control when driving through water, stay out of those wheel ruts (unlike while driving in snow), as rainwater collects in them. Good tires are also key. Tire Rack recommends 4/32 inch of tread as bare minimum for rainy situations to help prevent hydroplaning. Recovering from hydroplaning is much like recovering from an icy skid – don't brake or turn.

## FOG

The solid white lines on the right edge of the road are fog lines. Keep them in your peripheral vision to stay in your lane when driving through fog. Use your low-beam headlights, never your high beams or hazard lights. Slow down if visibility is poor, but don't pull over to the right shoulder unless absolutely necessary. Drivers behind you could veer out of their lane. Look for an exit if you need a break.



# Driving

## And consider this...

### BACK TO SCHOOL

Driver's manuals often offer vague advice about turning into a skid. But just as critical is turning the steering wheel back the other way at a crucial point. It takes practice, and the best way to learn is to experiment in a controlled situation. There are several great (and relatively inexpensive) driving schools that can teach you. Or try "slick track" go-karting to practice a controlled skid. It's the same skill, just a different vehicle.

### ALL-WHEEL DRIVE

All-wheel drive is excellent for helping a vehicle climb a steep, snow-covered driveway, but it does not increase cornering power on snowy or rainy roads. As a tire test driver, I have extensively evaluated all-wheel drive vehicles in all conditions. AWD adds grip while you're accelerating but not when cornering or braking.

### COMPUTERIZED BRAKES

Electronic stability control (also called ESC, ESP, VSA, StabiliTrak and VSC by various auto manufacturers) will be required on all light vehicle 2012 car models sold in the U.S. ESC is a complex computer-controlled system that applies the brake on individual wheels to balance uneven traction that sends you into a skid. ESC makes it much easier to avoid skidding and will therefore make the roads much safer for all of us. **SC**

Mac Demere is an automotive journalist who has written for *Motor Trend*, *edmunds.com*, *realcarguys.com* and others. He's a driving and tire safety expert and a former race car driver who competed in the NASCAR Southwest Tour and Rolex 24 at Daytona. Reprinted with permission from the Fall/Winter 2011 edition of *Geico Now* magazine.

Online:

Tire Rack: <http://www.tirerack.com>

## ➔ Danger Zones

- Some of the snowiest cities are concentrated in New York state. Syracuse averages 115 inches of snow per year and Rochester averages 93 inches. But there are places that get even more of the white stuff, including Mount Washington, N.H., and Valdez, Alaska\*.
- Point Reyes, Calif., is in one of the foggiest land areas in the world, with more than 200 days of fog per year†. Mount Washington gets fog about 60 percent of the year – along with record-shattering winds††. Other spots with poor visibility include the drearily named Cape Disappointment, Wash., and Mistake Island, Maine.

\*National Climatic Data Center records as reported by the National Snow and Ice Data Center

†farmersalmanac.com

††mountwashington.org

About the photo: Security personnel make sure drivers exercise caution aboard Naval Air Facility Atsugi, Japan, after a snow storm hit the area. (PH3 John E. Woods/USN)



The Naval Safety Center has prepared some presentations for the 2011 Winter Safety Campaign. Topics include DUI, home fires, weather, and – highlighted in this issue – the "Fatal Four." Although the winter months usually encourage some people to stay in and enjoy the warmth of their homes, there are others who need to be on the road for work or leisure travel. It's bad enough that winter driving poses certain road hazards; tragically, there are drivers that don't heed traffic warnings or state laws. The four elements below claim many lives in car wrecks – fatalities that could be prevented.

# The 'Fatal Four'

*Speed • DUI • No PPE • Fatigue*

## Speed

- Risk-taking behavior is often multiplied. Speeders killed in wrecks are nearly three times more likely to be DUI than sober, and 24 percent less likely to be wearing a seatbelt.
- The chance of dying in a crash is 15 times higher at 50 mph than at 25 mph.

## No PPE

### Seatbelts save lives

- More than half of the people who die in car wrecks were unrestrained.
- Traffic wrecks kill more people between the ages of 3 and 34 than any other single cause in the United States.
- NHTSA estimates that lap/shoulder seat belts, when used correctly, reduce the risk of a fatal injury to front-seat occupants by 45 percent.
- For military members, both DoDI 6055.4 and OPNAVINST 5100.12H mandate seat belt use 24/7.

### Helmets provide best protection

- Head injury is the leading cause of death in motorcycle wrecks.
- Motorcycle helmets provide the best protection from head injury for motorcyclist involved in traffic crashes.
- A helmet is the best protective gear you can wear while riding a motorcycle.
- When considering a new helmet, make sure to look for the DOT or SNELL sticker inside or outside the helmet. The sticker means that the helmet complies with the safety standards of the U.S. Department of Transportation (DOT) and/or the Snell Memorial Foundation.
- Wearing a helmet is a reflection of your attitude toward riding and shows that you are a responsible rider who takes motorcycle riding seriously.

## DUI

### What a DUI can do to your insurance

- Add a surcharge of between 35 percent and 200 percent, depending on the state, to your cost.
- You may not be able to get a new policy if you've had a DUI or had your license suspended within the last three years.
- You may not be eligible for preferred rates for up to seven years, which means your insurance will cost you an extra 30 percent even without the DUI surcharge.

## Fatigue

- Fatigued people get short-tempered, depressed or anxious.
- They react more slowly and are less vigilant.
- Fatigue often masquerades as complacency, inattention, distraction, task-fixation, or boredom.
- If you're planning a trip or a night out, try to stay off the road between midnight and 6 a.m. There is a strong relationship between time of day and traffic accidents. It isn't necessarily how long you have driven as what time you are driving.
- Learn to recognize the symptoms of fatigue in yourselves and those around you.

### A typical wreck involving fatigued driving

- Occurs during late night, early morning or mid-afternoon.
- Serious accident.
- Single vehicle leaves roadway.
- Occurs on a high-speed road.
- Driver doesn't try to avoid a crash.
- Driver is alone in the vehicle.



**Download the 2011 winter safety campaign briefs.**



# Heading out for fun this winter?



## **Learn the Sledder's Pledge:**

**I will never drink before and while driving a snowmobile.**

**I will drive within the limits of my machine and my own abilities.**

**I will obey the rules and laws of the state or province I am visiting.**

**I will be careful when crossing roads and always cross at a right angle to traffic.**

**I will keep my machine in top shape and follow a pre-op check before each ride.**

**I will wear appropriate clothing, including gloves, boots and a helmet with a visor.**

**I will let family or friends know my planned route, my destination and my expected arrival time.**

**I will treat the outdoors with respect. I will not litter or damage trees or other vegetation.**

**I will respect other peoples' property and rights.**

**I will lend a hand when I see someone in need.**

**I will not snowmobile where prohibited.**

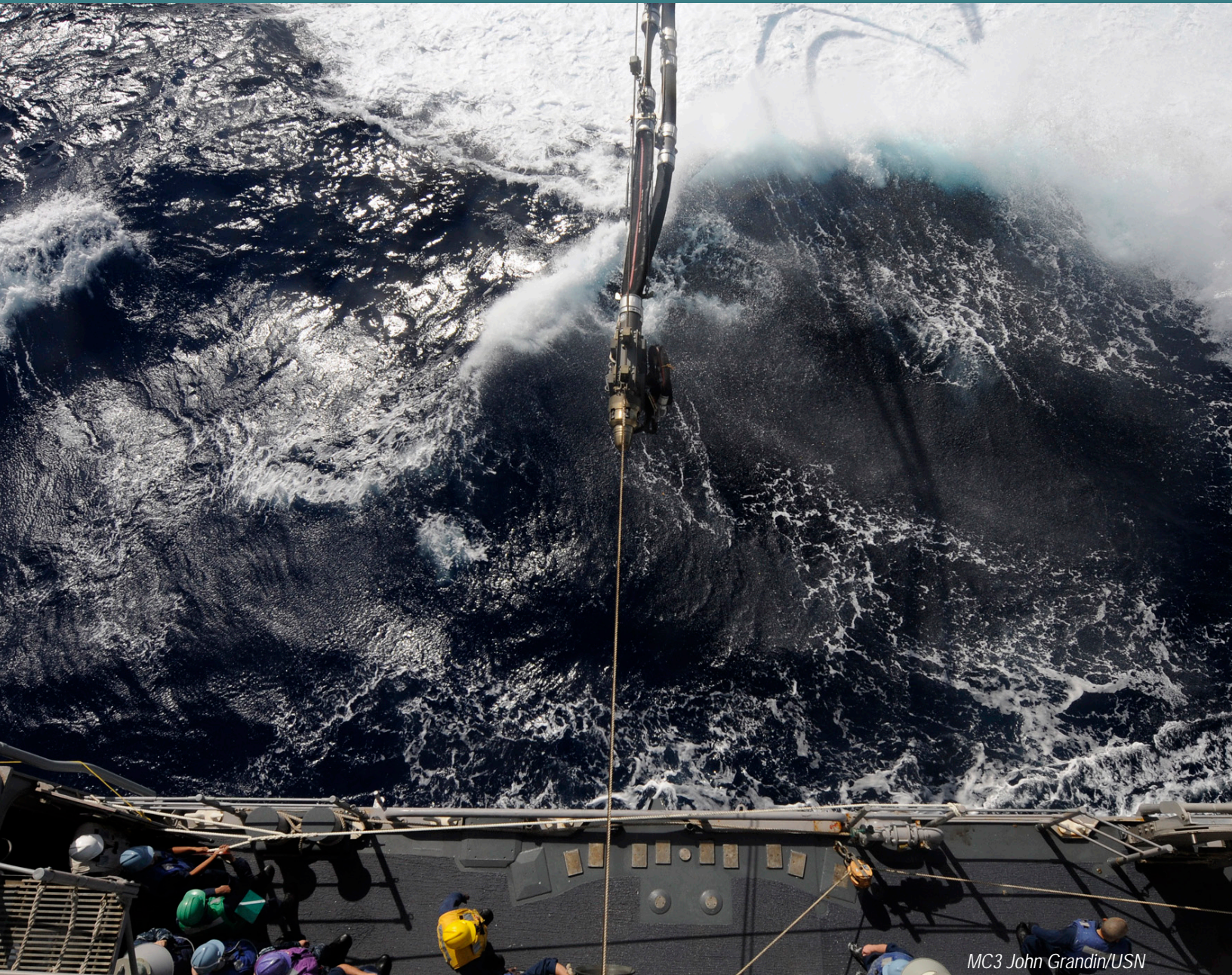
*U.S. Air Force photo by Senior Airman Jonathan Snyder*

To learn more about snowmobiling safety, visit [www.snowmobile.org/snowmobilesafety.asp](http://www.snowmobile.org/snowmobilesafety.asp)



# Our Sailors at Their Best

Getting the job done aboard USS *Bunker Hill* (CG 52)



MC3 John Grandin/USN

We believe that there's only one way to do any task:  
the way that follows the rules and takes precautions against hazards.

– Excerpt from the Naval Safety Center Mission Statement