

June-August 2009

### **RADM Arthur Johnson, Commander, Naval Safety Center** Col. Mark Vanous, USMC, Deputy Commander John Mahoney, Head, Communications and Marketing Department

Naval Safety Center 757-444-3520 (DSN 564) Dial the following extensions any time during the greeting.

### Sea&Shore Staff

Ken Testorff, Editor/Editor in Chief kenneth.testorff@navy.mil	7251
Patricia Eaton, Graphic Artist patricia.eaton@navy.mil	7254
Ken Testorff, Distribution	7251

Patricia Eaton, Graphic Artist patricia.eaton@navy.mil	7254
Ken Testorff, Distribution kenneth.testorff@navy.mil	7251
Points of Contact	
Publications FAX	757-444-6791
Shore Safety Programs Director Capt. Stephen Johnson	7166
Explosives & Weapons Safety Division Cdr. Al Wooten, Head	7164
<b>Traffic &amp; Off-Duty Safety Division</b> Dave Kerrick, Head	7165
<b>Tactical Operations &amp; Safety Investigation Division</b> Vacant	7147
Training Safety Programs Division CWO5 David Tomlinson, Head	7175
Installation/Industrial Safety Division Cdr. Brenda Smith, Head	7177
Fire Data Analysis Division Vacant	7169
Shore Safety Programs FAX	757-444-6044
Shore Safety General E-mail safe-shore@navy.mil	
Afloat Safety Programs Director Capt. Bob Breon	7127
Surface Division LCdr. Jim Lyons, Head	7834
<b>Diving &amp; Salvage Division</b> Lt. Sarah Wilson, Head	7837
Submarine Division Cdr. Carville Webb, Head	7838
Data Analysis and Media & Education Division	7130

### **Afloat Safety General E-mail**

**Afloat Mishap Line** safe-afloat@navy.mil

Steve Scudder, Head

Mishaps cost time and resources. They take our Sailors, Marines and civilian employees away from their units and workplaces and put them in hospitals, wheelchairs and coffins. Mishaps ruin equipment and weapons. They diminish our readiness. This magazine's goal is to help make sure that personnel can devote their time and energy to the mission. We believe there is only one way to do any task: the way that follows the rules and takes precautions against hazards. Combat is hazardous; the time to learn to do a job right is before combat starts.

**DSN 564-1562** 

Sea&Shore (ISSN 1550-1434) is published quarterly by Commander, Naval Safety Center, and is an authorized publication for members of the Department of Defense.

Contents are not necessarily the official views of, or endorsed by, the U.S. Government, the Department of Defense, or the U.S. Navy. Photos and artwork are representative and do not necessarily show the people or equipment discussed. We reserve the right to edit all manuscripts. Reference to commercial products does not imply Navy endorsement. Unless otherwise stated, material in this magazine may be reprinted without permission; please credit the magazine and author. Periodicals postage paid at Norfolk, Va., and additional mailing offices.

COAST GUARD: Send address changes or requests for more copies to Commandant, USCG, CG-113, U.S. Coast Guard Headquarters, 2100 2nd St., S.W., Washington, DC 20593.

MARINE CORPS: To be added to Sea&Shore's distribution list, increase or decrease number of copies, or take yourself off the list, see your unit publications clerk and have him access MCPDS. Sea&Shore's PCN is 74000001900.

POSTMASTER: Send address changes to: Commander, Naval Safety Center Attn: Sea&Shore, Code 71A 375 A Street, Norfolk, VA 23511-4399

Send articles and letters to the address above, or e-mail the editor, kenneth.testorff@navy.mil. Visit us on-line at www.safetycenter.navy.mil.

# FEAT

# 2 Barhoppers: A Boating Misadventure

By Lt. Jon Charlton

A family's day of boating fun ends on a sour note when one of the boats runs aground at high speed.

## 4 Been There, Heard That (But Didn't Listen)

While mowing the grass, the author forgets about procedures and pays a price.

# **6** The Kayak Trip From Hell

By Sgt. George Kashouh, USMC Settling for river kayaks instead of ocean kayaks causes problems for the author and three fellow Marines.

# 13 Family Vacation Gets Off on the Wrong Foot

By Cdr. Bill Conway

The author turns loose a hotel door that catches his daughter's big toe.

## 14 The Case of the Mysterious Blisters

By LCdr. Laura Mussulman

A mix of sun and lime juice on the author's skin causes a bizarre reaction.

# 15 Behind Every Cloud ... There's a Sunburn

By ATAA John T. Dorow

The author mistakenly thinks an overcast day will protect him from a sunburn.

## 16 Jack's Story

By Gary L. Johnson

A young man never walks again after diving into shallow water.

# 18 Wipeout!

By Ens. Daryl Dawson

The author's boogie-boarding experience lulls him into believing he can surf Oahu's infamous North Shore.

### 20 Bicycle Gear: What To Wear and Why

By LCdr. Doug Blackburn

A look at the protective gear you need if you plan to take up bicycling, even for recreational purposes.

### 22 When the World Turned Sideways

By AW2 (AW) Brennan Zwak

A Sailor suffers some bloody injuries when he falls while mountain biking.

# 24 A Quick End to Deployment

By Ltjg. Charles Pruitt

A seaman stowing deck equipment gets hit in the head with a hatch he accidentally unlatches.

# **URES**

# 25 Losing Focus, Losing Fingers

By HTFN Rachel A. Stubbs
Because of her carelessness, this author has a
permanently distorted finger to remind her about the
importance of safety in the workplace.

# 26 Suicide: A Call for Locker-Room Leadership By Lt. James "Kikko" Frey Some no-nonsense info designed to help shipmates get through troubled times.

# 29 **Biting the Hand That Pets You**By Lt. Ryan "Chew Toy" Craft Petting a neighbor's dog nets the author a trip to an emergency room.

# **DEPARTMENTS**

- Admiral's Corner
- 23 Letter to the Editor
- 30 osh

# Front Cover



A mountain biker gets air in Mount Hood National Forest, Oregon. Photo by Jim Semlor

# Admiral's Corner From Commander, Naval Safety Center







# Make It Fun... Make It Safe... Make It Back Home!

he high mark of the Critical Days of Summer (CDS) 2008 was that, for the first time in 28 years, not one Sailor or Marine was lost over the three-day Labor Day weekend. However, 49 Sailors and Marines died during the entire 101-day period. During this same time frame, 226 Sailors and Marines were injured in PMV mishaps.

The CDS 2008 fatalities represented a 10-percent decline in sports/recreation mishaps, a 39-percent decline in PMV-4 mishaps, and a 38-percent drop in alcohol-related incidents. According to the Alcohol and Drug Management Information Tracking System (ADMITS) database, DUIs during the CDS declined 14 percent from FY07 to FY08 [includes 61 FY08 cases with initial reports submitted but final adjudication still pending].

The clear cause for concern during CDS 2008 was motorcycle safety. There were 25 Department of the Navy PMV-2 fatalities, compared to the previous six-year average of 13.4. The 14 Navy motorcycle deaths recorded were more than four times higher than the previous year's total.

The period between Memorial Day and Labor Day poses greater risks for several reasons. Schools let out, families transfer and go on vacation, people open up their swimming pools and break out the barbecue grills, and many head for the beach. With all this increased activity, the mishap rates have a tendency to rise, often with tragic results.

Every Sailor, Marine and civilian must do his or her part to make the Summer '09 Joint Service Safety Campaign (formerly known as Critical Days of Summer) a success. Make a plan to recreate and enjoy off-duty activities safely. Additionally, you are challenged to assist all those within your span of influence to be successful. We're counting on you to know the statistics so you don't become one.

The foundation for many mishaps is a "bulletproof" attitude of, "Oh, it never will happen to me... that stuff always happens to the other guy." Well, guess what—to others, you are "the other guy."

As big a kick as one gets from all those summertime activities, one cannot afford to overlook risk management and safety. Those 49 Sailors and Marines we lost last summer aren't a figment of our imagination; they're 49 brothers, sisters, husbands, wives, sons, or daughters who were taken prematurely from this world due to carelessness on their part or someone else's. That's 49 devastated families who gladly would trade everything they have in a heartbeat to spend one more moment with their loved one or to hear that person's voice once more.

Have yourself a great summer! Don't torment your family and loved ones with unnecessary, preventable "drama." Make it fun... make it safe... and make it home. Your family is waiting on you.

A L Johnson

A. J. Johnson Rear Admiral, U.S. Navy

# Barhopperst A Boatt

By Lt. Jon Charlton, HT-18

ike storm clouds on the horizon, the approach of summer heralds a startling rise in boating fatalities across the country as more people take to our nation's waterways for sunshine, relaxation and fun. Boating fatalities peak in the summer, with June and July being the most deadly (103 and 93 deaths, respectively, in 2007).

My experience had a happy ending, but that's no guarantee yours will, so read and heed.

It was a beautiful holiday weekend in Tampa Bay. My family and I planned to spend it island-hopping on the water. My uncle had trailered his boat up from Miami to join us. Because my family hailed from Tampa Bay and spent nearly every weekend on the water, we knew the local waterways very well. My uncle, on the other hand, didn't know the area and was an inexperienced boater.

After spending the day on a very popular



# Misadventure

island, we loaded up both boats for returning to the marina. We led, while my uncle and cousin trailed in their 17-foot Boston Whaler. A few minutes into our voyage, my uncle decided to deviate from our course after sighting a channel ahead. We slowed to a crawl, giving him a chance to catch up and to ensure he knew the correct route. We still were in the lead and already were in the channel as my uncle's boat approached its entrance.

As we watched, my uncle and cousin headed

far right of the red channel markers and into danger. We maintained our slow pace and frantically motioned for them to slow down and to come left. However, they maintained about 20 knots while happily waving back, oblivious to the impending danger.

Their boat was abeam of us when the outboard's lower unit shot out of the water, and the boat suddenly stopped, ejecting my cousin out the front. As he skipped 10 feet across the water, my uncle took the steering wheel in the stomach before pulling the kill switch. Fortunately, neither suffered serious injuries. but both were embarrassed. Meanwhile, the undamaged boat had run aground on a sandbar.

This incident could have been much worse. Here are some lessons we learned from it:

• Avoiding danger, injury or distress while boating begins with preparation.

Many states require a certified boating-safety course before they will issue a license. [Navy and Marine Corps instructions require people who rent boats from Navy Morale, Welfare and Recreation or Marine Corps Community Services facilities to be trained and to be evaluated on their qualifications.] Offered nationwide by the U.S. Coast Guard Auxiliary, U.S. Power Squadron, and other volunteer organizations, these courses are available in person and online. One of the things you'll learn is the Rules of the Road. Knowing even a little about navigation aids would have kept my uncle and cousin off the sandbar. Never rely on a single navigation aid, and remember that buoys can shift position or even drift free from moorings. Carry a chart of the area so you can identify navigation aids.

- Boating and alcohol don't mix. A boat is a vehicle and, like a car, requires dexterity, coordination, and good judgment to operate safely.
- Ensure your boat is stocked with a personal flotation device (PFD) for everyone aboard, full fuel tanks, and emergency equipment. [OpNavInst 5100.25A and MCO 5100.30A require everyone in a Navy MWR- or Marine Corps CS-rented boat under 16 feet in length to wear a PFD while underway. Some states also require children under a certain age to wear a PFD.] You might laugh, but running out of gas isn't funny when you're waiting for a tow back to the marina. Make sure your engine is tuned, and always file a float plan.

The author was assigned to HSL-47 when he wrote this article.

## Resources:

- U.S. Coast Guard Boating Safety, http://www.uscgboating.org/
- Boating Safety, http://www.boatingsafety.com/
- Boating Courses, Boating Tips, Boating Safety, Boating Contests, http://www.boatsafe.com/



# Been There, Heard That (But Didn't Listen)

e've all been there: After a long week of work trying to save the world, a beautiful weekend is upon us, but we can't start enjoying it until we've completed a handful of household chores. During times like these, we sometimes forget all those safety practices everyone harps about in the workplace, and I'm no exception.

As a 34-year-old, selected-reserve lieutenant commander, I've attended every safety stand-down, I've read every ground-mishap report, and I've wondered how anyone could make so many dumb mistakes. Now, though, I'm sitting here wondering how I could have become just another victim.

One Saturday morning after my family and I had moved into a new house in an established neighborhood, I awoke, played with my baby daughter a while, then headed outside to do some yardwork. We had lived in an apartment for the past two years, so I had to work on my lawn mower before I could start my tasks. I filled it with oil, put new gas in it, and installed a new blade. I then found an old pair of shoes and removed one of the shoelaces so I could tie off the safety handle. I wanted to be able to move around the yard without my mower shutting down. I also took off my good tennis shoes and put on an old pair I had reserved for this kind of work.

I mowed the front yard and both sides, leaving what I couldn't mow safely for a weed eater (you see, I'm always safety conscious). When I moved to the backyard, which is nearly flat, I suddenly realized an old pear tree had dropped hundreds of pears on the ground. Some still were hard; others were rotten. I remember thinking, "I should rake those up, but I've not unpacked the rake yet, so I'll wait until the next time."

With only four or five more passes to go, I came upon an outdoor fire pit, which was surrounded by bricks. I already was making plans for

the rest of my afternoon as I whipped around the pit, and that's when it happened. My old sneakers, with little or no tread, met with one of the rotten pears. I was pulling the mower as I walked backward, so, as I slipped, my feet went forward, and the mower's momentum carried it toward me.

OK, now that everyone is done cringing, here comes the "lesson" part.

My first mistake was not surveying the area I was mowing. If I had seen the pears earlier, I



probably would have opted to rake them up before trying to mow.

Another mistake was my choice of working apparel. How many times have we heard a supervisor talk about PPE? The tennis shoes I was wearing were sitting next to a pair of steel-toed boots with Vibram soles made to protect against slipping. They're very warm hunting boots, but they would have been even more valuable to me this day.

My next error was allowing my mind to wander. For seven summers while growing up, I mowed up to 30 yards per week, and I never had a mishap. Why now? As a young man, I didn't have many responsibilities; I only had to worry about myself, and I had time to waste. Now, I have pressure at work, a wife and daughter to consider, and my time is valuable to me. I can't recall what I was thinking before the mishap, but I know I was daydreaming. Though experience is a factor in reducing mishaps, the fact we've done some-

The boy in this photo and the victim in the story have a couple of mistakes in common: They aren't wearing PPE, and they're pulling a lawn mower backward.

thing hundreds of times doesn't make the task any less dangerous. Mowing the grass involves a rotating, cutting blade that moves very closely to our feet. The lawn mower was dangerous when it was invented, it was dangerous last month, and it's dangerous today.

I know everyone is awaiting the results of my last mistake. Well, the worst never happened. I'm not sure why, but I decided not to use the shoestring to override the safety handle. I recognized that mowing over pears was hazardous, but I can't say that's what kept me from making such a mistake. Because I was squeezing the handle with my hands when I lost my grip on the mower (after it already had hit my foot), it shut down. If it had kept running, I would have suffered much more damage.

To my delight, the mower blade only cut through the toe of my shoe, catching my big toe under the toenail. It sliced the toe, removed the nail, and hit the tip of the bone. During an hour in surgery, an orthopedic surgeon removed a tiny section of bone and the nail bed, cleaned everything, and pulled the skin from the bottom of my toe to meet the area where the bottom of my nail was. The result was a big toe that is about an eighth-inch shorter than the other one, and I'll never have a toenail again. I missed a week of work and hobbled around for more than a month, wearing a special shoe, but I consider myself extremely lucky.

In today's world, we all use equipment that has made our jobs easier. We also need to keep in mind that no matter how many times we use that equipment, hazards still exist, and if we don't follow procedures, we're going to fall victim to progress.

Author's name unavailable.

### Resources:

- Lawn Mower Safety, http://www.aap.org/family/tipplawn.htm
- Lawnmower Safety Tips, http://www.safetycenter.navy.mil/articles/a-m/lawnmower.htm
- Lawn Mower Safety Could Save Life and Limb This Summer, http://www.med.umich. edu/opm/newspage/2003/lawnmower.htm



By Sgt. George Kashouh, USMC

hree friends (Cpl. Davis, Cpl. Yamada, and LCpl. Jose) and I decided it was time to do something adventurous. We came up with a plan to rent kayaks and travel from Parris Island, S.C., through the Port Royal Sound, to Hilton Head—a distance of 3 miles.

Davis had gone kayaking before, and Yamada had done some ocean kayaking just a week earlier, but LCpl. Jose never had been kayaking—he couldn't even swim well. He was interested in trying out for force recon, though, so he figured

such an outing would be a good challenge for him.

I knew crossing the Port Royal Sound would be hazardous. People we invited to go with us kept bringing up good points: "What about the changing tides? What about undertows, the sharkinfested waters, and thunderstorms?" They told us we probably would end up at the Broad River Bridge or out in the Atlantic Ocean. These comments, though, only made us want to go more.

We spent a week planning our adventure. I checked the tides and weather and arranged to



have someone in Hilton Head to pick us up. Jose and I even went down to Parris Island to find a decent place from which to leave. We marked down all the oyster beds and found a spot that just was sandy. We planned to leave at high tide so we could ride safely over the oyster beds—a move designed to protect anyone who might fall from his kayak.

Saturday finally came, and it was time for us to leave. We bought a waterproof camera, a compass, and a rope. When we went to check out the kayaks, all of them were gone, so we had to go to the naval hospital's MWR, where they had four left. What they had, though, were river kayaks, not ocean kayaks. None of us knew the difference, and we really didn't care anyway because, after so much waiting, we definitely weren't going to postpone our trip another week. We checked out the river kayaks and personal flotation devices and arrived at Parris Island about 1300.

Everything started out fine: We were heading straight to Hilton Head, just as planned. The water was very calm. The weather report had said there was a 30-percent chance of thunderstorms, but no signs of rain existed at the moment. We all were excited and taking pictures of each other. Things were going so well at first I thought we

might make it across the sound in about an hour, instead of the two we had estimated.

After traveling probably a half-mile off the coast, Jose's kayak suddenly capsized when he lost his balance. Even though he couldn't swim well, Jose held on to his kayak until Davis and I could flip it over and help him get back in it—a job that took about five minutes.

Because we had river kayaks, the type you stick your legs straight into, the inside had flooded. Davis and I got on each side of Jose's boat and held it for support, so Jose had both hands free without worrying about losing his balance again. Jose then used his hands to splash the

water out of his kayak. It took a long spell to get most of the water out, but we finally were back on our way.

That first incident was disappointing; it had cost us so much time, but the important thing was that we were back on track, and everyone was fine. Unfortunately, more difficulty would follow.

We had been in the water about an hour when Jose again flipped his kayak, and Davis and I had to upright it for him. As Jose was trying to get back in his kayak, however, it flipped a third time and now had even more water inside. We were helping him with this problem when some really big waves hit and flipped Yamada's kayak, as well. Jose and Yamada both treaded water while Davis and I struggled to upright their flooded kayaks and get them seated again.

Davis helped Jose, and I helped Yamada. During this time, Yamada and I drifted about 50 feet away from Davis and Jose. Once Yamada was back in his kayak, I went to help Davis and Jose, who still were having trouble. By this time, Jose had been in the water about 15 minutes and had suffered multiple jellyfish stings.

As I was en route to Davis and Jose, my kayak went across a big wave caused by the currents churning in the sound. The wave came directly from underneath and rapidly carried me straight toward Davis and Jose. At first, I seriously thought a whale or shark was surfacing below me and was going to carry me into the air. I rode three more swells like this one until I reached Davis and Jose.

With Jose's kayak flooded almost to the top, there was no way he could get back inside without his weight completely submerging it. Davis and I would have to empty it while Jose treaded water. We tried using our hands but quickly realized the futility of that effort.

By now, Jose was yelling about the jellyfish attacking him, and both he and Yamada were asking to use the cellphone I had brought along to call for help. Jose definitely wasn't taking this situation well; he was getting angry about the jellyfish.

I ignored both Yamada and Jose as Davis and I worked to roll Jose's kayak over to empty out the water. Unfortunately, we couldn't get rid of enough water to make the kayak suitable for Jose to get back in. Each time we got on either side of the kayak and lifted it into the air to dump the water, the extra weight immediately pushed both of our kayaks down so low we almost were taking

in water. We kept trying new ideas until we finally were able to empty enough water for Jose to get back inside, where he used his hands to finish splashing out the remaining water. There was one noticeable difference between the first time he did this and now, though: None of us was laughing this time.

Jose was saying that he was done and that we needed to go back. We were much closer to Parris Island than Hilton Head (still 2 miles away), but if we turned around, we would have to fight the tide, and I wanted to press on. We had intended to kayak straight west to Hilton Head, and even if the tide did take us south, as we had planned, we would have a couple miles of room to beach.

I tried to convince Jose that we had to keep going. I gave him my brave-heart speech about how we had said we would make it and still could do it. I also added that if we had thought this adventure was going to be easy, and that we would be able to go straight across the sound, we never

# "What about changing tides? What about undertows, the sharkinfested waters, and thunderstorms?"

would have done it in the first place. We all talked a little while, and everyone agreed we would continue our journey to Hilton Head.

As we kayaked directly west again, I gave Jose some tips (based on what I had learned during my few hours of kayaking) about how to stay balanced. The tides were going out now, and we were getting into some really big waves—much bigger than anything we had been through so far. I knew one of us would tip over again; Davis and I came close a few times, but surprisingly, we all were holding our own. We kept going straight through the big waves on our way to the other island.

None of us wanted to capsize again and spend time trying to splash the water from our kayak, so we took every precaution we could. We agreed to stay close together, and when one of us got too much water in our kayak, the others would hold onto it for support while the victim emptied out the water. We were confident we would make it to Hilton Head and were laughing and joking about our previous problems, even though we now were going through the roughest water yet. Our luck wasn't going to last much longer. Jose's craft suddenly capsized after some large waves flooded it. Our first reaction was, "Oh great," but we still treated it as an inconvenience, rather than a big deal.

Jose held onto his boat, while we all tried to reach him. In the process, Yamada's kayak capsized, too. Both Jose and Yamada also lost their paddles, and Yamada lost one of his shoes that had been in his kayak. Davis went to help them, while I looked for the paddles and Yamada's shoe.

Getting the two kayaks upright this time was nothing like the first incident. Huge waves were hammering us, and every time we got a decent amount of water emptied, another wave would splash over us, again filling the kayak. Jose and Yamada both were cursing about the jellyfish and saying they wanted to call off the adventure. Yamada was punching the water, while Jose tried to get into Davis's kayak and grab my cellphone. Davis asked Jose whom he thought would come out to help us, then told him to get off his kayak. Jose insisted, however, that we call the police or someone at the squadron.

The situation was getting even worse: Jose's boat had taken on so much water it submerged to the point where Davis and I had to get on either side and hold on, just so it wouldn't sink to the bottom. Meanwhile, Jose and Yamada were struggling to stay afloat, and, of course, the waves and tide weren't helping at all.

During the next 45 minutes, all of us nearly capsized several times. I worked with Davis, and we eventually found a technique that paid off. We rolled the submerged kayaks on top of the front of ours to drain the water from them. While we were working on one kayak, though, Jose grabbed onto mine so hard I almost fell out. I got mad enough I wanted to hit him with my paddle and told him to back off and wait. He backed off only for a second, then grabbed onto my kayak again. This time, I fell into the water.

I remember falling and the feeling I got of not knowing what was in the water around me. Some jellyfish were nearby, but none of them touched me. I also remember seeing something in the water; it was large and looked a whitish color. With no idea what it was, I panicked and tried to

8 Sea@Shore



jump back into my kayak. As soon as I did, the thing in the water swam away, and my kayak just rolled back over.

I calmed down and tried once more to get back inside my kayak—more carefully than before because I didn't want my kayak going underwater like Jose's had. Davis helped me get back into my craft, where upon I had to empty out the water before I could help anyone else.

I worked as fast as I could, while looking around to see that everything else was in chaos. One kayak had drifted so far away that Davis had had to go out and tie the rope to it. He now was paddling back, while Jose and Yamada held on to the other overturned kayak. Personal belongings—shoes, shirts, and sunglasses—were floating in the water all around us. In the distance, I could see the camera. I really was tempted to ignore what was going on around me and go get it, but I knew I couldn't, given the condition of my kayak and the situation everyone else was in.

After what seemed like an eternity, I was able to empty my kayak enough to where I could help everyone else. Davis and I lifted the sunken kayak across ours and flipped it upside down until all the water had drained out. Our kayaks came with two compartments on each side, both of which somehow had flooded. We had to open and drain them, which allowed everything inside to fall into the ocean. At that point, though, we really didn't care what we lost. Finally, we got all four kayaks upright, with most of the water removed.

Just when I felt we could relax, Davis said something that made me feel threatened seriously for the first time. He said we were at the point of no return, directing my attention to the buoys that marked the end of the sound and the beginning of the Atlantic Ocean. We were close enough to see the rust on the buoys and were getting still closer, which meant the tide had pulled us 5 miles in a direction we never really had wanted to go. We had intended to go west and land on the

Summer 2009



northeastern part of the island, but, now, the very southeastern part of Hilton Head was directly west of us. There was no more debate about calling off the rest of our trip and going back to Parris Island. We all knew we had to make it to Hilton Head, or we'd end up in the ocean in our river kayaks.

I stayed next to Jose, while Davis stayed beside Yamada, as the waves continued to grow. We couldn't help drifting into the ocean at this point. We went slightly past the buoys but still were heading toward Hilton Head. I remember Jose asked me how far it was, and I said probably a mile-and-a-half.

Somehow, Davis and Yamada ended up getting really far behind Jose and me. I suggested that we stop to wait for them, but Jose didn't want to because, when he stopped and lost his momentum, he usually flipped over. Besides, the waves hadn't died down at all, which almost would guarantee our flipping over if we stopped and turned around to wait.

As Jose and I got closer to Hilton Head, Davis and Yamada got farther behind us. They eventually got so far away that all I could see was Yamada's bright yellow paddle, and it took a few seconds to spot it each time. Nevertheless, Jose and I continued on to the island until we could make out people on the beach and the colors they were wearing. By now, my left arm felt like someone had punched it a hundred times right about my bicep. Finally, Jose's paddle hit the bottom, instead of water, and we were able to get out of our kayaks and drag them to shore.

Walking again felt strange; we had been in the water for about six hours. Exhausted, we fell down on the beach and tried to spot Davis and Yamada. After a while, I saw what I thought was the telltale yellow paddle coming toward us. Jose and I were happy that we now could sit and relax as we waited for them. Unfortunately, we weren't able to relax very long.

After about five minutes, the bright yellow paddle we thought we had seen disappeared, and we couldn't see anything in the water. Then, it hit us; we realized we probably had mistaken white caps from the waves for Yamada's paddle.

Although Davis and Yamada had been far behind us, we knew they should have beached by now, or we should have been able to see them. Worried, Jose and I left our kayaks with some people who were lounging on the beach and

started jogging south, hoping to find our friends beached somewhere. To our left was a big sand bar that came out of the ocean, and we figured they probably just had landed there. Jose and I had fought the current to get to where we landed, so we figured they probably had ridden the current to the sand bar.

We asked some people walking in the other direction if they had seen anyone with kayaks. While we were talking to them, someone else came up and said a couple guys on the sand bar were yelling for help and that, if we stayed quiet, we could hear them. I listened and barely could make out Davis yelling for help—from the same sand bar where we had looked just a little earlier. The yells were getting people's attention on the beach as we prepared to find out what was happening.

Jose and I ran back to get our kayaks, then headed toward the sand bar. I could see what I thought was Davis standing in front of us the whole time we were crossing toward him. I had no idea why he had been yelling for help but didn't figure it was anything serious because he wasn't acting frantic. As I got closer, I realized I only had been looking at a pelican—not Davis.

When Jose and I landed on the sand bar, we saw nothing but pelicans all around us. Now I really was worried again and began wondering if I actually had heard Davis yelling. Up ahead, on the very far corner, I barely could make out a white boat just off the sand bar. Jose and I started

running toward it, and as we got closer, we saw a small red spot behind it, hoping it was one of the kayaks.

It took a long time to reach the boat, but we were happy to find it dropping off Davis and Yamada when we got there. The waves had sunken Yamada's kayak, and Davis couldn't pull it

# At first, I seriously thought a whale or shark was surfacing below me and was going to carry me into the air.

out by himself. They had ended up drifting out to the ocean, where Davis gave Yamada the option of staying with him or heading to shore to get help.

We thanked the people in the boat, and before leaving, they gave each of us two bottles of water, which we really needed. Davis and Yamada were mad at us for a while for leaving them, which is understandable. When we told them why we had kept going, they said they understood. We all just were happy to be back on land.

Our trip, although successful [if you define "success" as "nobody drowned"—Ed.], had included several close calls, and we had lost lots of personal property. The person who was supposed to have picked us up several hours earlier had left, so we were stranded on the island, with the burden

of dragging the kayaks everywhere we went. We also were starving, and some of us were without money, shoes or shirts. Because we had crashlanded at a resort on the island, we decided to go to a restaurant but were asked to leave since shoes and shirts were required—the perfect ending to a perfect day.

Looking back, I realize we were lucky no one got hurt—or worse. Some of our planning was good, but we overlooked the importance of having the proper gear. If we had





had ocean kayaks, which are similar to surfboards, our problems would have been reduced considerably. We also should have found someone more reliable to wait for us on Hilton Head—someone who, instead of leaving, would have gotten help when we didn't arrive within a reasonable time.

The author was assigned to VMFA 115 in Beaufort, S.C., when the events in this story occurred.

The standard equipment for kayaking is simple. The kayak should be a model that is handled easily by the kayaker. There are risks in kayaks that are too small, as well as in those that are too large. Kayaks should be built sturdily, so the seaworthiness of the boat never is in question. Used gear should be free from major damage. Here are other equipment tips:

• Personal flotation devices should be designed to allow freedom of movement while remaining fastened securely to the paddler's torso. A PFD that rides up when floating in the water is dangerous since the paddler's arms or head can be immobilized. PFDs should maintain their buoyancy; don't use one with a ripped or torn cover or damaged foam.

- Clothing such as wetsuits and drysuits are important gear for preventing the risks of immersion in cold water—namely hypothermia. They should be mended as necessary to maintain their water proof quality.
- VHF radios are an important piece of equipment for paddlers who frequent major maritime areas. These devices can be used to communicate within a group, to summon help, to coordinate locations of shipping traffic, and to check weather. Keep this equipment in a waterproof bag that is stored in a dry place.
- Emergency and rescue equipment, such as flares, strobes, lights, whistles, and dye markers, should be stored in a dry area. Keep them in an accessible dry bag while paddling, and replace those items with expiration dates at the appropriate time.
- Paddlers venturing out on large bodies of water should carry navigation equipment, such as a compass and chart. Global-positioning satellite units also are handy devices but should act as complements to, not replacements for, your chart and compass.

12 Sea@Shore

# Family Vacation Gets Off on the Wrong Foot



By Cdr. Bill Conway, OinC, FACSFac Pearl Harbor

relaxing trip with the family—what could be better?" That was my thought as my wife and I started our first morning of summer vacation at the beach with our 5-year-old daughter and 2-year-old son. The commercial flight had been uneventful and the first night's sleep restful. We were ready for an early morning breakfast and exploration. I was excited, and so was everyone else.

It was nice to leave the Navy behind for a while, relax and forget everything. That's what vacations are all about, right? Unfortunately, in my happiness, I forgot too much, and it cost me.

Upon leaving the hotel, our children were right behind me, like ducklings. Our daughter was less than an arm's length away as I exited the front door and let it go. The door had a very effective retracting mechanism and caught our daughter's foot about halfway through the closing movement. I instantly knew my mistake when I heard a thud. I turned to find the door had smashed her big toe; the toenail was hanging by a piece of skin, and the wound was bleeding profusely.

I paid for my error with a trip to an emergency room, taking care of our daughter's toe for 10 days while on vacation, and watching her disappointment every time I said, "No, you can't go swimming." At the emergency room, our daughter lectured me about all the advantages of closed-toed shoes—an education she had gotten at a Navy Child Development Center. I apparently—in her eyes—had no clue.

Our daughter had been wearing sandals the day of the incident. Her mother had thought they were cute, and I had thought they were comfortable. Both of us forgot to be a bit more careful about their providing limited protection. We had left too much Navy common sense behind.

A little more awareness on that vacation would have made it memorable for everyone in a better sense. As it is, I'll have a constant reminder of what can happen when you leave too much behind at vacation time—and I'm not talking about a credit card.

The author was assigned to HSL-47 when he wrote this article.

### Resources:

- Vacation Safety, http://www.healthatoz.com/healthatoz/Atoz/common/standard/transform.jsp?requestURI=/healthatoz/Atoz/hl/sp/trvl/vacationsf.jsp
- Family Vacation Survival Guide, http://www. familyvacationsurvivalguide.com/articles/plan\_ ahead/2008/08/general\_safety\_while\_traveling.php

# The Case of the Mysterious Blisters

By LCdr. Laura Mussulman NOSC Kansas City

he Midwest was having another summer heat wave, so I didn't hesitate when a friend invited my daughter and me to spend a day boating with her. I jumped at the chance to explore Smithville Lake in Kansas City, Mo.

The sun was intense, with temperatures in the mid-90s. Being the conscientious parent I am, I insisted my daughter wear her life jacket the entire time we were on the lake. I also applied lots of SPF-50 sunscreen to her fair skin. However, I wasn't as conscientious about my own fair skin—I only used an SPF-8 sunscreen.

By midday, we were ready for lunch, so we anchored the boat in a cove, and my friend offered me a Corona with fresh lime. "That'll be the perfect choice to quench my thirst," I thought. I squirted the lime in my beer and wiped off the excess juice drip-

ping down my right hand onto my right thigh.

After lunch, my 2-year-old daughter pretended to drive the boat and played in a big inner tube, while my friend and I swam in the lake. We spent the entire day on the water, and by late afternoon, I could tell I had gotten too much sun.

I awoke Sunday morning to find my shoulders and legs were pink—not the worst sunburn I've ever had but bad enough. By Monday morning, I began to notice my right thigh had five red streaks, and my sunburn seemed more intense. As the day passed, the streaks turned into a 2nd-degree burn and began to blister. My right thigh looked like I had laid a hot curling iron on it five times. Meanwhile, my left thigh had a couple of thin, long, dark streaks and one large blister. I also discovered my stomach had a small, splattered pattern of blisters.



By Monday night, I was beginning to wonder what could have caused such an intense burn; the blisters were nickel size and quarter-inch thick. I looked through an old dermatology book from college for something to explain such a mysterious reaction, but I didn't find anything.

Because I work at a medical hospital, I consulted with two physician friends on Tuesday morning, and they said I definitely had a 2nd-degree burn from the sun. I wasn't convinced, however, that the sun alone could have caused such intense burning in this peculiar pattern. Other parts of my body that were more sunburned didn't have the same reaction.

By mid-afternoon, I was limping from the intense pain. A co-worker asked me what was wrong and, after taking one look at my burn pattern, immediately asked if I had had limes while on the boat. Her question took me by surprise, but I acknowledged I had squirted some lime in my drink. Unfortunately, some of the initial squirt had gone on my stomach—I had worn a bikini that day—and I also remembered wiping my right hand on my right thigh afterward.

The co-worker then told me about a friend of hers who had experienced the same thing once at the beach. The beach medics who treated her knew the burn was caused by lime juice, in combination with the intense sun exposure. The clinical name for the condition is phytophotodermatitis (PPD), sometimes called phototoxic dermatitis [see inset photo on previous page]. The clinical pattern is that the blisters don't develop until 24 to 72 hours after exposure, just as mine had done.

I investigated further and found that key clues to diagnosing PPD include "bizarre inflammatory patterns and linear streaks of hyperpigmentation. These patterns often result from brushing against a plant's stems or leaves while outdoors or from the liquid spread of lime juice over the hand or down the forearm. A handprint pattern from lime-juice contact is not uncommon."

Although the burn is extremely painful, it was interesting to solve this puzzling mystery. My advice is to be careful this summer, and always wear sun block. More importantly, always wash off any lime juice while you're at the pool, lake or beach.

The author is a Navy Reserve aerospace physiologist who was on AcDuTra at the Naval Safety Center when she wrote this article.

# Behind Every Cloud ... There's a Sunburn

By ATAA John T. Dorow, VQ-4

never thought a sunburn would land me in medical, let alone SIQ for two days—all because I mistakenly underestimated the power of the sun. As a result, another Sailor from material control had to fill my position.

First-degree burns on my arms and seconddegree burns across my shoulders *[see accompanying photos]* have earned me a reputation in my squadron



as "that idiot who got sunburned." I was in tears as my wife had to put my shirt on for me, just so I could go to medical.

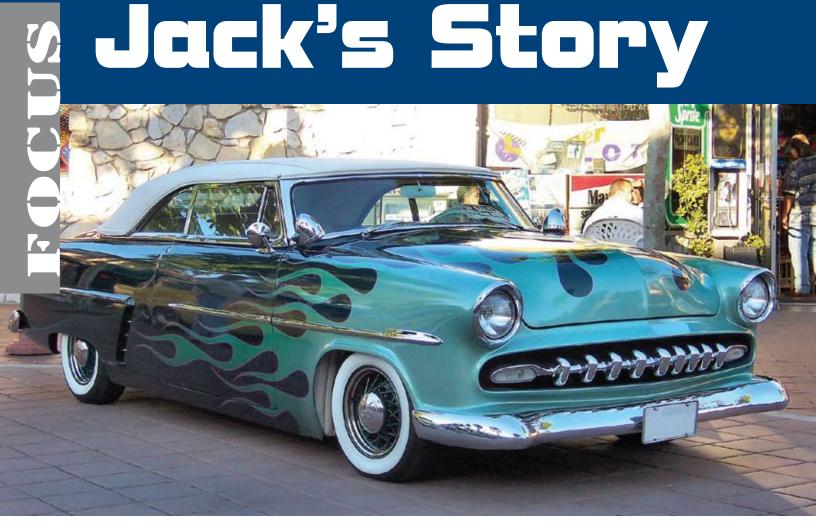


I got my burns during the air show at Tinker Air Force Base, Okla. It was a cloudy day, so I didn't even consider sunburn as a possibility.

The next time you're walking through your shop and see one of those commonsense ORM posters, take its message to heart. Plan ahead for every situation; it just may save your hide some day—literally.

# Resources:

- Sun Safety, http://www2.nsc.org/library/facts/sunsafet.htm
- The Many Faces of Phytophotodermatitis, http://dermatology.cdlib.org/127/commentary/phytophoto/almeida.html
- Can You Burn on a Cloudy Day?, http://beauty.about.com/od/summertanning/f/cloudyday-burn.htm
- SafeTips Sunburn, http://safetycenter.navy.mil/safetips/n-z/sunburn.htm



By Gary L. Johnson Grand Forks AFB, N.D.

t was the last day of school and the beginning of summer vacation for the four of us. Jack, who owned the car we were driving, was 16. The rest of us—Dennis, me and another boy whose name I've forgotten—were 15. We had decided to hit the road and celebrate.

We headed to Palo Verde, on the border between California and Arizona. Naturally, we didn't ask our parents' permission because we knew what they would say: "You're too young to go that far!"

It was a long, hot drive to Palo Verde, so we decided to explore some dirt roads, looking for an access to the Colorado River. Along one of these roads, where the dust lay 6 inches deep and had the consistency of talcum powder, we had a flat tire. Imagine what it's like changing a tire in ankle-deep dust and a temperature of 105 degrees Fahrenheit.

Once we were back on the road, it didn't take long

to find the river. All of us jumped out of the car and made a mad dash for the water's edge. Dennis, the other 15-year-old, and I decided to wade in with our clothes on so we could wash off the dust. Jack, on the other hand, was taking off his jeans to avoid getting them wet when he noticed his wallet was missing. He immediately started demanding that we get out of the water and go back with him to the spot where we had changed the tire.

We told him to forget it for now. "We'll look for your wallet on the way out," we said. Jack's impatience and frustration got the better of him, though, and he drove off alone to search for his missing wallet. He returned a half-hour later, more agitated and overheated than ever because he hadn't found it. He hollered a few expletives at us, then ran and dove into the muddy water. We looked around but didn't see him. A minute or two later, he floated to the surface,

face down, with his head covered in mud. We just laughed and left him there.

It's not that we didn't care, because we did. Jack, though, was known as "the class clown"—the guy who always was cracking jokes and pulling stunts to get your goat. At the time, we figured this was just another stunt.

Finally, I went over to Jack and lifted his head out of the water. He gasped for breath and said he couldn't move. As I held his limp body, I expected him to jump up at any minute and say, "Gotcha!" Nothing like that happened, though, so I called the others, and we half-dragged, half-carried him to the car and put him in the back seat. Our task was hampered by the fact Jack was not light, and his car was only a two-door.

I asked Jack what to do, and he said I should drive him home, which was 200 miles away. I was stunned, because his car, with a Thunderbird engine, was the envy of us all. I also knew the only reason he had chosen me to drive it was that I was a closer friend than the others, and he knew I could drive.

I still wasn't convinced of Jack's sincerity. I felt sure that, once we reached the main road, he would bolt upright and spring his trap. All he said, then, however, was, "Hurry!"

Now convinced that Jack wasn't fooling, I hit the gas and sped toward Los Angeles, with the speedometer resting on 95 mph. Shortly after we hit the highway, the sun went down, and we roared on into the darkness, getting more scared with each passing mile.

Ten miles short of Indio, Calif., and about 90 miles from our starting point, a highway-patrol cruiser's lights started flashing behind us, so I pulled over. The trooper who approached the car asked for my driver's license. I told him I didn't have one. I also told him our friend in the backseat couldn't move. The officer had us exit the car while he talked to Jack. He then took his keys and scraped the bottom of Jack's bare foot but got no response. He told us to get back in the car and to follow him. We raced to a hospital in Indio at 85 mph.

The three of us waited outside the emergency room as hospital workers took Jack inside. Just after midnight, Dennis' parents and my mother arrived at the hospital. Jack's parents soon arrived, too. The doctors already had told the three of us that Jack had broken his neck, he was paralyzed, and they weren't sure if he'd ever walk again.

Before our parents took us home, we were allowed to visit Jack, and I'll never forget the sight that greeted us. There was our muscular friend, lying on a frame, with his ankles tethered and a traction device screwed into his skull in four places.

The ride home wasn't a pleasant experience, although I must say we didn't get lectured once the entire trip. Perhaps our parents had decided we had learned our lesson, or they might have been in as much shock as we were.

Later, when Jack was referred to specialists in Los Angeles, we learned he hadn't actually "broken" his neck. They said his head had hit the mud when he made that shallow dive, which bent his neck forward. At the same time, two vertebrae separated, then pinched his spinal cord when they came back together, causing irreparable damage.

I wish I could tell you this story has a happy ending, but I can't. Jack spent a year in hospitals that specialized in spinal injuries, but he never walked again, and he couldn't use his hands very well. I took care of him the first summer he was allowed to come home, and although he stayed hopeful for awhile, the reality of what had happened eventually overwhelmed him. A year-and-a-half later, I joined the Air Force and saw him only occasionally when I was home on leave.

With no support groups available and maybe an unwillingness to make the best of what life he had left, Jack spiraled downhill. He chose alcohol to deaden his spiritual pain. Years later, I learned from a friend that Jack had died of natural causes in his mid-30s.

I'm telling this painful story in hopes it may prevent the same thing from happening to someone else. Diving into unfamiliar waters or making snap, and often foolish, decisions when you're mad can have disastrous results.

The author is the ground safety manager at Grand Forks AFB.

I omitted the date for this event (1961) because the same tragedy could happen just as easily today. I also left out the year and make of the car those boys were driving as they raced their injured friend toward home. It was a 1953 Mercury, similar perhaps to the accompanying photo of a customized model.—Ed.

# Resources:

- Shock Trauma Physicians Warn About Dangers of Diving, http://www.umm.edu/news/ releases/diving.htm
- Water Safety for Teens 12-18 Years, http://www.drowning-prevention.org/pdf/CE140.pdf
- Water Safety, http://www.nsc.org/resources/ Factsheets/hl/water safety.aspx



Story by Ens. Daryl Dawson, Photo by Ltig. Chris Lollini

y first mistake was thinking I could surf Oahu's infamous North Shore, home to some of the most powerful waves in the world. Adrenaline-seeking surfers, often with years of experience, travel to this island every winter to charge Pipeline, Waimea Bay, Sunset, Haleiwa, and other popular spots along the North Shore of Oahu.

I had been on the island a mere three days when I decided to drive up the Kamehameha Highway and buy a surfboard. In retrospect, there are plenty of beginner places all over the island I could have gone to, including the popular tourist spots, Waikiki, Barber's Point, and White Plains. I was determined, though, to start my surfing career on the North Shore.

My experience bodyboarding in the Atlantic off Florida and Maryland had given me a false confidence; I figured I'd quickly be able to pick up the sport of surfing. I had no idea what I was looking for when I got out of the car, but I met Luiz, a resident surfer of the North Shore, who hooked me up with an 8-foot board. Not certain what to do next, I asked him where I should go,

18 Sea@Shore



and he told me there was a good spot only a five-minute drive up the road.

I pulled into the parking lot, fumbled with my new board, and made my way down to the beach. I saw the sets rolling in; experienced surfers were catching the waves with ease. I probably should have heeded the butterflies in my stomach, which were my body's way of telling me this idea was bad.

One of the most important differences between East Coast beaches on the mainland and the beaches of Oahu is the type of bottom. The beaches I know, such as Virginia Beach, Bethany Beach, and Jax Beach, normally are covered in sand, with a few shells. Off most of Hawaii's beaches are rocks and reefs, which often are partly exposed during low tide.

Unaware, I pressed on and paddled out. I didn't make it very far before a couple of small waves caught me off guard and crashed into my face. I sputtered and tried not to swallow all the saltwater that went up my nose and filled my mouth.

I paddled a little farther and finally made it into the lineup. I watched the other surfers for about 20 minutes before I built up enough courage to take on a wave myself. I picked out a wave and positioned myself in front of it. Taking a couple of deep breaths, I paddled hard and felt the white water wash over me, sending me and my board speeding toward the beach. I still was holding on, so I decided to try standing.

What the other surfers don't convey in their movements is how much balance and coordination this part of the process requires. I think I stood up for about two seconds before I wobbled and crashed into the water. The sandy bottom I expected to find wasn't there. Instead, it was sharp reef and rocks.

As soon as my shoulder hit the rock, I knew instantly what the sharp pain on my right side meant: I had dislocated my shoulder. Another surfer helped me out of the water and onto the beach. My shoulder and right side were covered in scrapes and bruises, and I barely could move my right arm.

The next day, a doctor confirmed my injury and told me I wouldn't be able to participate in any strenuous activity for at least six weeks. I also missed ship's movement, due to an urgent MRI appointment and the immediate commencement of physical therapy.

I had dodged a bullet in not being injured so seriously I couldn't make it back to shore. After several months of physical therapy, I still had a desire to surf, but I pursued the sport the right way the next time. I found a couple of friends who were interested, and we all took lessons together from an experienced instructor in calmer water.

Here are lessons I learned from this experience:

- Get lessons from a licensed instructor before hitting the beaches in Hawaii.
- Don't go alone if you aren't familiar with the environment. Know the type of shore the waves break onto.
- Go with friends who have experience and can help if needed. Always have a cellphone handy. Know the location of the closest medical facility.
- Rent a board before you buy one. Make sure you can handle the sport before investing in equipment.
- Find beaches that support your experience level. The North Shore can be fun, but it's dangerous for new surfers. Most newcomers to the sport should stay to the southern portion of the island.

Both the author and photographer were assigned to USS Chung-Hoon (DDG-93) when they sent me this article.—Ed.

### Resources:

- Surfing Safety and Etiquette, http://www. wbsurfcamp.com/safety/ss\_surfing.asp
- Common Hazardous Beach, Surf & Ocean Conditions, http://www.aloha.com/~lifeguards/hazards1.html

# Bicycle Gear: What To

By LCdr. Doug Blackburn

had dressed for a bicycle ride and was in my driveway getting ready to go when my new neighbor approached me. "I thought you were pretty tough," he said, "but in that getup—well, I wonder."

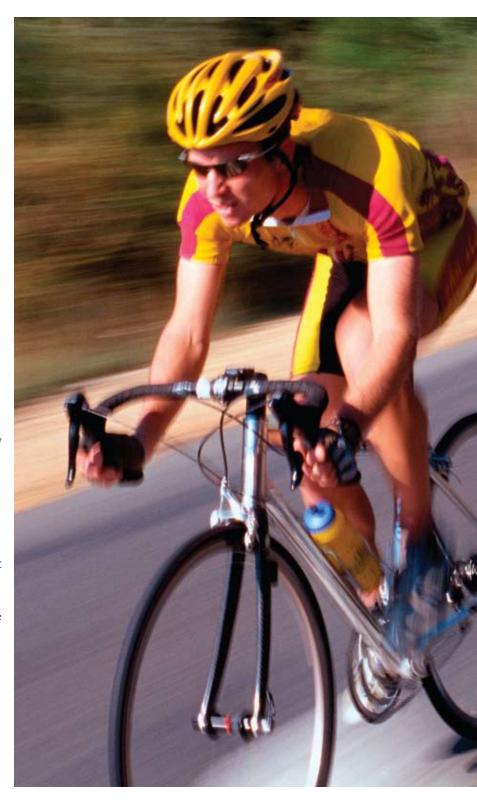
He was joking, but I was taken aback for a minute. I've been cycling on- and off-road for 10 years, and my cycling gear has grown to feel perfectly natural to me. In fact, I wouldn't think of wearing anything else. I have to admit cycling gear can look a little—well—dramatic, but beyond the flashy colors, tight shorts, and billboard-like designs, there is true practicality—and safety—to the stuff cyclists wear.

Here is a list of the usual gear and the reasons why riders wear it:

Helmets. They're the one item you never want to forget. We wear helmets, cranials or hard hats during risky situations at work. Athletes wear helmets on the gridiron and in the batter's box. Why shouldn't we want to protect our melons when we're on the road or anywhere else?

My first helmet met an untimely end when I was introduced to a 1964 Rambler Ambassador that ran a red light, prompting me to do an inadvertent "Starsky and Hutch" roll over the hood. The severe gouge on my helmet, above my right ear, would have looked far more gruesome on my head; it probably would have killed me.

Modern bicycle helmets are lightweight, well-ventilated, and easy to wear. As of February 1999, all bike helmets for sale in the United States were required to meet a new federal-safety standard set by the Consumer Product Safety Commission. Helmets meeting



# Wear and Why



the new standard must have a label saying so. Older helmets must be Snell-, ANSI-or ASTM-approved.

Shorts. I have to admit I get the most grief about my cycling shorts, but they serve a purpose: First and foremost, they are padded. Studies have suggested that bicycling may cause some health problems, including (gulp) impotence—not for me, thanks. I'll take the padding, plus the shorts don't flap or get caught on anything internal or external to the bike. Many companies now produce trail shorts with cycling pads sewn in.

Gloves. I once had to ride without my cycling gloves (when I couldn't find them) and was reminded of what an asset they are. Because they're padded, they protect the hands and arms from road shock. They also have terry cloth sewn on the back, which is great for wiping sweat from your eyes. In addition, they keep sweat off the handlebars, which improves your grip. Most importantly, if you wipe out, the gloves will grind against the pavement, not your palms.

Shirts. Wear whatever kind of shirt you want. I prefer cycling shirts because most are made of fabric that helps cool the body by wicking away sweat. Save the cotton stuff for the beach. The pockets in the back are great for filling with important stuff, like food and a few tools for the road. I also see cellphones in the pockets. If you get to going fast enough, T-shirts flap in the wind, which can be annoying. Cycling shirts don't flap.

Shoes. Cycling shoes have stiff soles designed to efficiently transmit energy from the legs to the pedals. They also are designed to work with the many available types of pedal-binding systems. I would buy cycling shoes last. They can improve

performance, but their safety utility is small, compared to, say, a helmet or gloves. They also can introduce an element of risk until you're experienced at getting them unclipped from the pedals.

Accessories. Sunglasses protect the eyes from the sun and whatever wants to fly into them. At 20 mph, even a speck of dust can be much more than a nuisance. Standard street-wear glasses probably won't do the trick. In fact, if the rims are too thick or are poorly shaped, they may interfere with peripheral vision. Most sport sunglasses will work, but make sure they are rated for UV protection. Also wear sunscreen. A cycling friend of mine had a 4-inch-by-4-inch-square piece of skin cut off his leg. The good news is he was lucky; they got the melanoma in time. The bad news is he has a really nasty skin-graft patch on his thigh for the rest of his life. The negative effects of the sun could fill an entire article. My advice: Respect it, and wear sunscreen.

After spending serious money on your new two-wheeler, you may be reluctant to lay out even more hard-earned dollars for protective cycling gear, especially if you only plan to ride for recreation. However, skin and bone never prevail against concrete or asphalt; the road always wins. I hope you'll never need the protective gear you wear, but if you do, it will be worth every penny you spend.

As far as looking cool is concerned, I believe that having a 100-percent functional and uninjured body is cool, no matter what my neighbor thinks.

The author was assigned to HSL-45 when he wrote this article.

### Resources:

- How To Not Get Hit by Cars, http://bicyclesafe.com/
- Bicycle-Related Injuries, http://www.cdc.gov/ncipc/bike/
- Perceptions of Bicycle Safety, http://www.bicyclinglife.com/SafetySkills/SafetyQuiz.htm

# When the World Turned Sideways

By AW2(AW) Brennan Zwak, HSM Weapons School, Pacific

t was a dry, 85-degree day at picturesque Big Bear Mountain—a great day to do some downhill mountain biking. Nine months earlier, in bad weather, I had traveled to the same hill and had had an awesome time, so I figured today only could be better. I had been riding a lot at such places as Sweetwater Reservoir and Missions Trails, which boosted my confidence that today would go well.

I was heading down the long hill for the sixth time of the day, in the middle of three guys. We were bouncing around trees and over bumps, ruts and rocks, with the front shock of my bike working overtime. Suddenly, I rounded a switchback and picked up a little speed on a short drop. Still thumping over the rough terrain, I went up a large bump, while leaning a bit too much to the right side. That moment was the last pain-free one I would have for a spell.

I couldn't have gotten more than two feet of air—and had I been vertical, rather than horizontal, I'm sure I would have been standing. However, the world was sideways, and a lot of thoughts raced through my head, the foremost being, "This isn't going to feel good."

I landed on my side, separated from the bike, and, with my forward momentum, did a somersault—helmet flopping against the ground. I artfully finished with one or two more rolls. A quick assessment told me I had enough pain; I didn't want tire marks added to the list. So, I jumped to my feet, with the helmet still flopping in my face, and made sure I wasn't in the path of the third guy.

Seconds later, he glided over the same obstacle that had been my downfall. He had enough control to avoid my bike still sprawled in the middle of the path. As soon as he passed, I picked up the bike and cleared out to the side of the trail.

Only then did I take time to look at my hand, which was bleeding profusely from three or four fingertips—I couldn't tell how many at that moment. My

right leg also hurt but wasn't broken, so I went back to my fingers. The bleeding thankfully slowed quickly, and I could see all the tips were attached.

Meanwhile, the third rider was staring in amazement at my right knee, making un-encouraging comments like, "Mmmm, that doesn't look good," and, "That's a pretty bad one." I finally looked down to find a laceration about five inches long and deep enough in places to have gone through all layers of skin. It ended up taking 16 staples and a lot of scrubbing to fix this wound—painful proof that I should have worn kneepads that day.

I did wear a helmet, and it saved me from a scar that would have matched the one on my knee—or something much worse. The gloves I was wearing helped out dramatically, even if they were fingerless. The road rash would have spread to my whole hand had I not worn them.

The moral of this story is to think about what you're doing, no matter how many times you've done it. If you ignore the hazards involved, they sooner or later will bite you.

The author was assigned to HSL-47 when he wrote this article.

# Resources:

- Mountain Biking Rules, http://www.mace-canada.com/tips/mtnbiking.htm
- Mountain Biking Safety: First Aid for the Trail, http://www.active.com/story.cfm?STORY\_ ID=9262&CHECKSSO=0
- Guide to Safe Mountain Biking, http://www.upanddownhill.com/mountain\_bike\_holiday/tips\_safety.htm

# Letter to the Editor

Re: "Guest Editorial: Speaking Up for Speaking Up," Winter 2008-09, pg. 49

This guest editorial never should have been published. To honestly recommend that an inspector intentionally violate established safety procedures to see "a few COs burned" violates every safety standard for which the entire safety and ORM procedures were designed. The author's callous assumption that it is the CO's fault when an inspector violates approved safety requirements was, at best, uninformed and, at worst, violates Navy regulations and instructions.

I have been a devoted reader of the Naval Safety Center's products since I was the safety officer in USS John A. Moore (FFG-19) for my first departmenthead tour in 1996. Our ship also won the CNO's Safety Award for the entire West Coast in 1997, so I know what a great safety program looks like and, more importantly, how it functions on the deck plates. Also, my current ship, USS The Sullivans, received the Yellow "E" for safety this year.

I agree that our junior Sailors should feel empowered to speak up when they see seniors making safety mistakes. I have several Sailors in my ship now who have done exactly that with me. In each case, I thanked them for keeping me safe. In fact, the first time it happened was during my turnover week, while assuming command, when one of my DCTT members, a BM2, reminded me that I needed to wear hearing protection while in the vicinity of the SCBA refilling station.

I enjoy your articles, but this editorial was a mistake. I haven't seen the latest edition of *Sea&Shore*, as I'm deployed, and the mail takes a while to get to us. I only can hope that you have printed a retraction of this bad idea. Intentionally violating established safety procedures to see if anyone will say anything is equal to committing a crime to see if the police will show up and stop you from doing it. I expect better from an organization I have received outstanding advice from throughout my career.

Cdr. Ryan C. Tillotson, USN CO, USS *The Sullivans* (DDG-68)

The author's response

Commander Tillotson is absolutely right. A correction is in order. Skipping a safety step during an

evolution is an abysmally bad idea and definitely runs contrary to any notion of best practices. My intent was to add some sort of real-world test for safety awareness to the inspection process, without the risk of getting anyone hurt. A far better approach would be for the inspector to make a deliberate error in the pre-flight to an evolution (such as omitting to ask for some safety equipment called for by the MRC or inspection requirements). This would allow ship's-force personnel the chance to identify the problem **before** starting the evolution, without exposing anyone to real hazards. Under no circumstances should the inspectors continue with the evolution until the safety discrepancy is corrected. It was poor communication on my part, and the commander was absolutely right to call me on it.

I also apparently miscommunicated about the root cause of this mishap. Operator error in the form of ignoring established procedures on the part of the contractor was the cause of this mishap. That said, my contention was that the CO is responsible for the safety climate onboard his vessel. In the mishap described, two chief petty officers, whose rates required close familiarity with the equipment being inspected, utterly failed to correct a series of glaring safety discrepancies on the part of the inspector. To me, this speaks volumes about the safety leadership onboard the ship. Those chiefs either were unaware of the safety issues, or were willing to overlook those issues for some reason. Either way, the commanding officer needs to address the safety climate at his command. Any CO who allows violations of basic, black-letter safety rules deserves to get metaphorically burned, lest some of his crew get burned in actuality.

Once again, Cdr. Tillotson is absolutely right in his letter. I did a bad job communicating my meaning—in writing, no less. Good on him for catching both mistakes.

John Mapp Safety Specialist, NNSY

Cdr. Tillotson's add-on comments

Mr. Mapp's contention that COs are responsible is spot on. It is my responsibility, but it's also a team effort.

# A Quick End to Deployment

By Ltjg. Charles Pruitt, USS Ross (DDG-71)

ur ship just had gotten underway for deployment when a seaman started striking deck equipment below to the forward boatswain's locker. As he positioned himself to go below, he accidentally pulled the safety latch on a hatch. The hatch subsequently closed, pinning the seaman's head between it and the knife edge and knocking him unconscious.



The victim.

The victim's PO1, who was nearby and saw what had happened, rushed to the scene. He opened the hatch and pulled the seaman to safety. Otherwise, the seaman could have fallen 10 feet to the deck below. He was taken to shipboard



The victim's ear.

medical on a stretcher, then was flown to a medical center for treatment.

Besides missing deployment, the seaman had to have stitches and most likely will carry sears for life on his ear and the left side of his head where he was pinned.

# Resources:

- Hatch and Stanchion Violations Can Hurt, http://safetycenter.navy.mil/media/ fathom/issues/AprJun03/canhurt.htm
- A Very Lightweight Composite Hatch, http://www.avtecindustries.com/11%20%20 US%20Navy%20Very%20Light%20Hatch%20 Program.pdf



Summer is almost here, and it's time to head outdoors for some fun in the sun. But don't let a day at the beach turn into tragedy of a lifetime. The Naval Safety Center is teaming up with the Army and Air Force to provide all the summertime risk-management information you and your family need to have a great summer season. Visit www.safetycenter.navy. mil and download your resources today!

24 Sea@Shore

# Losing Focus, Losing Fingers

By HTFN Rachel A. Stubbs, USS *Essex* (LHD-2)

t was the day before zone inspection, and time was running out. I needed to fabricate three more handles for valves in the pump room. I already had made several mistakes, leaving little of the metal that I needed. Instead of taking time to find another piece of the same material, I decided to use the short piece I had on hand.



The "buffalo," as we call it, is a hydraulic metal cutting machine, capable of cutting angle iron, flat bar, and round stock, as well as making notches or holes. As I know now, it also can mutilate fingers.

I had been using the flat-bar cutter and deemed the installed safety guard excessive and inconvenient, so I had lowered it. As a result, the cutting blade came down, causing the opposite end of the metal to rise up. Unfortunately, my finger at the time was between the unused safety guard and the piece of metal. In an instant, I lost a chunk of my finger.

Upon my arrival at sick bay, the medical officer was able to reattach the wayward piece of flesh, but no one knows yet if the reattached tissue will survive.

I could have prevented this event if I only had done some things differently. Primarily, I should have focused on the task. My mind, instead, was on some personal issues. I wasn't concentrating on the machine, the piece of metal, or the safety precautions presented to me. I was wearing the proper personal protective equipment, but it's only effective when you follow all the safety precautions.

Outside the work space is a sign that states, in bold capital letters, "DO NOT TALK TO OPERA-

TOR WHILE OPERATING MACHIN-ERY." The intent, of course, is to prevent loss of concentration and avoid incidents like mine. Sadly, there is no sign that reminds the operator to focus only on the assignment. Besides delaying completion of the job, my lack of focus caused me pain and inconvenienced many. I'm temporarily removed from the work force, which means someone else has had to take my workload.

I also used the machine improperly. Each cutting system on the machine has a safety guard attached—all of which are removable for cleaning, maintenance, and blade replacement. In this case, I had lowered the safety guard, so that I could squeeze my fingers in between to reposition the too-small piece of metal.

It was a fast and easy shortcut. My intent was to move my fingers out of harm's way as soon as the blade touched the metal.

What I forgot is that hydraulic machines are merciless and unforgiving. Because of my carelessness, I left my shop without a piece of myself.

Even though I'm well aware of the safety precautions (how could I forget, since they're posted on the equipment?), I chose not to follow them. I'm still paying for that mistake with daily trips to medical, and I have lost the ability to perform certain simple tasks.

Finally, the price I paid for rushing wasn't worth it—I never even finished the job. Taking time to do a job correctly is the best and most efficient way to complete any task.

While some people have to tie a string around their finger to help them remember things, I only have to look at my permanently distorted finger to remember how important safety in the workplace is.

# Suicide: A Call for Locker-Room Leadership

By Lt. James "Kikko" Frey, HSC-2

Someone died at work today.

Death isn't a new thing; people die all the time. Old age, car crashes, food poisoning—ya know, life causes death. The entire Navy has hazards that can come out of nowhere and take a life. In aviation, we see it way too often.

My first buddy to "buy it" was my OCS roommate, Jim Logan, who died in a mid-air during VTs [fixed-wing training]. My next loss was a couple years later; Lyle Gordon, USMC, died during an H-46 combat mission in the Sandbox. I saw his picture in Navy Times while I was on detachment. Lyle was my HT [helicopter training] form-flying partner.

You probably have a half dozen similar stories of your own. We see it, we deal with it, we read about it with practiced distance and nonchalance; we call it anything but what it is. He "bought it," "checked out," "met his maker"—we say anything but "he died." Truth is, we don't want to say it. That's fine, because just saying it means dealing with it. We're not human; we're pilots. We don't have to deal with human problems. You can't stop the war every time

a sacrifice is made. We learn to press on as a matter of professionalism.

But today's Class Alpha was different. They won't be freezing log books, or trying to find someone to blame. Today our friend and shipmate killed himself. He took his life with a gun; his wife found him. He had cleaned out his locker before leaving work.

Suicide is a totally different kind of scary, don't-talk-about-it death in any command. True, only 1 to 3 in 10,000 people in the U.S. will do it this year—that's good odds. The military rate is slightly lower, but we're different, right? We don't have to deal with financial problems, marital issues, separation, alcohol and drug abuse, or physical and sexual abuse like the rest of society. At least, we don't talk like we do.

In naval culture, you either have no human qualities, or you're encouraged to suppress them. How many times have you heard, "She didn't come with your sea bag," when talking about a spouse or girlfriend?



Suppression of issues and concerns doesn't mean absolution from their existence or consequence. Still, suicide sneaks up on a military unit. It comes from nowhere. We say we never saw it coming. After one week, we won't even talk about this one. It never happened, and never will again, we hope.

Here's the problem. It did happen, it does happen, and it will happen again. What we need to do is talk about it. We're better than that. Everyone who is serving his/her country is better than that. We don't just need to give more feel-good lectures about suicide and gun control. We fail with GMT PowerPoint presentations, chock-full of graphs and collegiate-audience-driven drivel, given by nervous JOs. We, instead, should talk about it in the geedunk, in the smoke pit, and in the shop. We need to talk about all the reasons not to do it. You don't need to say, "Let's talk suicide prevention, Sailor." You need to say, "How are you doing today? How's your wife? What kind of things are you looking forward to on your next leave?" That's the same thing as official suicide-prevention classes—only better.

One of the reasons not to commit suicide is that we're all making a difference; we matter. If we matter, and we know it, why would we want to stop mattering?

This machine we call the Navy needs every one of us pulling our weight; this nation we all love needs the Navy. We matter, and our shipmate mattered, but I guess we didn't tell him often enough.

Everyone in the Navy joins because he/she wants to be "that person." We all want to be the one who runs into a burning building to save a child. We want to help the elderly cross the street, or hold the door for a lady whose arms are full of packages. When we overhear a question, we interrupt with an answer because we're programmed to be ready to help in anyway we can. Every patriot is like that.

Suicide, though... I mean, wow! At what point do we get so involved in our own little political and administrative problems at work that we decide it no longer is important to tell those around us that they're making a difference? How can we get so

caught up in planning for a mission that we take for granted the extraordinary hours, efforts, and stress that our young (and old) Sailors put into their daily task?

Back on Guam, when I was a division officer, I would show up at shift change and make a point of asking the Sailors how they felt they had contributed "to the fight" that day. This cheesy and ridiculous question made some uncomfortable, and they would answer they didn't know. But guess what, every day they left knowing that they had made a difference in some flight or mission. I would reaffirm it by explaining how they had made it safer, better, faster, smoother, or something.

What I was saying didn't matter as much as the fact I cared enough to say it. Say anything, because just talking with people means you trust and value them as contributors to the nation's, the Navy's, the squadron's, and their personal success. Their success is your success.

We should all be more proactive about telling our troops how vital they are. Our nation's Soldiers, Sailors, Airmen, Marines, and Coast Guardsmen do this every day because they love it—and it's not for the money. We all do it because being "that guy" is its own reward. If no one tells us how important we are once in a while, though, we can get bogged down in the smoke of the fire, the mire of paperwork, the smallest problems, and the office politics that drive the machine. Sometimes we get so caught up in what we're trying to do that we can feel the heat of the building burning down all around us, instead of seeing, leaving, or allowing a way out.

It may seem hopeless to some people, but you won't know which ones until you ask. They all perhaps will run into the burning building, but, for some, it'll be more than they may think they can handle. A wise CHSCWL chaplain once said, "It's always worse on the inside than it appears on the outside." They may feel they have failed to save the kid and then become prone to giving up and letting the house collapse around them. In smoke that thick, the only encouragement to carry on may come from their peers and leadership. Sometimes, only people on the outside can see through the smoke and help them through it, aided, of course, by the many Navy resources available.

The chaplain corps, for example, is available 24/7 for any kind of counseling, and confidentiality is guaranteed. Chaplains operate outside the chain of command (CoC) and cannot be compelled by

the CoC or the legal system to divulge what you or your Sailors tell them. They cannot be forced to testify in civilian or military court.

Chaplains are well-trained for anything you throw at them. If you haven't met yours, you should. At least get his or her cellphone number for that next emergency in town when one of your Sailors needs something, and you're not at your desk. You can send a Sailor to the chaplain, or ask the chaplain to visit a Sailor, regardless of the latter's religious preference, if any at all. The chaplain corps is there to help, not sell an ideology.

One way the chaplain corps helps is with CREDO (chaplains' religious enrichment development operation), which sponsors free retreats (including room and board), couples' relationship enrichments, personal or spiritual growth, help for returning IAs... and more. All this stuff is free and accessible if we, as leaders, just make it a point to find out about it and then share it with our people.

The Navy Marine Corps Relief Society (www. nmcrs.org) has a program that pays for a nurse to do free home visits for active duty and dependents for pregnancy or any other medical issue where such a visit would help.

Military OneSource (1-800-342-9647, or www. militaryonesource.com), formerly Navy OneSource, also is available to help. Master's-degree-level counselors here are on call 24/7/365 to help those having trouble. Perhaps you're trying to help someone; if so, this is a good place to start. Military OneSource can put you or your Sailor in touch with a counselor within 25 miles of you, anywhere in the United States, for free.

These are just a few of the naval leadership EPs (emergency procedures) memory items. The test is every day, so have them ready for impromptu use in conversations in the passageway, the parking lot, the flight line, or wherever our Sailors need us. If you don't already know all your leadership EPs memory items, call the local fleet and family service center or chaplain's office to get a list.

Proactive leadership may be enough to help shipmates get through their troubled times and be the hero they came here to be. Don't let another life go to waste.

The author was assigned to CHSCWL, Norfolk, when he wrote this story. Currently an MH60S flight instructor at HSC-2, Norfolk, he's in his third year of study for a PhD in organizational psychology.

28 Sea@Shore

# Biting the Hand That Pets You

By Lt. Ryan "Chew Toy" Craft, VAW-121

s I write this article, I'm feeling as high as prescription drugs can get me. The world is spinning, and I'm laughing at things that normally wouldn't bring a chuckle. Even Rob Schneider movies are funny in my current state, which shows I'm definitely having more fun than the normal buffoonery underway.

That fun, however, doesn't last long, especially when flight ops begin, and the rest of my squadron gets carrier-qualified while I'm med down. I lie in my room, watching the flight-deck camera and wondering when I'll get to fly again—all because I petted a neighbor's dog.

If only I hadn't believed that the neighbor's friendly pooch never would bite anyone. I should have realized that, no matter how much training the pooch had received, it still was an animal. If I had remembered this simple rule, I wouldn't be in my current situation.

It was a Friday evening, three days before my squadron sailed with an aircraft carrier for a month of pre-deployment workups. I was home alone, playing ball with my dog in the front yard. The neighbor's 110-pound boxer was standing on his back legs, peering over the 4-foot fence that separates our backyards, watching us play. In case you're not familiar with this breed, a boxer is an intimidating dog, by looks and stature. My neighbors had saved the 5-year-old dog only three months before from a rescue shelter. In those three short months, he had been a great pet and wasn't causing any problems with the neighbors.

I had become more and more comfortable with him, and every time he stuck his head over the fence, I'd pet him. I had scratched him behind the ears many times over the past three months, but this day was different. Today was the first time I had gone up against "his" fence, with my dog at my feet.

I had been petting the boxer's head for a few seconds when I looked away to see what my dog was doing. That was all the time the boxer needed; he went for my forearm like it was a T-bone steak. I pulled my arm away to release his grip; however, that action also created a nice tear in my skin. This injury occurred just as my girlfriend got home from work. She immediately had to give me a lift to a local emergency room—not exactly the way I had planned to start the weekend.

As if the dog bite wasn't bad enough, my health problems started going downhill. Initial treatments at the ER weren't done right, which promoted infection in the wound. The first signs of trouble showed once the boat had departed for sea. The issue suddenly became much bigger than I originally had thought.

A flight surgeon had to clean out the wound, which included carving out the dead tissue. Instead of a small puncture wound with five stitches, I had a large hole in my arm that could take weeks to heal and that might leave a permanent scar. I also lost many valuable days of flying and training on the aircraft carrier, so it became an ORM issue for my flight crew.

What did I learn from this experience? First, don't put yourself at unnecessary risk. There was no need for me to pet an aggressive-looking dog on his own turf—not with my dog so close. What normally wasn't a hazard became one because I introduced a change to the environment.

This event is just another example of risk in everyday activities outside of naval aviation. I'm sure you never will find petting your neighbor's dog as a risky event in any publication. It's just one of those issues in which we have to rely on common sense to guide us and to keep us safe from the unexpected. After all, who needs a new callsign like the one I have?

## Resources:

- Stay Dog Bite Free!, http://www.hsus.org/ pets/pet care/dog care/stay dog bite free/
- Prevention and Treatment of Dog Bites, http://www.aafp.org/afp/20010415/1567.html

# Summer Safety in the Workplace

By Stanley Willingham, Naval Safety Center

he Summer '09 Joint Service Safety Campaign, or the period between Memorial Day and Labor Day, involves more than spending time at the beach, drinking something cool by the side of a pool, or barbecuing in the backyard. These recreation and off-duty activities certainly matter, but what about the effects this time of year has on the work force? Too many times, the only thing you hear about is the black-flag conditions commands advertise when the heat and humidity become extreme.

My basis for this article is 29 CFR 1960, subparts .8, .9 and .10. In summary, employers and employees within the workforce are required to become familiar with their responsibilities to comply with safe and healthy work environments, to follow regulations, and to use personal protective equipment (PPE).

I'm not sure if it's the extended hours of daylight upsetting our circadian rhythms, or the higher ambient temperatures, but people this time of year tend to try exceeding or stretching risk factors. This behavior, in turn, leads to mishaps, and the rest is history.

Let's look at the Occupational Safety and Health Administration's top 10 most-cited violations for FY2008, as published by the American Society of Safety Engineers. This list (in order) includes: 1. scaffolding, general requirements (construction); 2. fall protection (construction); 3. hazard communication (general industry); 4. control of hazardous energy (lockout/tagout) (general industry); 5. respiratory protection (general industry); 6. electrical-wiring methods, components and equipment (general industry); 7. powered industrial trucks (general industry); 8. ladders (construction); 9. machines, general requirements (general industry). I'll focus only on the top two most-cited violations.

# Scaffolding

The weather in June, July and August is very conducive to construction. Activity increases as builders

try to maximize production during this period. Most facilities in a construction phase exceed the fall-protection safety standards of 4 and 6 feet, respectively, for general industry and construction. Scaffolding is one of many accepted methods of enabling construction workers and equipment to reach heights needed to accomplish the job. Smart workers refer to 29 CFR 1926, Subpart L, for guidance regarding scaffolds. They also use 29 CFR 1926.451, which covers general







requirements of scaffolds. Also note 29 CFR 1910.28, which covers general safety requirements for scaffolds in general industry, as well as 29 CFR 1915, Subpart E (Scaffolds, Ladders or Other Working Surfaces), which covers scaffolding in the maritime industry (shipyards).

As outlined in Subpart L, a scaffold means any temporary elevated platform (supported or suspended) and its supporting structure (including points of anchorage) used for supporting employees or materials, or both. High-rise construction is commonplace in many American urban centers. This fact, combined with the aging of our national infrastructure, requiring constant attention for maintaining structural and aesthetic integrity, keep scaffolds in great demand.

There are three basic types of scaffolds. Supported models consist of one or more platforms supported by rigid, load-bearing members. Suspended scaffolds are one or more platforms suspended by ropes or non-rigid, overhead support. The third type, known as "other" scaffolds, includes manlifts, cherry pickers, scissor lifts, etc. Although sometimes thought of as vehicles or machinery, "other" scaffolds are regarded as another type of supported scaffold. All three types of scaffolds are used to erect systems that are specialized for specific tasks, depending on load, weather conditions, materials, and a number of other factors.

It's estimated that 65 percent of the construction industry frequently works from scaffolds, which means that approximately 2.3 million or more people are

subjected to scaffold hazards. The most common hazards are: falls from elevation; collapse/overturning of the scaffold; being struck by falling tools, work materials or debris; and electrocution, principally caused by scaffolds being near overhead power lines. To preclude scaffold mishaps, make sure employees are trained, scaffolds are erected correctly, maintenance is done regularly, and inspections are done at prescribed intervals.

Scaffold mishaps are preventable. Education is the most powerful tool in reducing the number and severity. As directed in 29 CFR 1926.454(a), employers shall have each employee who performs work while on a scaffold trained by a person qualified in the subject matter. These experts must be able to recognize the hazards

associated with the type of scaffold being used and to understand the procedures to control or minimize those hazards. A competent person also must oversee scaffold erection and inspection. Poorly assembled scaffolds are a common cause of mishaps.

Using OSHA standards, training employees, and having competent people running the oversight form the foundation for successful scaffold operations. I further recommend reading the article "Scaffolding Good Practices," by Dale Lindemer, PE, which can be found in the August 2007 issue of *Occupational Health & Safety News (http://ohsonline.com/Issues/2007/08/August-2007.aspx)*.

# **Fall Protection**

According to 29 CFR 1910, General Industry Safety Standards, the threshold height for using fall protection is above "4 feet." Meanwhile, 29 CFR 1926, Construction Safety Standards, and 29 CFR 1915, Occupational Safety and Health Standards for Shipyard Employment, set the threshold height for using fall protection at "6 feet."

The Department of the Navy policy regarding fall protection is contained in OpNavInst 5100.23G, paragraph 1303. It requires every command workcenter and unit to have a safety culture, with management commitment to a safe work environment for all personnel working at any height. Regional commanding officers, directors, and officers-in-charge of Navy activities are responsible for establishing and



of three components: anchorage/anchorage connector, body wear, and a connecting device. Using safe work practices and training employees also have proven to be effective in preventing falls. The most effective measure is simply to think about and address fall hazards before any work begins—operational risk management, job-hazard analysis, and hazard assessment immediately come to mind.

Here are the six major recurring errors in fall protection:

Not using fall-protection equipment. Many times, the need for fall protection is ignored. Planning (having a fall-protection plan in place) should result in identification, evaluation and elimination of fall hazards. Even if hazards can't be eliminated, they can be controlled by using fall-protection-arrest systems.

Which way does this go? More workers today are using fall-protection gear, but many use it incorrectly. Fall-arresting harnesses often are worn too loosely, and employers many times buy incorrect equipment for specific applications. A common problem is buying shock-absorbing lanyards and then using them in areas with inadequate fall clearance.

implementing a fall-protection program that includes identification and elimination/control of fall hazards. Paragraph 1303 also emphasizes the Navy's policy for executing the fall-protection program. It assigns responsibilities for surveying and assessing fall hazards, providing prevention and control measures, training personnel, inspecting equipment, auditing and evaluating, and installing and using fall-protection systems. The paragraph also discusses the availability of rescue equipment, with accompanying rescue procedures.

Falls are the most frequent cause of fatalities at construction sites. The annual toll is one of every three construction-related deaths. At this writing, 2008 Bureau of Labor Statistics (BLS) data were not available; however, 2007 data indicate 442 construction workers died as a result of falls. Most of those falls were from roofs, followed by falls from scaffolds and ladders. Ironworkers experience the highest number of fall-related fatalities per 100,000 full-time workers, while sheetmetal workers experience the greatest number of non-fatal falls per 10,000 full-time workers.

There are a number of ways to prevent falls from heights in the workplace (e.g., guard rails, safety nets, and a personal fall-arrest system). The latter consists



32 Sea & Shore





A chief electronics technician works on radar equipment. [We realize there are a couple of safety violations: no working lanyard and loose leg straps.]

Know when to say when. Knowing when to remove a product from service is key to ensuring safe working conditions. Regular inspections and promptly removing equipment from service when wear and tear is detected is a must. Using equipment, such as a lanyard, past its useful life can be a deadly mistake. The wise adopt this policy: "When in doubt, throw it out!" This common-sense-based practice will save many lives.

Lack of communication/training. This factor often results in equipment misuse, or the equipment not being used at all. In time, the instructions disappear, personnel rotate in and out, and Murphy's Law comes into play. OSHA construction standards mandate that employers train employees for the environment in which they're working (e.g., excavation, welding, scaffolding, etc.). Fall protection is no different. Each employer must have a competent/ qualified person training the workforce. Competent people can identify worksite hazards, and they must have management authority to control them. They also must know and be able to explain the following: nature of worksite fall hazards; procedures for erecting, maintaining and disassembling fall-protection systems and personal fall-arrest systems; how to use and operate fall-protection systems and personal fall-arrest systems; role of each employee who may be affected by a safety-monitoring system; restrictions that apply to mechanical equipment used in roofing work; procedures for handling and storing materials and for erecting protection from falling objects; the OSHA fall-protection standards.

Anchorages that miss the mark. Top-ofthe-line lanyards or lifelines cannot arrest a fall if an unsuitable anchorage is used. Anchorages must support 5,000 pounds for a single tie-off for one individual. They should be positioned directly overhead whenever possible. Avoiding swing-fall injuries and knowing how to perform a rescue also necessitates anchorage selection.

Waiting for the free-fall. Waiting to update a fall-protection plan until a fall has occurred is too late. Identifying fall hazards should include an analysis of the likelihood for fatal or serious injuries, as well as the amount of time employees will be exposed. The goal is to eliminate the fall by changing the work process or environment. Lives will be saved and serious injuries will be prevented by following these three steps: Eliminate a fall hazard entirely, prevent a fall from happening, and provide personal fall-arrest equipment.

The Summer '09 Joint Service Safety Campaign is a great time to take a hard look at how you work and play. The threat of scaffold and fall-protection mishaps increases as the benefits of environment, longer periods of daylight, and great weather are realized. Active ORM-based planning, training/oversight by competent people, a properly trained workforce, and involved members of management will keep scaffold and fall-protection mishaps to a minimum.

