



Volume 2, Number 1

Winter 2009

WINGMAN

Airmen Taking Care Of Airmen

The United States Air Force Journal of Occupational, Operational and Off-Duty Safety

- **The Holiday Party**
- **The Day I Gave My Boss the Finger**
- **Skiing & Snowboarding Tips**



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The United States Air Force Journal of Occupational, Operational and Off-Duty Safety

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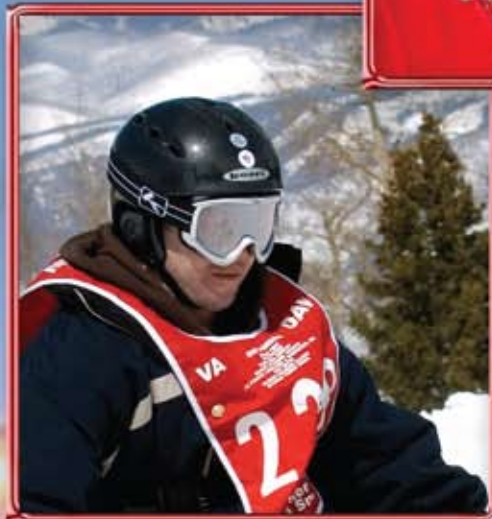


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DEPARTMENT OF THE AIR FORCE
CHIEF OF SAFETY, USAF

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PURPOSE—The Air Force Safety Center publishes *Wingman* quarterly, as part of the program to prevent ground mishaps. Contents are not directive unless so stated. REPRINTS—Air Force units may reprint *Wingman* articles without further authorization. Other organizations must advise the editor of the intended use before reprinting. This coordination will ensure that articles are accurate and contain the most current information. The appearance of specific commercial products, commodities or services is for information purposes only and does not imply Air Force endorsement. Some individuals in this publication are not Air Force members, and may not conform to Air Force appearance standards. DISTRIBUTION—One copy for each five Air Force members. To establish or change requirements, Air Force units must contact afsc.semm@kirtland.af.mil, Voice—DSN 246-1983; Fax—DSN 246-0931 or by mail:



Wingman
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Features

Front cover: U.S. Air Force photo by Senior Airman Jerry Morrison Jr.
Background: U.S. Air Force photo by Senior Airman Joshua Strang
Photo illustration by Felicia Hall and Dan Harman

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POSTAL INFORMATION—*Wingman* (ISSN 1055-7725) is published quarterly by HQ AFSC/SEMM, 9700 G Avenue SE, Kirtland AFB, NM 87117-5670. Periodicals postage paid at Albuquerque, NM, and additional mailing offices. POSTMASTER: Send address changes to *Wingman*, Attn: Executive Assistant, HQ AFSC/SEMM, 9700 G Avenue SE, Kirtland AFB, NM 87117-5670.

CONTRIBUTIONS & FEEDBACK—*Wingman* welcomes reader contributions, comments and constructive criticism. The editor may revise contributed material to improve clarity, without altering the author's intended meaning.

To discuss your story idea, contact the managing editor by telephone, e-mail or fax.

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E-Mail—afsc.semm@kirtland.af.mil
24-hour fax: DSN 246-0931

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Back row, left to right: Maj. Gen. Wendell L. Griffin, Staff Sgt. Christine Holbrook, Staff Sgt. Katharine Hallows
 Front row, left to right: Tech. Sgt. Eduardo Osorio, Airman 1st Class David Hibson U.S. Air Force photo

Maj. Gen. Wendell Griffin, Air Force chief of safety, observed aboard an AWACS mission with the 961st AACS while visiting Kadena AB, Japan, seeing some of the safety issues these dedicated Airmen face every day.

Air Force Chief of Safety Visits PACAF

MAJ. SEBASTIAN J. CARRADO
 Air Force Pentagon Safety Office
 Washington, D.C.

“Safety should be everyone’s priority” was the central theme of the visit to the Pacific Air Force theater by Maj. Gen. Wendell L. Griffin, the Air Force chief of safety and commander of the Air Force Safety Center.

The two-star has made it a point since becoming the Air Force’s senior safety officer in June 2007 to spend time with each major command’s safety offices, to see some of the critical safety issues and concerns they face, and to talk about his priorities.

In February, accompanied by Col. John Kreger, the PACAF chief of safety, the general set out to spread the safety message. He engaged in an extensive visit to pitch his three primary points at five installations — Hickam AFB, Yokota AB, Misawa AB, Kadena AB and Andersen AFB. Speaking to an audience of operators and maintainers at the first-ever 35th Maintenance Group Quarterly Safety Meeting at Misawa AB, Japan, Maj. Gen. Griffin listed the three main items on his scope: Leadership, Operational Risk Management/Maintenance Resource Management, and the Wingman philosophy. These points have been at the center of his aggressive

campaign to take the safety message to the field. He also emphasized how critical it is for commanders to be engaged and to put safety on their scopes.

“It’s all about leadership and commander involvement. If leadership makes it a priority and gives it attention, the force will take notice, and it will get better,” he said.

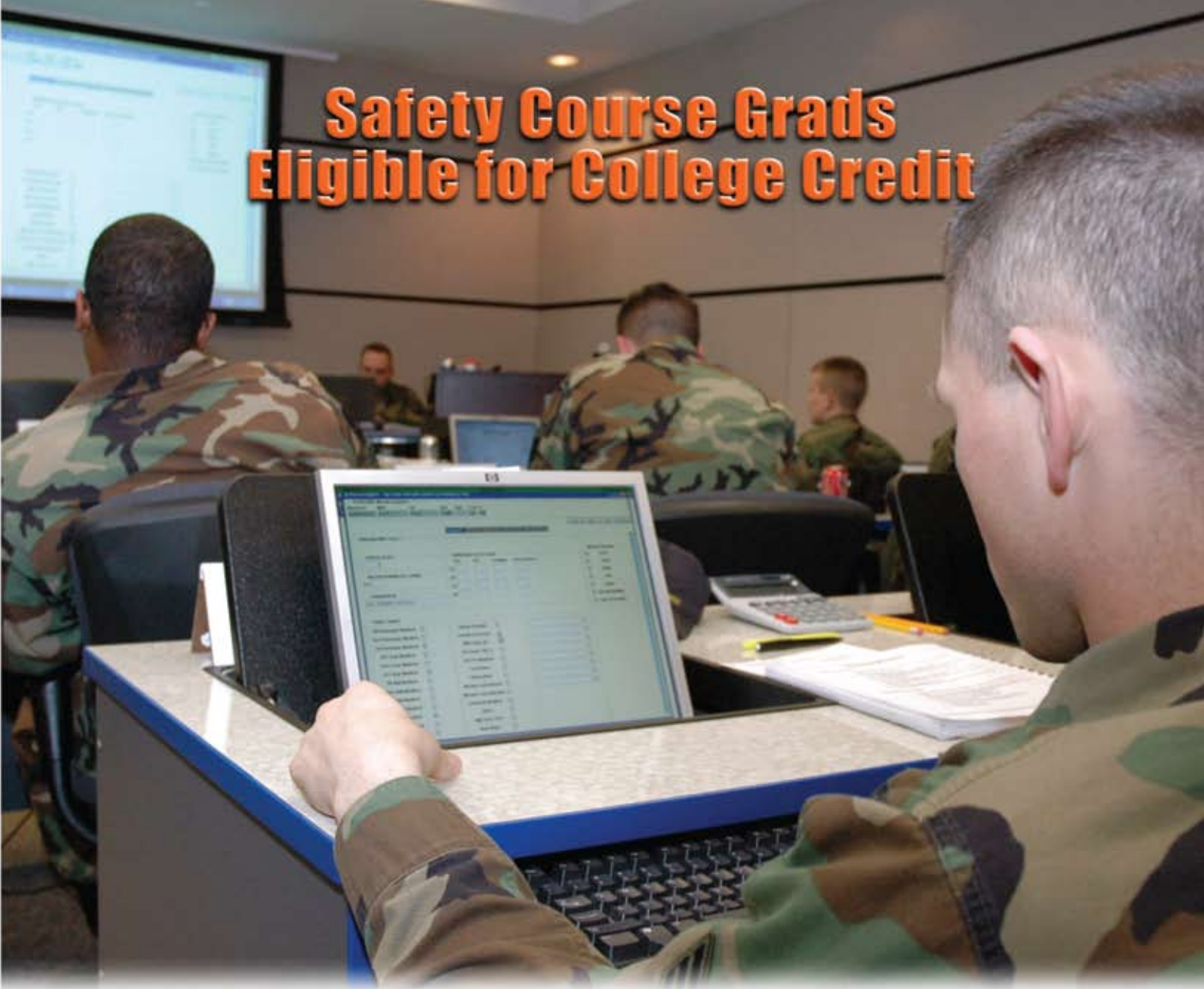
He also highlighted the importance of reinvigorating ORM/MRM as part of his back-to-basics approach. These programs focus their functional communities on assessing and minimizing risks inherent in the nature of doing their jobs. ORM/MRM should be applied where guidance is not available or doesn’t cover all aspects of a situation — which includes a great deal of what the Air Force is doing today. Even where technical order guidance provides instructions, human factors, the environment and other issues must be evaluated. That’s where ORM/MRM comes into play. ORM/MRM is intended to help identify and minimize unnecessary risk. In operations and maintenance, people get into trouble when they cut corners and don’t follow procedures. If your conscience is questioning what you’re doing or how you’re doing it, step back and re-assess. As Maj. Gen. Griffin pointed out to the group, “If you hear someone talk about a ‘work-around’ or ‘shortcut,’ that should make the hair on the back of your neck stand up.”

He then transitioned into his third point, the Wingman culture. He applauded the Wingman concept, saying, “In 32 years of service, I’ve seen programs come and go, and this is a great program. It’s all about Airmen taking care of Airmen. Everyone should be a wingman, and everyone should have a wingman. I have a wingman; you should have a wingman.” He emphasized that the Air Force is building a culture that says when people see something wrong, they’ll identify it, report it and attempt to fix it 24/7.

Other areas the general touched on included human factors being at the heart of many mishaps, on and off duty. Whether it is aircraft maintenance, flying, or driving a car or motorcycle, the concepts and problems remain the same. He also focused on reaching out in the right way to ensure our high-risk group of 18- to 26-year-olds, whom he called “The Indestructibles,” are getting the right message, in the medium they work and play in.

“Saving lives and protecting resources — that is the bottom line for a safety program, and it’s how I will judge myself after this command. We need to get our eyes back on the target. We need an increased focus on the safety analysis of near misses and almost-mishaps. We need to analyze the leading indicators of where the next mishap is going to be, and prevent it from happening. The key is to create a safer environment, on and off duty.” ★★

Safety Course Grads Eligible for College Credit



U.S. Air Force photo by Tech. Sgt. Scott T. Sturkol

ROBERT BURNS

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In August, the American Council on Education recommended college credit for graduates of three of the courses taught at the Air Force Safety Center, Kirtland AFB, N.M.

ACE recommended three semester hours credit in aircraft accident investigation and one semester hour credit in aircraft accident investigation laboratory, in the upper-division baccalaureate category, for undergraduates who have completed the Flight Safety Officer Course. For graduate students, the council recommended three semester hours in aviation safety and human factors.

Graduates of the Aircraft Mishap Investigation Course may qualify for three semester hours credit

in mishap investigation analysis and one semester hour in mishap investigation analysis laboratory, in the upper-division baccalaureate category.

For the Mishap Investigation Non-Aviation Course, the recommended credits are three semester hours in mishap investigation analysis and one semester hour in mishap investigation analysis laboratory, in the upper-division baccalaureate category.

Under the ACE recommendation, the credits may be available to FSO and AMIC students who graduated since October 2007. Students who completed the MINA course since January 2008 may also apply for credit.

Course graduates may apply for the credits by providing their course completion certificate(s) and a copy of the ACE guide, available at www.militaryguides.acenet.edu, to the colleges in which they are enrolled. ☛



The Holiday Party: Managing the Impairment

AL JONES

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This year I'm determined to have the best holiday party ever. I know Lt. Col. Smith down the street is going to have his big production. That man is so insecure ... it's pathetic the way he's always trying to compete with me. Not just pathetic, but also sad ... so very, very sad. Pathetic and sad, that's what he is. He wishes he could be half as cool as I am. Everyone always says how great my parties are. Anyway, if I'm going to outdo him this year, I have to concentrate on the basics. I've simply got to come up with a better centerpiece. What was it Martha was saying? Oh yeah, "A footed clear glass bowl piled high with colored glass tree ornaments makes a pretty centerpiece, in place of flowers." How true, how true.

I'm on pretty shaky ground here at the Safety

Center ... one more incident and I'm bound to get fired. I need to make sure there are no safety episodes at my party. I'll need plenty of nonalcoholic drinks and at least three designated drivers. Capt. Wurmstein said he probably won't be drinking, but I know once everybody else starts, he'll jump in. He's not bringing a date this year; that's a real shock — with his face, he couldn't buy a date. I better go ahead and get him a ride in advance, so he's free to have a few if he so desires. Last year he showed everyone how macho he was by climbing up on the roof and writing his name in the snow on my front lawn. He says "macho." I say "obnoxious." How he got up there without a ladder I'll never know.

I've heard another tip for planning a party is to provide a wide range of food and activities for guests.

Serve food that's high in protein and carbohydrates. Cheeses and meats are especially good, because they stay in the stomach longer, which slows the rate at which the body absorbs alcohol. So if I serve a lot of food, that should take care of any drinking problems.

Sounds good, but I should bounce this off Dr. Hughes. No need to waste that "know it all" psychology doctorate of his. Although he was way off the mark when he analyzed me as being a narcissistic buffoon ... I don't even think "buffoon" is a real medical term.

Man, you can never get a simple, or short, answer from that guy. It's hard to remember everything he said ... I was dozing off after the first hour. All I wanted to know was if I was taking the right steps to make sure my guests wouldn't be impaired by the alcohol they drank at my party. Then Dr. "Downer" tells me, "If you drink any amount of alcohol, you're already impaired." What a nerd — I bet he never has any fun. Oh well, at least he'll be one of the designated drivers.

If any amount of alcohol introduces an element of impairment, I guess anyone who drinks has to manage their impairment. If it takes the average body about one hour to process one ounce of alcohol, you'd think you could drink four drinks in the first 45 minutes of the party and then be good to go four hours after you arrived at the party. Right?

Not so fast. The body processes alcohol at a steady rate. So if you start at a higher rate, it will take a longer time to process.

If you drink a lot, even after you process the alcohol, you still have to deal with the effects of a hangover. Been there, done that.

What about my other invitees? Maj. Hinkle is a

female, fairly petite and no sign of body fat, so she may process alcohol a little differently.

Lt. Johnson is chunky — I'm being kind — he may process the alcohol differently, too. He may not feel the effects as soon, but the alcohol may stay with him longer.

This is tougher than I thought. I guess there are no guarantees. The only thing for sure is that if you drink, you introduce some level of impairment. Maybe Doc Hughes was right (he's so smug ... I hate it when he's right).

I guess the bottom line is I shouldn't fool myself into believing my actions will eliminate any alcohol problems. Still, I'll do my part to be a responsible host.

If we're going to go from 6 to 11, I'll need to stop serving alcohol by 10. I'll have two guest bedrooms set up for anyone who may need to sleep it off. I'll have designated drivers identified and have the "Dial a Ride" number posted for everyone to see. I'll also keep an eye on everyone and ensure no one appears too loaded.

I'll do everything I can do, but I guess anyone who drinks needs to know they are responsible for managing their impairment. A prearranged, designated, nondrinking driver sounds like the right way to go. If you're going to manage your impairment, the best option is making management decisions before you get even a little bit impaired.

OK, now that I have that squared away, I've got to work on the seating arrangement. I don't need a repeat of last year's fiasco. I don't care what Maj. Musselman says — flatulence may be perfectly natural, but it still ruined last year's party. He's definitely sitting out on the porch this year — I can't let him near the fireplace again. ☞☛



Jack Frost Nipping At Your Wingman

CHIEF MASTER SGT. GARY COLE

4th Air Force
March ARB, Calif.

It seems like just yesterday we were complaining about the heat, and here we are now, complaining about the cold. Have you ever noticed the disparity in our temperature comfort ranges between work and play? At work, it's about five degrees. When the office temperature drops below 71 degrees, we're scrambling for our space heaters. If it rises above 76 degrees, we're calling CE to fix the air conditioning. Off-duty though, it's a completely different story! At 20 degrees, we're out in shirt sleeves throwing footballs around, and at 110 degrees, we're packing our golf bags up and down rolling fairways, complaining about how hot it was in the office that day. Strange, huh?

That's what I'd like to talk about — the tendency to disregard temperatures and outside dangers in our quest for adventure in the winter wonderland. I want to offer some safety tips to help you enjoy your winter recreation even more, by identifying and eliminating some hazards. I spend my winters hunkered down in my living room watching football games, and then at some point after the Pro Bowl, I peek out through the curtains to see if it's safe to step outside. But I know many of you yearn for that first frost, when you can start dreaming of the ski runs, or that first hike through waist-high

snow, or that first jump across the ravine on your new snowmobile. The hair on the back of my neck is already starting to rise!

Before you bolt out the door like your hair's on fire, you need to think about some things. Use those same thought patterns that keep our planes in the air. Don't worry; it won't take long. You'll be back to the pursuit of thrills in no time.

In the early planning stages of your winter recreation, try to think of everything that can ruin your day — things that can hurt you, your family, or your wingman, if you're not prepared. Don't hold back. Get others involved in listing potential dangers. Aside from the obvious threats, such as cold weather and driving on ice and snow, other hazards get overlooked, such as equipment problems, inexperience, behavior and alcohol abuse, to name a few. You don't have to stop with things that can hurt and maim you. Consider lost wallets, stolen valuables, reservation problems, or unwanted relatives tagging along.

Before you have a panic attack and cancel your plans, take a deep breath. Planning a safe adventure takes just minutes. I know time can run out for coherent thought as the weekend approaches, so try to concentrate on the most dangerous things first and then work your way down the list, exploring some of the ways you can eliminate the danger, or at least lessen the potential for injury or death.

For example, statistics say you'll knock the wood




Photo illustration by Dan Harman

panels off the family sedan in a traffic accident long before you even get to the recreation site, so let's start with winter driving. The tendency is to jump in your ride with a G-force grin on the day of the trip and mash down on the gas pedal until you screech to a halt at your destination. Hold up though; let's put an eyeball on your vehicle. Days before the trip, check your tires for good tread and air pressure, brakes, lights, windshield wipers and signals. Peek under the hood and check fluid levels, hoses/belts and the battery. Take the time to look now; it's a long walk from the middle of nowhere.

Pack some emergency supplies, even if your son has to hold the box on his lap all the way there. Not a bad idea really; he'll be less likely to fight with his sister! Bring along a first-aid kit, matches, candles, tools, jumper cables, tow rope, flashlight, blankets, extra clothing, some nonperishable food and water. With all that stuff, you might even want to leave one of the kids home.

OK, you're ready to go, but remember you're now in the most dangerous phase of your adventure: winter driving. Slow going is the name of that tune; it's not a race. Travel well below posted speed limits and avoid sudden movements in steering, braking or accelerating on icy roads. You know that three-foot following distance your daughter uses on the freeway? Multiply that by about 200 for winter conditions. If you happen to start sliding, remember to steer into the skid. The hardest part: maintaining

your composure. Don't press the brakes too hard, or you'll lose the ability to steer the car. You might as well wave your hands out the window, because they're not doing any good on the steering wheel when your brakes are locked up. You've seen those cars on the evening news, sliding on ice with the front wheels frozen sideways while they hurl into the wrecked cars? All they have to do is let off the brakes and they can steer right around the mess. Yes, maybe not at the speed of light, but they'll be safe ... and I hope they'll learn a lesson once they start breathing again.

Let's look at your list again. Next up is outdoor winter activities. Whether you're skiing, hiking, snowmobiling or whatever, you can count on temperatures being cold and weather changing quickly. You've already told friends and family where you'll be, and you've already checked weather reports to ensure there are no nightmare storms bearing down on you, right? Pause for effect. Good. You'll want to dress in layers to meet changes in weather and physical exertion. That emergency kit you packed for the car? Yup, that will go with you into the boonies. Take it out of the kid's lap first or it will be extra heavy. You can trim it down too, depending on means of travel and projected event, but as a minimum, take a knife, matches, a compass or GPS, and some food and water. Try to avoid overexertion, because sweating can be deadly if you start morphing into a Popsicle. ☞

Identify Hazards

Make Decisions

Assess Risks

Implement Controls

Analyze Controls

Supervise & Review

Photo illustration by Dan Harman

Before I run out of time here, let's quickly hit a couple more items. Inexperience has to be right up there near the top. Ignorance is not bliss when it comes to testing Mother Nature. If you're new to the activity you'll be involved in, read up on it, get the right equipment, and go with a wingman who is experienced. Look at equipment hazards, too. Inspect your equipment just as you did your vehicle; doing so may save your life. If your equipment happens to have a motor on it that propels you even more quickly into danger, take some spare parts for it and treat it with respect.

That's a thorough review of your list, considering things you can do to make your vacation safer, yet still enjoyable. If all this thinking is just too much of a burden, share the load. Tear your kids away from their MP3 players and have them get on the Internet to check weather, traffic routes, or other conditions at the planned recreation site. Or put your wingman in charge of preparing snowmobiles or other equipment. It makes for a good team effort and, more importantly, gets friends and family in the proper mindset of looking for hazards as they barrel through life at Mach 2.

Ahhhh, so the day of the event is finally here. You can commence having fun without the safety geek preaching to you. Not so fast! I just want to warn you that you're now coming face to face with the

Grim Reaper. You have to keep your wits about you and stay on the lookout for hazards you may have overlooked, or people in your party who decided to throw caution to the wind and common sense out the back door. Your world can turn tragic in the blink of a bloodshot eye!

After all the fun and you're back home, take a moment by yourself or with anyone else still conscious and assess the trip. Consider those things that didn't go so well or dangers you overlooked and determine how to improve the next trip.

That wasn't so bad, was it? OK, by show of hands: how many of you realized that we just covered the entire six-step ORM process? For anyone left behind, go ahead; go back and look for the steps yourself. We identified hazards, assessed or prioritized the risks, analyzed control measures, made some decisions, implemented our plan while still watching for other hazards, and then reviewed the process.

By using these winter safety tips, you'll be more likely to spend your time enjoying your activity rather than repairing damaged equipment, paying medical bills, or heaven forbid — burying your wingman. Know that ORM is a painless, lifesaving process you can apply to nearly anything.

I wish you a safe, enjoyable winter season. I expect to see you back next summer, complaining about the heat! ☼



The Day I Gave My Boss the Finger

ED SCOTT

Air Force Safety Center
Ground Safety Division
Kirtland AFB, N.M.

U.S. Air Force photo

Typical of winter in the Midwest, the base I worked at had just received several inches of heavy, wet snow. Civil engineering snow-removal crews were in full swing and, after clearing the white blanket from the airfield, were busily working on parking lots and sidewalks. Later that morning, the safety office was notified that a member of the snow-removal crew had been involved in an accident. Arriving on-scene a few minutes later, I found out one of the grounds workers had been injured trying to unclog his snowblower.

Looking at the snowblower, I could see the heavy, wet snow firmly packed into a solid mass, making the snowblower useless. The worker left the engine running with the blower mechanism engaged, while he tried to dig out the mini-iceberg. Unfortunately, his gloved hand was caught by the spinning impeller, which mangled and cut off part of his finger. Nearby workers came to his aid and he was quickly transported to the base hospital.

With the engine turned off, I dug the leather glove out of the snowblower, talked with the witnesses and returned to the office to brief my boss and start writing the necessary safety report. I left the glove

with my boss. As I started writing the report, my boss yelled for me (well, maybe at me). While pulling the glove on in an attempt to determine the level of dexterity available, he encountered a cold, wet lump in the glove ... and pulled out the remains of a finger. We took the remains to the hospital, but the doctors said it was too chewed up to be reattached.

Fortunately, the injured worker was able to return to his job. I got the safety report turned in to our typist, and everyone on the snow-removal crew, learning from their co-worker's mistake, was very careful for a long time to turn off their equipment before doing any maintenance actions.

Although this mishap occurred many years ago, and snow-removal equipment has improved since then, with more safeguards built in, operators still need to follow ALL safety precautions when using ANY powered equipment. Guidance in technical orders, manufacturer's instructions and other guides is there to protect us. But it only works if we follow it.

After this mishap, word spread quickly that I had "given my boss the finger," and it was several weeks before the comments died down. Every so often, when there was a heavy snow, someone would mention it. It was enough to remind me to be very careful with my own snowblower. I hope it's enough to remind you to be careful, too. ☘



Top 10 List: Dangerous Drivers' Famous Last Words

JOHN COCHRAN

Air Force Safety Center
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Here at the Safety Center, we're always on the lookout for fascinating tidbits of information. Based on our research into the most common mishap — automobile accidents — we've compiled the following Top 10 list. These are eyewitness accounts of famous last words spoken just before vehicle mishaps:

10. "Do you see any cops?"
9. "What's the worst thing that could happen?"
8. "I do this all the time and I've never been hurt!"
7. "Everybody back home drives this way!"
6. "Chicken!"
5. "Take the wheel a minute while I _____ (fill in the blank):
 - a. Shave
 - b. Brush my teeth
 - c. Change clothes
 - d. Check my e-mail
 - e. Teach the guy in the other lane a lesson
4. "It's OK — I'm used to multitasking!"
3. "I know a shortcut through here. Who are you gonna believe — me or that lyin' GPS?"
2. "I bet you've never seen a car do this before!"
1. "Hold my beer and watch this!"

That's our list. If you've heard — or said — other famous last words right before a memorable mishap, drop us a line at afsc.semm@kirtland.af.mil. We'll consider all comments, and might even publish the printable ones in a future edition. ✉



Preventing Frostbite and Hypothermia

Prolonged exposure to low temperatures, wind or moisture — whether on a ski slope or in a stranded car — can result in cold-related illnesses, such as frostbite and hypothermia. The National Safety Council offers these tips to help you spot and put a halt to these winter hazards.

How to detect and treat cold-related illnesses

Frostbite is the most common injury, resulting from exposure to severe cold. Superficial frostbite is characterized by white, waxy or grayish-yellow patches on the affected areas. The skin feels cold and numb. The skin surface feels stiff, but underlying tissue feels soft and pliable when depressed. Treat superficial frostbite by taking the victim inside immediately. Remove any constrictive clothing that could impair circulation. If you notice signs of frostbite, immediately seek medical attention. Place dry, sterile gauze between toes and fingers to absorb moisture and to keep them from sticking together. Slightly elevate the affected part to reduce pain and swelling. If you're more than one hour from a medical facility and you have warm water, place the frostbitten part in the water (102 to 106 degrees Fahrenheit). If you don't have a thermometer, test the water first to ensure it's warm, not hot. Rewarming usually takes 20 to 40 minutes, or until tissues soften.

Deep frostbite usually affects the feet or hands and

is characterized by waxy, pale, solid skin. Blisters may appear. Treat deep frostbite by moving the victim indoors. Seek medical attention immediately.

Hypothermia occurs when the body's temperature drops below 95 degrees F. Symptoms include change in mental status, uncontrollable shivering, cool abdomen and a low core body temperature. Severe hypothermia may produce rigid muscles, dark and puffy skin, irregular heart and respiratory rates, and loss of consciousness.

Treat hypothermia by protecting the victim from further heat loss and calling for immediate medical attention. Get the victim out of the cold. Add insulation, such as blankets, pillows, towels or newspapers beneath and around the victim. Be sure to cover the victim's head. Replace wet clothing with dry clothing. Handle the victim gently, because rough handling can cause cardiac arrest. Keep the victim in a horizontal position. Give artificial respiration or CPR, if you're trained, as necessary.

How to prevent cold-related illnesses

Avoid frostbite and hypothermia when you're exposed to cold temperatures by wearing layered clothing, eating a well-balanced diet, and drinking warm, nonalcoholic, caffeine-free liquids to maintain fluid levels.

Avoid becoming wet, as wet clothing loses 90 percent of its insulating value. ☑



Slips, Trips and Falls Poster Child — Me!

ED SCOTT

Air Force Safety Center
Ground Safety Division
Kirtland AFB, N.M.

Although I'm not a cat, and I don't have nine lives, I have spent the last 30-plus years in the safety career field, learning how people can hurt themselves and trying to protect them. Like me, you've probably heard that slips, trips and falls account for a large percentage of all mishaps.

Over the years, I've done my part to add to those figures. I remember the first instance very well. I'd finished a summer conference on-base and the custodian was mopping the floor. A base-level safety guy (me) was talking, not watching where he was going, slipped and then kissed the floor. "Ow ... that hurt!" Being somewhat embarrassed and blood red – oh, wait, that's real blood – my blood – I was transported by base ambulance to the emergency room. Fortunately, I survived. "I'll pay more attention next time," I said.

Fast-forward a dozen years. It's winter at a Midwestern base. High temperature for the day will be

minus 15 with winds above 35 mph. Parking lot conditions are hard-packed ice and snow – reminds me of a northern-tier base, and I'm not even TDY. Older and wiser, and now a MAJCOM-level safety guy, wearing rugged boots, gloves and heavy coat, will brave the elements ... and make it about halfway across the frozen parking lot. Next thing I know, I'm spread-eagled on the cold, hard ice, with a nice lady dressed like an Eskimo leaning over me asking if I'm OK. Embarrassed, but not as red, I slowly crawl to a patch of bare pavement (thank you, base civil engineering!) and gingerly make my way into the building. That's the second time I've fallen. I need something to keep from slipping on ice.

Fast-forward another dozen years. It's January and I'm TDY to a real northern-tier base that's about as far north as you can get and still be on a U.S. base. I'm the Air Force Safety Center safety guy escorting the regional OSHA representative on a staff assis-



ce Command's
Base Group
8' 42W. Elev 251 FT
of Edward A. Flanna

Air Base

U.S. Air Force photo

tance visit. The time and temperature sign says it's well below zero. The truck's electric heater has been plugged in, so the truck starts and we can drive to lunch. Actually, it's "creep" to lunch. Everything is ice-coated and will stay that way for weeks.

I park less than 100 feet from the front door. The OSHA guy puts on his steel-studded ice creepers. Right on time, I make my once-every-12-years dumb decision – I don't need my creepers for THAT short a distance. I make it about halfway to the door and a split-second later, I'm spread-eagled on cold, hard ice again. This time, the Eskimo-looking person leaning over me is a senior OSHA safety staffer, asking me if I'm OK. I'm lying there thinking, "That's a good question; one that warrants some serious thought." With little traffic in the parking lot, I have plenty of time to lie on the ice and ponder the error of my ways. For the last three days, I've walked all over an ice-covered base while wearing my creep-

ers. Why did I think I didn't need my creepers now? They were beside me in the truck and would have taken less than a minute to put on. Maybe I was blinded by thoughts of a double cheeseburger.

Some follow-on thoughts: "I really don't want to move. I really, really don't want to find out something is broken, but the very patient lady there in the red car wants a parking space. Time to move, but slowly. Nothing broken. I'll probably be stiff and sore tomorrow. I promise to wear my ice creepers." I was lucky again.

As I've expressed here, when it comes to falls, I've had plenty of practice. This year I'm nominating myself as the Air Force Safety Center's poster child for this hazard. If you see a poster on preventing slips, trips and falls, with some safety guy spread-eagled on a floor, parking lot or iceberg, it's probably me. When you see my poster, please remember – I'm not a cat, I don't have nine lives, and neither do you. ☞☞

De-icing the Brain



make you numb to safety!

Don't let the cold ...



Photo by Kenn Mann
Photo illustration by Dan Harman



The Most Wonderful Time of the Year

WILL HARDING

17th Training Wing Safety Office
Goodfellow AFB, Texas

Old Man Winter is knocking at my door, bringing the holiday season with him. My thoughts are turning to those special meals you only get this time of year, decorating my home, and visiting family and friends.

Some people set out to make holiday travel plans of where they'll go and how they'll get there, but give no thought to potential problems they could encounter. Those are accidents looking for places to happen. Unfortunately, many people leave safety out of the equation until it's too late.

Wouldn't it be great to have all the fun you can handle and be safe, too? You bet it would! When it comes to safety, personal experience is a harsh teacher. With a little imagination and the use of "what if ..." scenarios, you can plan a safe, fun holiday. Consider all the potential hazards or problems you could encounter — slippery roads, severe weather, drunk drivers and many others.

When I'm traveling, I always ensure my family is well-rested. Before leaving, we plan our rest and meal breaks. When driving, you don't want to

overextend yourself. Good planning will take into account setting aside enough time to get to your destination without rushing or skipping rest and meal breaks that are essential for mind and body. It's never wise to push yourself to the point of exhaustion, because driving fatigued is as dangerous as driving drunk. Your judgment is just as impaired as it would be with alcohol; your vision blurs and your reactions slow.

If traveling during the holidays is not your thing, maybe playing host for parties in your home is. The holiday season is when many home kitchens work overtime. Family and friends gather, schedules become even more hectic, and many hands want to help. It's no wonder food safety practices are likely to fall by the wayside. Many of our holiday guests are at greater risk for food-borne illness: the elderly, children and anyone with a weakened immune system or chronic illness, such as heart disease, diabetes or HIV. No one wants to spoil a holiday celebration with a food-borne illness. Keep your family and friends safe with the following food safety strategies.



Check your refrigerator temperature, using a thermometer to ensure it holds foods safely — between 37 and 40 degrees F. Warmer temperatures allow harmful bacteria to thrive and food to spoil. If you'll be cooking for a crowd and are short on space, fill a cooler or two with ice for the extra items.

Thaw frozen meat and poultry safely in the refrigerator or under cold water in the sink. If you're really pressed for time, microwave thawing is fastest, but make sure you finish cooking immediately after thawing. Defrosting any perishable food on the counter is just asking for trouble. Bacteria can thrive in the outer portions of the food before the inside thaws.

Wash your hands with warm, soapy water before and after handling food, as well as after using the toilet, diapering children, blowing your nose or playing with pets.

To prevent cross-contamination, keep raw meat and poultry and their drippings separate from other foods; also wash counters, cutting boards and knives before, during and after food preparation. Using paper towels to wipe up meat and poultry

drippings is the safest way to clean up, since dishcloths and sponges soak up and spread bacteria throughout the kitchen. Clean up using a sanitizing solution of one teaspoon bleach in one quart of water. Spray on countertops, kitchen tables and refrigerator door handles — the dirtiest spot in a busy kitchen.

When roasting a turkey in the oven, make sure it's set no lower than 325 degrees F. Avoid shortcut cooking methods that call for cooking the bird overnight at a lower temperature. You're only asking for trouble.

Always use a meat thermometer to ensure safety and quality. The turkey is cooked to perfection when the thermometer inserted into the inner thigh, but not touching bone, reads 180 degrees, the breast reads 170 degrees, and the juices run clear. Cooking dressing in a separate casserole dish is safest, but if you prefer to stuff your holiday bird, fill the cavity loosely and make sure the center of the stuffing reaches 165 degrees.

The key to food safety is keeping cold foods cold, below 40 degrees, and hot foods hot, above 140 degrees. Use hot plates, chafing dishes, and crockpots to keep hot holiday buffet food at a safe temperature. Put out small quantities of perishable foods, such as meat, cheese and dips, and refill as needed, or keep cold foods chilled by nesting dishes in bowls of ice.

Finally, there always seems to be leftovers, no matter how many guests you had — turkey for sandwiches, dressing and cranberry sauce. To safely reuse leftovers, make sure they are refrigerated or frozen within two hours of serving. Remove the turkey meat from the carcass and refrigerate in small, shallow, covered containers that protect quality and allow for rapid cooling.

Refrigerated leftovers must be consumed within a few days. Use your freezer for longer storage. Leftovers should be reheated to 165 degrees, or until hot and steaming. Leftover gravy must be brought to a rolling boil before serving.

By following these simple steps, you and your family can have a happy and safe holiday season. 🍷

'Twas the Night Before

'Twas the night before Christmas and all through the house, people were partying; some were quite soused.

The conscientious host took the keys from each guest; didn't give them back unless they passed the sobriety test.

No drinking and driving would he allow. "Friends don't let friends drive drunk," was his motto now.

Lives destroyed; futures lost. Drinking and driving is not worth the cost.



Horseplay is for the Weak-Minded

STAFF SGT. SAMUEL C. GOLDFIELD
31st Test & Evaluation Squadron
Edwards AFB, Calif.

Ever find yourself in a situation that might get out of control? What do you do when you find yourself in this position? Do you go with the flow, or do you put a stop to it? The more people who go with the flow, the harder it is to stop. Eventually, someone gets hurt and all the fun comes to an end anyway, but in a serious way.

It takes more self-discipline to put a stop to horseplay than to encourage it. This is called your conscience. In the back of your mind, it's saying, "Man, look at all the fun those people are having around that multimillion-dollar aircraft; I think I should go join." It hardly ever says, "That doesn't look too safe; I wonder what kind of damage could happen?" This is where you need to train your mind with the self-discipline that leads you to stand up and say something. Horseplay can occur at any time and in any place — in the office, on

the flight line, or in a vehicle driving around base. An example of how horseplay can happen on the flight line follows.

Early one morning, while a few crew chiefs were in the area of responsibility, one had the bright idea to start throwing rocks around. Instead of putting a stop to it, a few more joined in, and one of the rocks broke their truck's windshield. This situation resulted in cost to the government for the price of a windshield, and hardship on the people who then lacked a vehicle. Luckily, no one got hurt in this incident. This is where they needed to think, "Was it really worth it? Was it worth two weeks of being without a vehicle that is a necessity to perform our job? Was it worth creating more work, not only for ourselves, but the people at vehicle maintenance, and those who helped the crew chiefs perform their job without an available vehicle?"

Next time you find yourself in a situation like this, take the time to be a good wingman and think about all the things that could happen, although it's easier to agree than to say, "STOP THAT HORSEPLAY!" 🚫



Holiday Season Safety

The National Safety Council offers these suggestions to help make your holiday season merry and safe.

Decorations

Wear gloves while decorating with spun glass “angel hair.” It can irritate your eyes and skin. A common substitute is nonflammable cotton. Both angel hair and cotton snow are flame-retardant when used alone. However, if artificial snow is sprayed onto them, the dried combination will burn rapidly. Be sure to follow directions carefully when spraying artificial snow on windows or other surfaces. These sprays can irritate your lungs if you inhale them.

Fireplaces

Don't try to dispose of evergreens or wreaths by burning them in a fireplace or in a wood stove; they are likely to flare out of control and send flames and smoke into the room. Also, don't burn wrapping paper in the fireplace; it often contains metallic materials that can be toxic if burned.

Candles

Never use lighted candles near trees, boughs or curtains/drapes, or with any potentially flammable item.

Toys and Gifts

Be especially careful when you choose toys for infants or small children. Be sure anything you give them is too big to get caught in their throat, nose or ears. Avoid toys with small parts that can be pulled or broken off. If you're giving toys to several children in one family, consider their age differences and the chances that younger children will want to play with older kids' toys.

Older Adults

Select gifts for older adults that are not heavy or awkward to handle. For those with arthritis, make sure the gift doesn't require assembly, and can be easily opened and closed. Choose books with large type for anyone with impaired vision.

Plants

Small children may think that holiday plants look good enough to eat, but many plants can cause severe stomach problems. Plants to watch out for include mistletoe, holly berries, Jerusalem cherry, and amaryllis. Keep all these plants out of children's reach.

Food and Cooking

The holidays often mean preparing large meals for family and friends. Wash hands, utensils, sink, and anything else that comes in contact with raw poultry. Keep in mind that a stuffed bird takes longer to cook. For questions concerning holiday turkey preparation and cooking, call the U.S. Department of Agriculture Meat and Poultry Hotline at 1-800-535-4555. Refrigerate or freeze leftovers in covered, shallow containers (less than two inches deep) within two hours after cooking. Date the leftovers for future use.

Alcohol, Parties and Driving

Being a smart party host or guest should include being sensible about alcoholic drinks. More than half of all traffic fatalities are alcohol-related. Use nondrinking designated drivers to drive other guests home after a holiday party.

Stress

The holiday season is one of the most stressful times of the year. You can't avoid stress completely, but you can give yourself some relief. Allow enough time to shop, rather than hurry through stores and parking lots. Plan to do a reasonable number of errands. When shopping, make several trips out to the car to drop off packages, rather than trying to carry too many items. Take time out for yourself. Relax, read or enjoy your favorite hobby at your own pace. ☺



Skiing and Snowboarding Tips

The National Ski Areas Association offers the following advice for skiers and snowboarders.

Before Hitting the Slopes


- Get in shape. Don't try to ski yourself into shape. You'll enjoy skiing more if you're physically fit.
- Obtain proper equipment. Be sure to have your ski or snowboard bindings adjusted correctly at a local ski shop. You can rent good ski or snowboarding equipment at resorts.
- When buying skiwear, look for fabric that is water- and wind-resistant. Look for wind flaps to shield zippers, snug cuffs at wrists and ankles, collars that can be snuggled up to the chin, and drawstrings that can be adjusted for comfort and keep wind out. Be sure to buy quality clothing and products.
- Dress in layers. Layering allows you to accommodate your body's constantly changing temperature. For example, dress in polypropylene underwear (top and bottoms), which feels good next to the skin, dries quickly, absorbs sweat and keeps you warm. Wear a turtleneck, sweater and jacket.
- Be prepared. Mother Nature has a mind of her own. Bring a headband or hat with you to the slopes; 60 percent of heat-loss is through the head. Wear gloves or mittens (mittens are usually better for those susceptible to cold hands).



- Be aware of the snow conditions and how they can change. As conditions turn firm, the skiing gets hard and fast. Begin a run slowly.
- Skiing and snowboarding require a mental and physical presence.
- If you find yourself on a slope that exceeds your ability level, always leave your skis / snowboard on and sidestep down the slope.
- The all-important warm-up run prepares you mentally and physically for the day ahead. Drink plenty of water. Be careful not to become dehydrated.
- Curb alcohol consumption. Skiing and snowboarding do not mix well with alcohol or drugs.
- Know your limits. Learn to ski and snowboard smoothly and in control. Stop before you become fatigued and, most of all, have fun.
- If you're tired, stop skiing. In this day and age of multi-passenger gondolas and high-speed chairlifts, you can get a lot more time on the slopes compared to the days of the past when guests were limited to fixed-grip chairlifts.

Your Responsibility Code: Seven Safety Rules

Skiing can be enjoyed in many ways. At ski areas you may see people using alpine, snowboard, telemark, cross-country and other specialized ski equipment, such as that used by disabled or other skiers. Regardless of how you decide to enjoy the slopes, always show courtesy to others and be aware that there are elements of risk in skiing that common sense and personal awareness can help reduce. Observe the code elements listed below and share with other skiers the responsibility for a great skiing experience.

1. Always stay in control.
2. People ahead of you have the right of way.
3. Stop in a safe place for you and others.
4. Whenever starting downhill or merging, look up hill and yield.
5. Use devices to help prevent runaway equipment.
6. Observe signs and warnings, and keep off closed trails.
7. Know how to use the lifts safely. 

- Wear sun protection. The sun reflects off the snow and is stronger than you think, even on cloudy days!

- Always wear eye protection. Have sunglasses and goggles with you. Skiing and snowboarding are a lot more fun when you can see.

While on the Slopes

- Take a lesson. Like anything, you'll improve the most when you receive some guidance. The best way to become a good skier or snowboarder is to take a lesson from a qualified instructor.

- The key to successful skiing / snowboarding is control. To have it, you must be aware of your technique, the terrain and the skiers / snowboarders around you.



Safe Snow Shoveling

Although shoveling snow can be good exercise, it can also be dangerous for optimistic shovelers who take on more than they can handle. The National Safety Council offers the following tips to help you get a handle on safe shoveling:

- Individuals older than 40, or those who are relatively inactive, should be especially careful.
- If you have a history of heart trouble, don't shovel without a doctor's permission.
- Don't shovel right after eating or while smoking.
- Take it slow! Shoveling, like lifting weights, can raise your heart rate and blood pressure dramatically, so pace yourself. Be sure to warm up before taking on the task.
- Shovel only fresh snow. Freshly fallen, powdery snow is easier to shovel than the wet, packed-down variety.

- Push the snow as you shovel. It's easier on your back than lifting the snow out of the way.
- Don't pick up too much at once. Use a small shovel, or fill only one-fourth or one-half of a large one.
- Lift with your bent legs, not your back. Keep your back straight. By bending and "sitting" into the movement, you'll keep your spine upright and less stressed. Your shoulders, torso and thighs can do the work for you.
- Don't work to the point of exhaustion. If you run out of breath, take a break. If you feel tightness in your chest, stop immediately.
- Dress warmly. Remember that extremities, such as the nose, ears, hands and feet, need extra attention during winter's cold. Wear a turtleneck sweater, cap, scarf, face protection, mittens, wool socks and waterproof boots. ❄️



Portable Generator Safety Tips

The National Safety Council offers the following advice for safely operating portable generators.

In an emergency, portable electric generators offer lifesaving benefits when outages affect your home or business. They can safely power important electrical equipment, such as portable heating units, computers, water pumps, freezers, refrigerators and lights. However, portable generator use can also be very hazardous. If you plan to use an emergency generator, it's essential you take precautions for your safety and the safety of those working to restore power.

The most effective way to avoid portable generator mishaps is to make sure you fully understand the proper operating procedures. Read and follow the manufacturer's guidelines before operating or maintaining your generator — and use common sense.

Follow these tips for safe portable generator use:

- Always read and follow the manufacturer's operating instructions before running the generator.
- Engines emit carbon monoxide. Never use a generator inside your home, garage, crawl space or other enclosed areas. Fatal fumes can build up that neither a fan nor open doors and windows can

overcome to provide enough fresh air.

- Only use your generator outdoors, away from open windows, vents or doors.
- Use a battery-powered carbon monoxide detector in the area you're running a generator.
- Gasoline and its vapors are extremely flammable. Allow the generator engine to cool at least two minutes before refueling and always use fresh gasoline. If you won't use your generator for 30 days, stabilize the gas with fuel stabilizer.
- Maintain your generator according to the manufacturer's maintenance schedule for peak performance and safety.
- Never operate the generator near combustible materials.
- If you have to use extension cords, be sure they are of the grounded type and are rated for the application. Coiled cords can get extremely hot; always uncoil cords and lay them in flat, open locations.
- Never plug your generator directly into your home outlet. If you're connecting a generator into your home electrical system, have a qualified electrician install a power transfer switch.
- Generators produce powerful voltage — never operate them under wet conditions. Take precautions to protect your generator from exposure to rain and snow. ☔

Safety Shorts



Highway fatalities drop to historic low

The overall number of traffic fatalities declined to the lowest level since 1994, but the number of motorcycle-related fatalities continues to rise, a new report from the National Highway Traffic Safety Administration shows.

Transportation Secretary Mary E. Peters announced Aug. 14 that the overall number of traffic fatalities fell in 2007 to 41,059 — the lowest number since 1994. The fatality rate per 100 million vehicle miles traveled was 1.37 — also the lowest fatality rate on record, she said. Peters attributed the drop to safer vehicles, aggressive law enforcement, and efforts by DOT and NHTSA.

Motorcycle fatalities increased for the 10th straight year, rising 6.6 percent in 2007, Peters said.

Additional findings show alcohol-related fatalities involving a blood-alcohol content of 0.08 declined by 3.7 percent in 2007.

Source: National Safety Council

Workplace deaths decrease 6 percent in 2007

Fewer workers were killed on the job in 2007 than in 2006, according to preliminary data from the Bureau of Labor Statistics' annual Census of Fatal Occupational Injuries. A total of 5,488 fatal worker injuries were recorded in the United States in 2007, compared with 5,840 in 2006, BLS said.

Other findings:

- The construction industry continued to incur the most fatalities of any industry in the private sector: 1,178.
- The number of fatal workplace falls in 2007 rose to a census series high of 835 — a 39 percent increase since 1992.
- Fatal occupational injuries among African-American workers reached their highest level

since 1999, but fatal work injuries among Hispanic workers fell 8 percent in 2007.

Source: National Safety Council

Leadership linked to healthy workers

The key to a healthy workforce may begin at the top, according to a study published in the August issue of the *Journal of Occupational and Environmental Medicine*.

As part of the study, Finnish researchers examined 27 qualities commonly associated with good leadership, such as treating employees fairly; being truthful; and providing social support, motivation and intellectual stimulation. Employees working under good leadership were found to be 40 percent more likely to fall into the highest category of well-being, indicating the lowest levels of stress, anxiety and depression.

Researchers also found a potential link to time away from work: good leadership was associated with a 27 percent reduction in sick leave and a 46 percent reduction in disability pensions.

Source: National Safety Council

NHTSA releases new motorcycle report

Motorcycle rider age, motorcycle engine size and time of day correlate highly with motorcycle rider helmet use, a new report from the National Center for Statistics and Analysis shows.

The report, released Aug. 18, is an analysis of motorcycle crash data from 1997 to 2006. Currently, 20 states and the District of Columbia have laws that require all motorcyclists 21 and older to wear a helmet.

Researchers found the odds that a motorcycle rider involved in a single-vehicle crash wore a helmet were 72 percent less in states that did not have a universal helmet law than in states that had a universal helmet law. Absence of a universal helmet law led to a 69 percent reduction in the odds a rider involved in a two-vehicle crash wore a motorcycle helmet.

Additional findings show:

- Motorcycle riders in the 20-29 age group and the 59-and-older age group had the highest helmet use.
- Helmet use was greater during the day than at night.

- Among the motorcycles with an engine size of 501 to 1,000 cubic centimeters, 38 percent of riders did not wear helmets. 🏍️

Source: National Safety Council

answers to puzzle on page 29



Safe Winter Fun

CAPT. TONY WICKMAN

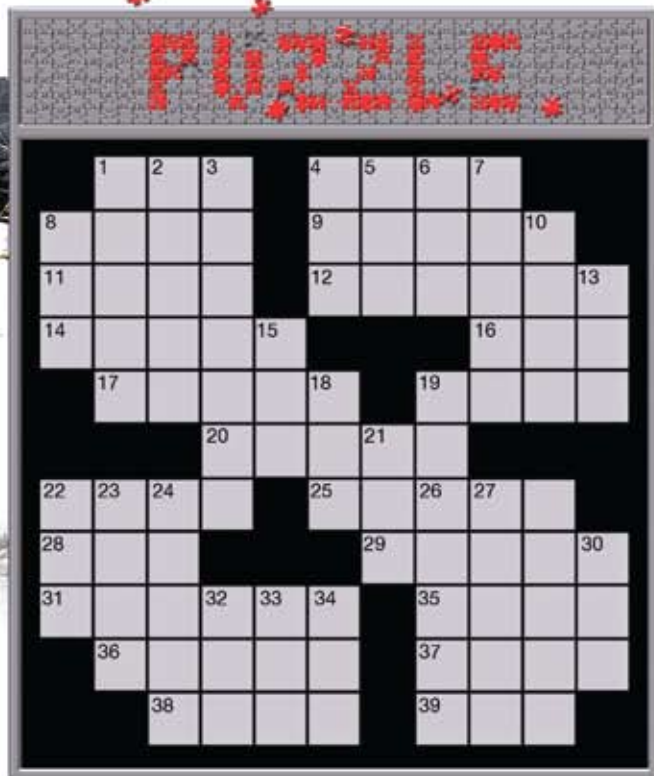
U.S. Air Forces in Europe Public Affairs
Ramstein AB, Germany

ACROSS

1. Cooking spray
4. Southwest U.S. "monster"
8. Cab
9. Computer pictures
11. Newsman Hume
12. Lie close and snug in the winter
14. Winter recreation
16. Snakelike fish
17. First letter of the Hebrew alphabet
19. Computes
20. Water nymph in Greek mythology
22. Winter safety items
25. Pine, elm, oak
28. Engine need
29. Legislate
31. Winter hand protection
35. I came, ____, I conquered
36. Took an oath
37. Fiddling emperor
38. Whack
39. Small, mischievous creature considered to have magical power

DOWN

1. Cold-weather torso protection
2. In or on a rotating point
3. Cold-weather hand-protectors



4. Liquor made of distilled grain mash with juniper berries
5. Winter danger
6. ____ Alamos
7. Paid to play
8. Cable TV station
10. Winter fun activity item
13. Golfer Ernie
15. Federal org. monitoring pollution
18. Smack
19. Purine base pairing with thymine in DNA and with uracil in RNA
21. ____ We There Yet?
22. Person who plays a minor part in a large organization
23. Feels ill or has pains
24. Snow-removal items
26. Painting holder
27. Winter neck-protector
30. Duo composition
32. Promise
33. Epoch
34. Harden



Safety Research Update

The following information is courtesy of *SafetyLit*, a service of the San Diego State University Graduate School of Public Health. Information about the occurrence and prevention of injuries is available from many sources and professional disciplines. *SafetyLit* staff and volunteers regularly examine and summarize 2,600 scholarly journals from 35 professional disciplines and scores of reports on safety research from government agencies and organizations. We've included these summaries in *Wingman* for their interest to the Air Force community. For more information, go to www.safetylit.org.

SUV Safety Depends on Driver

Researchers conducted a population cohort study of all licensed passenger vehicles in New Zealand in 2005-2006. The objective was to evaluate the effect on road safety of sport utility vehicles compared to other passenger vehicle types. Statistical models were fitted to the population of 2,996,000 vehicles, of which 17,245 were involved in an injury crash. Controlling for distance driven, vehicle and owner characteristics, SUVs were found to be relatively safe vehicles in injury-crash involvement and in the injury rate of their own occupants or other road users into which they crashed. Current research on SUV safety shows them to be a road safety concern, but only once a collision occurs. This study shows that SUVs in New Zealand have relatively few collisions compared to other passenger vehicle types, allowing for factors such as distance driven, some allowance for the type of driving exposure (via the owners' addresses) and for owner age and gender. Overall, the vehicle type implicated most frequently in injury crashes and involving the highest rate of road injuries was sports cars, causing the most harm per licensed vehicle. Instead of concerning themselves primarily with SUVs, the focus of road safety agencies should be on the relatively high crash risk of sports cars. Their high crash-involvement rate and injury rate is likely to be largely due to the way they are driven, rather than to inherent characteris-

tics of the vehicles themselves.

(Source: Keall MD, Newstead S. *Accid Anal Prev* 2008; 40(3): 954-63. Copyright 2008, Elsevier Publishing.)

Side Airbags and Injury Risk

BACKGROUND: The availability of automotive airbags continues to increase in an effort to reduce traffic fatalities. Their benefits do not come without consequences, as front and side airbags have been linked to upper and lower extremity injuries. This study sought to test the hypothesis that occupants of vehicles equipped with side airbags involved in side-impact motor vehicle collisions have an increased risk of upper extremity injury, compared with occupants of vehicles without side airbags.

METHODS: The risk of upper extremity injury in side-impact collisions was compared between vehicles with and without side airbags, using data obtained from the 1995-2004 Crashworthiness Data System, a dataset maintained by the National Highway Traffic Safety Administration. We assessed the risk of upper extremity injury as classified by Abbreviated Injury Scale score, 1990 Revision.

RESULTS: Although there was no association between side airbag availability and the risk of upper extremity injury overall [risk ratio (RR) 1.08; 95 percent confidence interval (CI) 0.85-1.36], the risk of a moderate or serious upper extremity injury (Abbreviated Injury Scale score ≥ 2 or ≥ 3 injury) was significantly increased (RR 2.75, 95 percent CI 1.10-6.83 and RR 2.45, 95 percent CI 1.00-5.96, respectively). The risk of dislocation was also increased (RR 2.42, 95 percent CI 1.26-4.64), although there was no difference in the risk of fracture (RR 1.00, 95 percent CI 0.53-1.89). **CONCLUSION:** The forces generated by airbag deployment may explain the increase in upper extremity injuries observed in vehicles equipped with side airbags. This increased risk must be balanced against other research, suggesting reduced risks for head and thoracic injury.

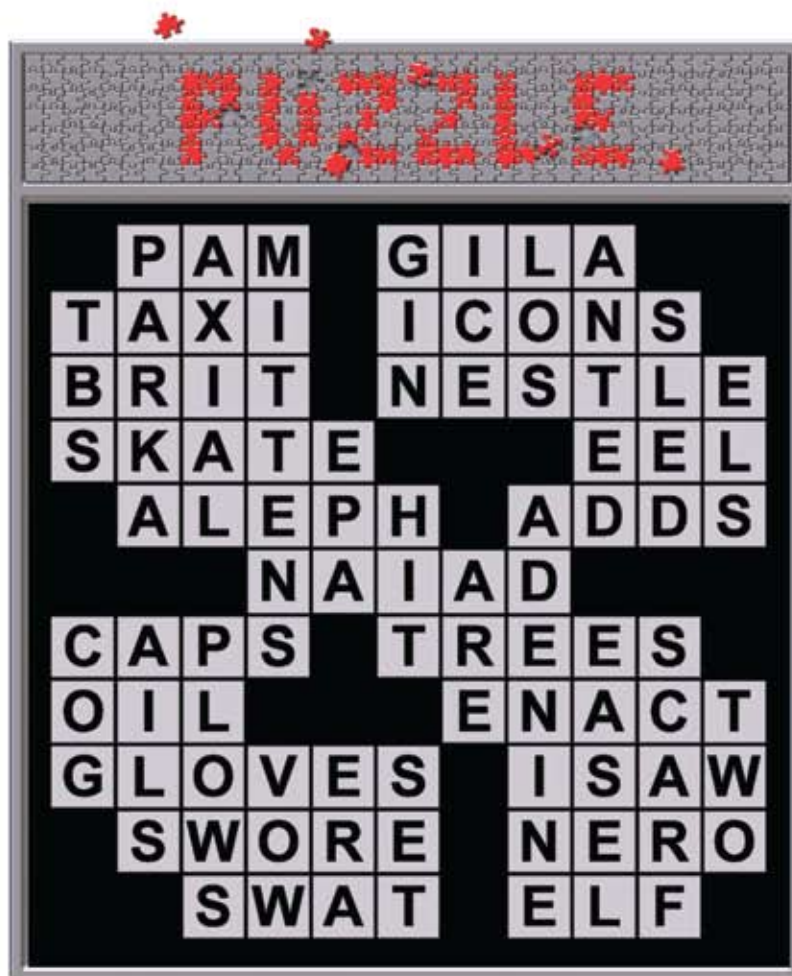
(Source: McGwin G, Modjarad K, Duma S, Rue LW.

ESC Reduces Rollover Risk

BACKGROUND: Electronic stability control systems were developed to reduce motor vehicle collisions caused by loss of control. Introduced in Europe in 1995 and in the USA in 1996, ESC is designed to improve vehicle lateral stability by electronically detecting and automatically assisting drivers in unfavorable situations. **AIM:** To examine the relationship between vehicle rollover risk and presence of ESC using a large national database of vehicle crashes. **METHODS:** A retrospective cohort study for the period 1995 through 2006 was carried out using data obtained from the National Automotive Sampling System General Estimates System. All passenger cars and sport utility vehicles/vans of model year 1996 and later were eligible. Vehicle ESC (unavailable,

optional, standard) was determined on the basis of make, model, and model year. Risk ratios and 95 percent CIs were calculated to compare rollover risk by vehicle ESC group. **RESULTS:** For all crashes, vehicles equipped with standard ESC had decreased risk of rollover (RR = 0.62, 95 percent CI 0.50 to 0.77) compared with vehicles with ESC unavailable. The association was consistent for single-vehicle crashes (RR = 0.61, 95 percent CI 0.46 to 0.82); passenger cars had decreased rollover risk (RR = 0.77, 95 percent CI 0.52 to 1.12), but SUVs/vans had a more dramatically decreased risk (RR = 0.40, 95 percent CI 0.26 to 0.61). **CONCLUSIONS:** This study supports previous results showing ESC to be effective in reducing the risk of rollovers. ESC is more effective in SUVs/vans for rollovers related to single-vehicle crashes. ☛

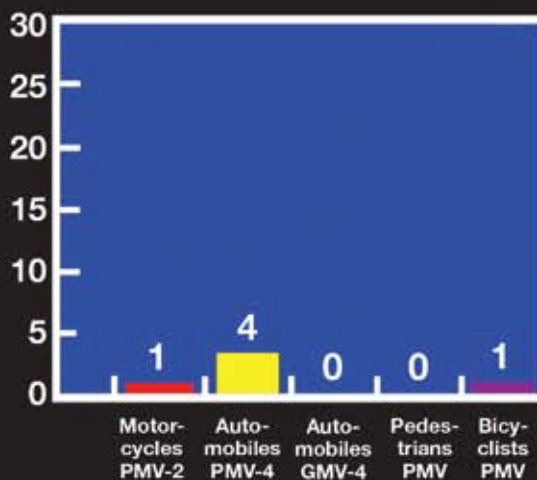
(Source: Maclennan PA, Marshall T, Griffin R, Purcell M, McGwin G, Rue LW. *Inj Prev* 2008; 14(3): 154-8. Copyright 2008, BMJ Publishing Group.)



answers to puzzle from page 27

Snapshot on Safety

Motor Vehicle Fatalities Total FY09 (as of November 5)



LORENZO VILLARREAL

Air Force Safety Center
Ground Safety Division Contractor
Kirtland AFB, N.M.

Towing at High Speeds can be Fatal

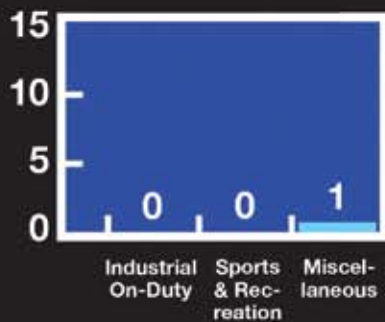
Airman 1 was driving a 5-ton M-series truck towing an M840 dolly set, with Airmen 2 and 3 as passengers on a training certification route. Airman 2 was the middle passenger, and Airman 3 was the door passenger. Airman 1 had held a license for the truck for one day, and had not previously driven the vehicle. He was receiving training from Airman 3 on the dolly set, and Airman 2 was an observer. Airman 1 was driving west on a 20-foot-wide, hard-packed gravel road with several curves and knolls, and a posted speed limit of 35 mph. Airman 1 had driven about one mile before entering a left curve at about 50 mph. As Airman 1's vehicle exited the curve, the dolly set left the road and entered the north ditch. Airman 1 tried to regain control before

entering a right curve. Airman 1 was unable to regain control and the vehicle skidded into the north embankment, flipped and landed on its top. Airman 1 was wearing a seat belt, was not ejected and suffered only minor injuries. Airmen 2 and 3 were not wearing seat belts and were ejected. Airman 2 suffered multiple traumas to head, chest and extremities, and was pronounced dead at the scene. Airman 3 was airlifted to a hospital where he underwent vascular surgery on his leg.

Lessons Learned

Speed, lack of towing experience, and unfamiliarity with the road conditions were factors in this mishap. Becoming familiar with the road conditions before performing the training may have made Airman 1 more aware of the dangers the road presented. Additionally, whenever performing a towing activity, it's important to follow the posted towing speed. Operators and passengers should

Non-Motor Vehicle Fatalities Total FY09 (as of November 5)



always wear their seat belts, increasing their odds of survival during an accident.

Winter Driving

During the night after a winter storm, Operator 1 was driving a two-wheel-drive pickup truck along with a passenger. They were returning from a local shopping mall to the driver's parents' house, five miles away. While traveling north on a two-lane road at about 30 mph, the driver turned onto the highway entrance ramp. The entrance ramp continues into a merge lane that allows vehicles to reach posted speed limits. Because afternoon temperatures had been above freezing, there was no snow on the road. The temperature was below 32 degrees at the time, freezing the melted snow. The driver continued in the merge lane for about 40 feet, reaching a speed between 30 and 40 mph. He lost control while unknowingly driving over a patch of ice. The truck spun 360 degrees to the right,

left the road and struck a light pole. Both occupants were transported to a local civilian hospital. The driver suffered major injuries and lost vision in his left eye. The passenger sustained minor injuries and was released the following day.

Lessons Learned

Although there was no inclement weather at the time of the mishap, water on the roads can quickly turn into ice, also known as black ice, when the temperature falls below freezing. Black ice is very difficult to spot, especially at night, and can be deadly when traveling at high speeds. Always be aware of the road conditions. Just because the storm has passed doesn't mean the dangers are no longer present.

Always Expect the Unexpected, Especially on the Road

Two Airmen were returning from a professional military education graduation ceremony. After a good night's rest, they started driving their government vehicle to another base. Three hours into the drive, they were southbound in the inside lane of a four-lane divided highway, with occasional paved and curbed crossings that allow drivers to change their travel direction. As they approached an uncontrolled intersection, a group of vehicles was around them, including a sport utility vehicle in front and a semitrailer in the right lane, slightly behind them. The SUV ahead of them blocked their view of the motorcycle it followed. The SUV began slowing in front of them. The Airman driving also slowed, but was closing the distance between the two vehicles. The SUV driver swerved into the right lane in front of the tractor-trailer, leaving the Airmen's vehicle to rapidly approach the motorcycle. The driver had a split second to decide what action to take. He immediately applied hard braking, but couldn't evade to the right because of the semitrailer's position. His vehicle slammed into the two-wheeler, knocking the driver off the seat. The motorcyclist slid face down on the pavement before coming to rest; he died of his injuries at the scene.

Lessons Learned

It was not determined whether the distance between the two vehicles contributed to the mishap; however, being aware of your speed and distance between other vehicles will give you more time to react to unexpected situations. A factor in this mishap was the lack of personal protective equipment on the part of the motorcycle rider. He wasn't wearing a helmet, and even though some states' laws don't require motorcyclists to wear helmets, not wearing one was a decision that placed him in jeopardy. Personal protective gear is a necessity if a motorcyclist is to have any chance of survival in a serious mishap. ☞



Slip into the Joint Services Winter Safety Campaign, beginning December 1, 2008 and ending February 28, 2009.

After Thanksgiving, a dedicated page of campaign information will be available online at the Air Force Safety Center Ground Safety Division's Web site:

<http://afsafety.af.mil/SEG/SEG/ground.shtml>.