The United States Air Force Journal of Occupational, Recreational and Driving Safety

Road & Rec

Volume 16, Number 4 Fall 2004

WINNER 2004 APEX® AWARDS FOR PUBLICATION EXCELLENCE

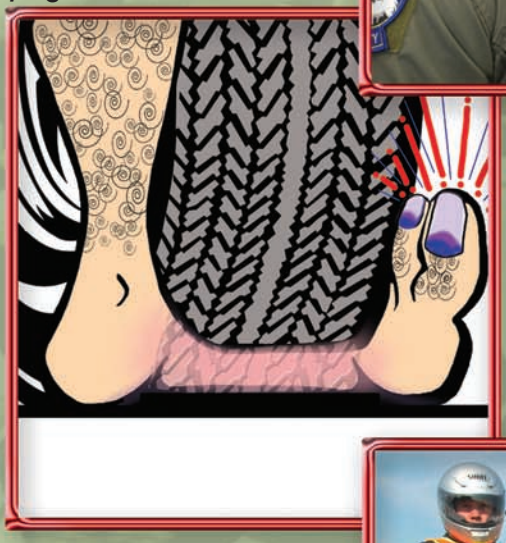
The United States Air Force Journal of Occupational, Recreational and Driving Safety

Road & Rec

Volume 16, Number 4 Fall 2004

page 4

page 12



page 14

page 26

Web page address for the Air Force Safety Center:
http://afsafety.af.mil

Commercial Prefix (505) 846-XXXX
E-Mail – john.cochran@kirtland.af.mil

DEPARTMENT OF THE AIR FORCE
CHIEF OF SAFETY, USAF

PURPOSE—The Air Force Safety Center publishes ***Road & Rec*** quarterly, as part of the program to prevent vehicle and other ground mishaps. Contents are not directive unless so stated. **REPRINTS—**Air Force units may reprint ***Road & Rec*** 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 **Mrs. Pat Rideout at HQ AFSC/SEPM, Voice—DSN 246-1983; Fax—DSN 246-0931; E-mail—Patricia.Rideout@kirtland.af.mil;** or by mail to:

Road & Rec Magazine
HQ Air Force Safety Center
9700 G Avenue SE, Ste 286
Kirtland AFB, NM 87117-5670

Limited numbers of back issues are available from HQ AFSC/SEPM.

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

CONTRIBUTIONS
Editor
Road & Rec
HQ AFSC/SEPM
9700 G Avenue SE, Ste 286
Kirtland AFB, NM 87117-5670

Back cover photo by TSgt Michael Featherston
Back cover digital illustration by Felicia Moreland

Features

Departments

STATEMENT OF OWNERSHIP, MANAGEMENT AND CIRCULATION

The United States Postal Service requires all publications publish a statement of ownership, management and circulation.

Title of Publication—**Road & Rec**
USPS Publication No.—10557725
Frequency of Issue—Quarterly

Location of Office of Publication—
HQ AFSC/SEPM
9700 G Avenue SE, Ste 286
Kirtland AFB NM 87117-5670

Publisher—U.S. Air Force
Editor—Col Ramona Barnes
Owner—United States Air Force
Total number of copies printed—36,211
Number of copies distributed—35,961
Number of copies not distributed—250
Total copies distributed and not distributed—36,211

CORRECTION

In the summer issue of ***Road & Rec***, the "**Timing Is Everything**" item in the "**Safety Shorts**" section on page 15 stated, "Every 13 seconds, someone in the U.S. dies in a motor vehicle crash." The correct statistic is, "Every 13 ***minutes***, someone in the U.S. dies in a motor vehicle crash."

Thanks to alert reader Mr. J.R. Dunn, 1st Fighter Wing ground safety manager, for pointing out the mistake. We regret the error.

New Air Force Chief of Safety Q & A

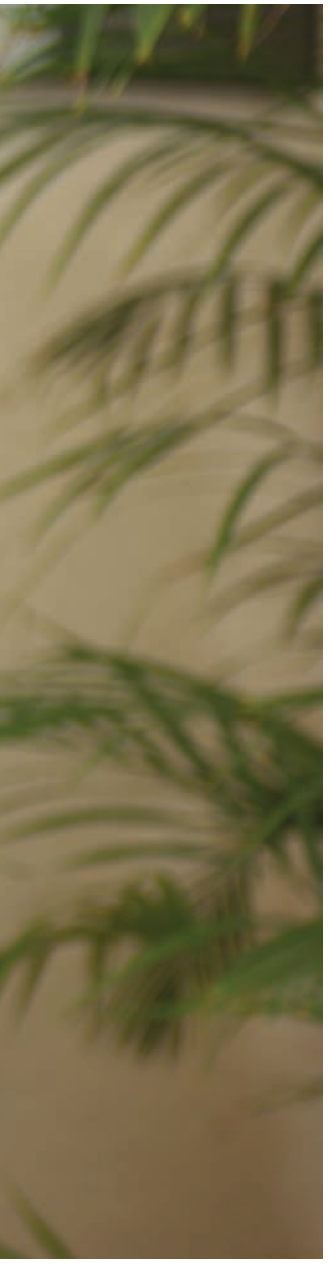
MAJ GEN LEE MCFANN
USAF Chief of Safety and Commander, AFSC

Editor's note: *Maj. Gen. Lee McFann took over July 1, 2004, as the Air Force Chief of Safety and Commander of the Air Force Safety Center. Below is an excerpt from his August 9 interview with the editors of* **Flying Safety Magazine**, **Road & Rec** *and* **Weapons Journal.**

What is your safety-related background?

When I found out I was coming here, I thought, "I've never been in safety." Then after I thought about it, I've spent my whole career in safety. I think we all have. I don't think there's anyone in our Air Force who's not involved in safety. For me, it's just more visible now. I've flown big airplanes, I've flown little airplanes, I've had staff jobs, I've been a commander several times, and I think of all the responsibilities and exposure to safety I've had. It's not unique to me. Anybody who's been in the Air Force as long as I have has been exposed to safety, whether on the flight line or in a missile silo. Safety's safety. Now I have a different viewpoint because of my

USAF photos by TSgt Michael Featherston



formal association with safety.

As you serve as Air Force Chief of Safety, what are your priorities as far as improving our safety efforts?

My priority is our people. If we can save one life, what a great thing to do for our Air Force. I think our job in Air Force safety is prevention of fatalities, serious injuries for our people, or damage to our equipment. I think the goal of zero, while it may be very difficult to achieve, is the only goal to have. Accepting a goal of anything less than zero, is saying, "I agree, we're probably going to hurt or maim some people this year." I could not look at somebody and say, "We're going to lose 17 people this year—that is our goal." That's unacceptable.

What do you believe we can do to improve our safety record in POV mishaps?

First is personal responsibility, then leadership responsibility. The Army has instituted a program that is showing great promise. It is a program of increased senior involvement. For example, if you're going to take a long, three-day weekend, you need to brief your supervisor in detail on what you're going to do. The results from that program have been pretty astonishing. Nearly 40,000 individuals have participated in this, and they've had one fatality. And that person was a passenger. I do not think this is super rocket scientist stuff—it is just more personal involvement at all levels. If I came and briefed you, as my supervisor, that I was going to drive from New Mexico to San Francisco and back on a three-day pass, you'd probably say, "Hey, you need to add a few days onto this or change your target location—you're driving too far." So by making people lay out their plans, you're having them do a personal risk management when they brief their supervisor. Anytime we brief our supervisors, we pay attention to it. Leadership involvement will help us a great deal. We lose more people to traffic accidents in our Air Force than in any other cause.

What special safety concerns are posed by our war efforts?

There are a few. One of them is the fatigue of the force. We have a pretty high ops tempo. When we come back from Iraq, where there are people trying to kill us, we drop our guard a little bit. We think, "Oh, I'm safe, I'm back in America." So, complacency is one. The second one is when people try to make up for lost time. "I was in Iraq for six months—I didn't get to go downtown and have some fun. I'm going to go accomplish all those fun things and make up for the time I was deployed." Complacency—"I'm out of the high-risk zone." What a terrible thing, to come back from a war zone and get killed while driving home. To get killed anywhere is a tragedy, but to survive a war and come back and get yourself killed because you tried to drive too far and fast when you were tired, just because you wanted to get to Florida for the weekend ...

Speaking of our war efforts, do you see any special concerns with the support side of aviation—our maintainers,

continued on next page

weapons, security, supply, transportation and the rest of the Air Force?

Our effort in the war, on the support side, is fabulous. They're in a high-risk zone, people are lobbing grenades at them, and they accomplish their mission better and safer than anybody else in the world. The reason is our training, our education, and the commitment of our people. When we come home, I hope we can maintain that same razor's edge and attitude. It's difficult to do—you can't be in an intense environment in Iraq and come back and maintain that forever, so I worry about keeping people at that high level of alertness when they come back home, wherever they're stationed. That's a leader's job—you need to keep your people motivated and be attuned to their needs.

What role do you believe supervisors and/or co-workers play in ensuring our Air Force works and plays safely?

It's fundamental. That's what we're supposed to do. Leaders should know their people, and work and play safely. If you see somebody about to do something that makes the hair on the back of your neck stand up, they probably should not do it. If it's your co-worker or one of your troops, don't let them do it. Would you want to talk with this person's spouse and say, "I thought jumping off that bridge wasn't a very good idea, but I let him do it—sorry?"

What role do you see ORM playing in our on- and off-duty safety efforts?

I think it's very important; in fact, it's critical. We cannot take all the risk out of anything, but we need to know it's a risk worth taking. If the risk factors come out too high, then you have to step back and ask, "Why am I doing this?" Whether it's flying an airplane or driving a POV. If why you're doing it doesn't make sense, you need to change the factors you can control. Get more sleep before you go, take more time, is there another way to accomplish the same thing? Find some way to mitigate the risks. You can't take them all out. For example, airplanes. Before we go fly, we know our mission. We prepare for it. We've obviously been trained in whatever events we're going to do in the airplane, so we mitigate all those risks. There are still risks; we can't eliminate all of them. To get it down to zero is pretty difficult, but we can really reduce the risks.

What do you see as the greatest safety problem with reference to off-duty activities?

I don't know that there is a single greatest problem. It's personal responsibility and leadership responsibility. Both parties have to accept the responsibility. We have to realize we're Airmen 24/7, 365. I can't finish a day's work and go home at 7 o'clock tonight and say, "I'm hanging up my Air Force blue uniform." We're all too valuable to be wasted, splattered on the highway somewhere because we did something stupid. For example, not wearing a helmet on a motorcycle—I don't get it. I understand riding motorcycles—I don't get not wearing a helmet. I don't get not wearing seatbelts. It's personal responsibility—you have to take some on your own, and your boss has to take some, too. It's always easy in hindsight to say, "I've seen him drive home on a Friday night like that before—it wasn't the first time he drove that way." Where was the supervisor? If the co-workers knew, why didn't they say something? Why didn't the supervisor say, "I understand that you live in the mountains and you're trying to start your three-day weekend, and you're in a rush to get home, but … "

When you have completed your tour as Chief of Safety, what would you like to have accomplished?

I'd like to think that all our safety records—from individuals, to aircraft,

to munitions, to space, to ground—have all improved. It'll take a little bit of a culture change, but I think what we need to do in Air Force safety is more involvement from our supervisors, accepting responsibilities on a personal level, and I think we can build on an already great safety record. We can't afford to lose one precious Airman. That's our best resource, and if we say it's our most important resource, we need to protect it.

Secretary of Defense Rumsfeld has given DoD a goal of reducing mishaps by 50 percent. How will the Air Force work to reach that goal?

I think that's a great effort by the Secretary, recognizing that we're losing some of our precious people and equipment, and that's unacceptable. I think the goal is achievable. It's going to be difficult in some areas; it's going to take a cultural change in some parts, because we're going to have to accept more responsibility. Do I think we'll make the 50 percent reduction in all categories? Maybe not, but we're going to try. We're well on the way in some areas, and some areas need some more emphasis. It's a good effort, and it's good for our Air Force.

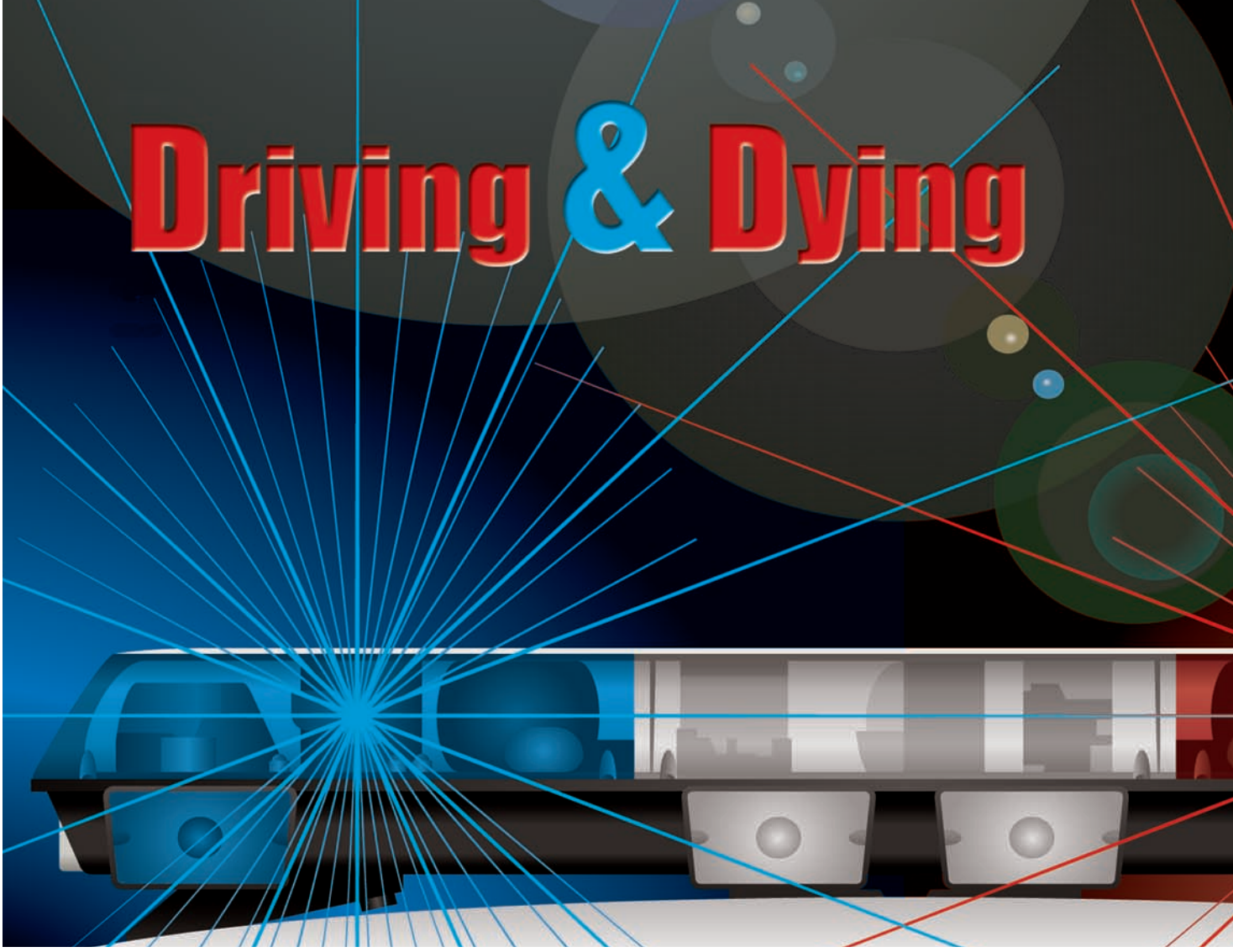
The Air Force Chief of Staff, Gen. John Jumper, has initiated a program of motorcycle mentorship. What's your view of that, and how do you see it affecting Air Force riders?

I think it's great. As we speak, Gen. Jumper is at Bolling AFB, taking the motorcycle safety course. He's a rider; he believes in leadership by example, and that's what he's doing. He's the Chief; would it be OK if he skipped the course? Maybe. He has a very busy schedule. Nobody would probably say anything. However, he's leading by example—he's attending the course. He'll probably have some golden nuggets for us on ways to improve the course. We have a couple of our people there, watching him go through the course. He'll probably have some safety points from the safety course that we can incorporate in all our clubs. We have some 900 mentorship club members across the Air Force, and I'd like to see that number grow to a larger percentage of our riders. Our largest club is in South Carolina, with 450 members.

Is there anything else you'd like to add?

I'm thrilled to have the job. Looking forward to working with the great people at the Air Force Safety Center. We'll be working hard together to reduce mishaps. Many people focus on aircraft mishaps, and that's important, but it's not the whole story. Our greatest tragedy is in motor vehicles. That's where we lose most of our people. ■

Driving & Dying

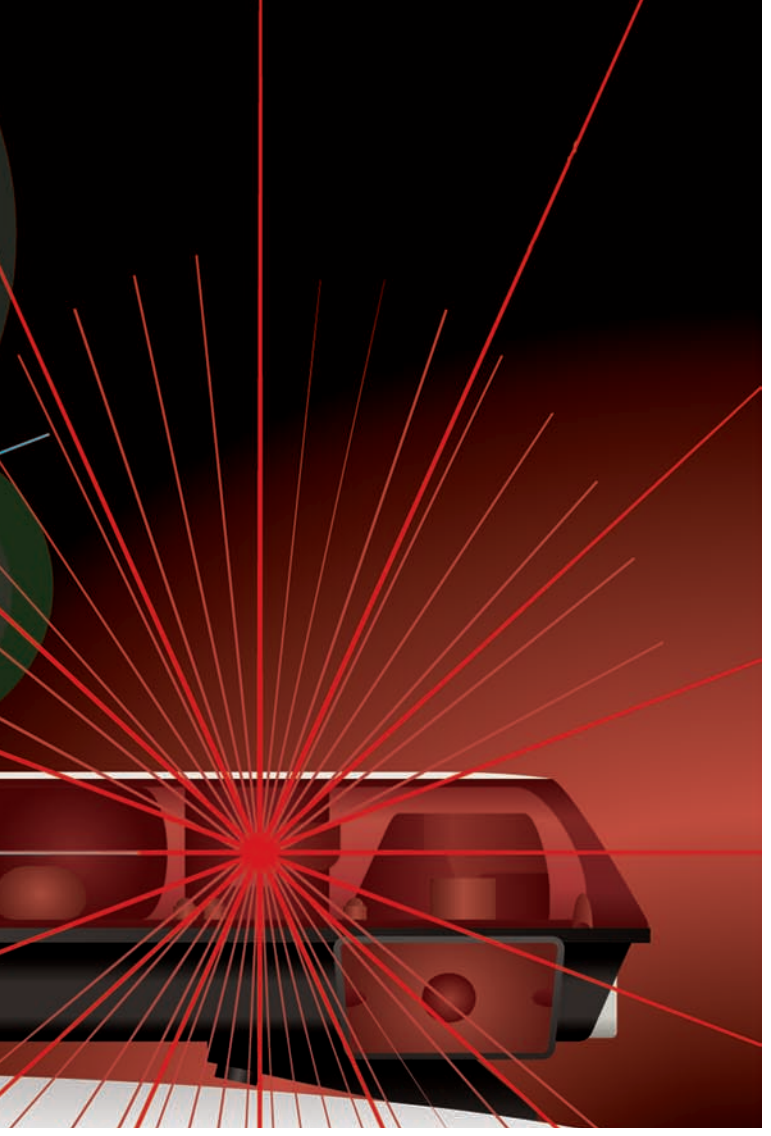


MSGT MICHAEL ORR
HQ AFSC/SEGO

It was a morning not unlike any other autumn morning. The sun was rising on the horizon, signaling the beginning of a new day. There was a distinct chill in the air as the wind rustled through the leaves, as they stubbornly clutched the branches that supported them throughout the spring and summer. Some failed in their effort to stand fast and fell to the earth, while others maintained their defiant stance. It was fall. A time when it seems much of the life around us becomes dormant as it prepares for the harsh attack of winter. This day had started like any other autumn day, but it would end as no other had ended. There was no sign of any of the events that would roll into life this day; events that etch a permanent stitch in the fabric of one's soul; events that follow us through life wherever it takes us; events we remember for all our days.

It was a weekend, and like many of the weekends, it was reserved for a journey. A short journey to a neighboring city to experience the culture and history it contained. I had prepared for my journey the day before; the gas tank was full, the route mapped, and local currency in hand.

I departed without incident, but I would never make it to the city. I chose the most direct route on a winding, twisting road. It was a two-lane asphalt road, marked with a solid white line to separate the lanes. The road was characterized by lots of curves and bends as it snaked over the hills and around the fields. There was a vehicle ahead of me. It was a compact car. I followed the vehicle for some time as the road made its way over the rolling hills and wound through the fields. It was not a heavily traveled road, and it seemed as though we were the only two on it. Then, in one of the twisting, winding bends in the road, another car traveling in the opposite direction cut into our lane as it came



through the bend.

The car in front of me swerved to miss the vehicle that had encroached into our lane. In doing so, it struck an embankment and ricocheted across the road, where it struck another embankment and began to roll. It rolled into the field, where it came to rest. The car was a mangled, twisted mass of steel, plastic, and glass. Looking at it, one would find it hard to believe anyone could survive in such a wreck.

As I approached the vehicle, I could hear the faint cry of the occupant. When I reached the vehicle, I discovered there was a lone occupant, a young female, still alive inside. I saw other things, too. I saw more blood than I have ever seen before. It was pouring out of her. With each beat of her heart, the very blood that keeps us alive was taking the life from her as it poured from her. As she lay there crying for her mother, I realized getting her out was not going to be possible. So, if I were going to do anything, I needed to get into the car. I managed to squeeze through the back window into the car. I made my way to the front where she was trapped. I desperately tried to stop the bleeding, but to no avail; it would not relent. I sat and talked to her, I held her hand, I told her not to worry—everything would be all right. We both knew it was a lie.

I stayed with her. I held her as best I could while I kept talking to her. I will never forget the look in her eyes—the fear, the pain. She knew she was dying and so did I. I held her, comforted her as best I could until the life she was desperately trying to hold onto left her body. I held her still. I held her until the rescue crew from the local village arrived on the scene. A passerby had driven into town and notified them, as this was a time before cell phones abounded. I thought I had seen and felt the worst pain one could ever feel. That was until these moments. There was more to come.

Her grandmother tracked me down through the local rescue crew. She wanted to speak to me. She thanked me for what I did. When I told her I had done nothing, she told me I had done more than I might ever realize. She was grateful because her granddaughter did not die alone in a farmer's field. She thanked me because I stayed with her granddaughter. I will never forget her pain as she talked to me. The reflection in her eyes and inflection of her voice was a testament to the pain enduring in her soul. It was if I could feel it myself. The pain of one generation as another passed away. The pain of a grandmother, who not only suffered the loss of a daughter some years before, but the pain of a grandmother who now lost a granddaughter, too. It is not supposed to be this way.

I often wonder what happened to the driver of the other car. Why did he cross over into our lane? Was he late for something? Was he speeding? Did he always drive this way? Does he realize what transpired that day? He never stopped and was never found. I do know a young lady died needlessly. It was a tragic and useless death. The actions of one person left an indelible mark on many people that day. Our actions and decisions often do. The consequences are often unintended and devastating.

Think before you act, not only of yourself, but of others you know and don't know. ■

SafetyLit℠ Injury Prevention Literature Update

Preventing injuries by providing information℠

SAFETY RESEARCH UPDATE

The following information is courtesy of *SafetyLit*, a service of the San Diego State University Graduate School of Public Health. The weekly *SafetyLit* update provides summaries of copyrighted reports on safety research. *SafetyLit* staff and volunteers regularly examine more than 300 journals and scores of reports from government agencies and organizations. We've included these summaries in *Road & Rec* for their particular interest to the Air Force community. For more, go to this link: *http://www.safetylit.org*.

DRIVE AS I SAY, NOT AS I DO

Despite parents' best intentions, two Finnish psychologists found that it's the driving behavior of parents, not their instructions, that predicts their children's driving behavior. (Source: *Accident Analysis and Prevention*, Vol. 36, Issue 4, July 2004, pages 655-659. Copyright 2003, Elsevier Ltd.)

EIGHT UP WITH RISK

An Australian study reports that people who accept high risks in other areas of their lives have ***eight times*** the risk of being seriously injured in a vehicle crash. (Source: *Accident Analysis and Prevention*, Vol. 36, Issue 3, June 2004, pages 383-389. Copyright 2004, Elsevier Publishing.)

TREE STANDS, HUNTER FALLS

Serious spinal cord injuries, resulting in paralysis or death, have occurred among hunters who do not use safety restraints and fall from tree stands. Hunter education and the use of safety harnesses would reduce this risk. (Source: *The Journal of the Oklahoma State Medical Association*, Vol. 97, No. 4, pages 156-159. Copyright 2004, Oklahoma State Medical Association.)

SAY WHAT?

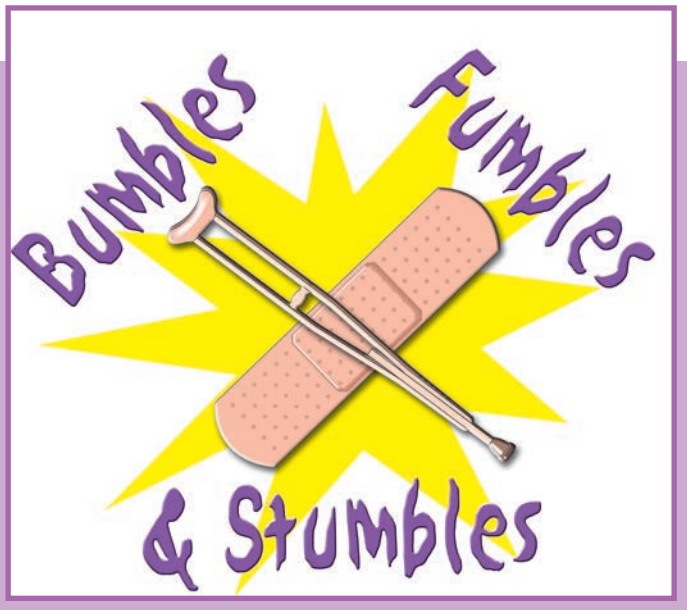
Swedish researchers report that hands-free cell phones are just as distracting to drivers as handheld phones. They found that it's the content of conversations, not the type of device, which increases reaction times. The more difficult and complex the conversation, the greater the possible negative effect on driver distraction. (Source: *Accident Analysis and Prevention*, Vol. 36, Issue 3, June 2004, pages 341-350. Copyright 2004, Elsevier Publishing.)

BACK SEAT BULLETS

You may think the safety habits of others only affect them. However, as unbuckled back seat passengers in a crash become airborne, they may raise the risk of death to those in the front seat by 75 percent, according to a study by British researchers. (Source: *Accident Analysis and Prevention*, Vol. 36, Issue 4, June 2004, pages 627-629. Copyright 2004, Elsevier Publishing.)

DRINKERS ARE SINKERS

A recent review of published studies suggests that a blood alcohol content of .10 raises the risk of death by drowning to ***10 times*** the level of non-drinkers, and that even small amounts of alcohol can increase the drowning risk. (Source: *Injury Prevention*, Vol. 10, Issue 2, pages 107-113. Copyright 2004, BMJ Publishing Group.) ■



The following short articles are derived from actual Air Force Class C mishaps. Our intent is not to make light of anyone's pain, even if it is self-inflicted; it's the questionable behavior and decisions we're pointing out. This is just a different approach to getting people to read about safety. Check 'em out—you just might get a laugh, and learn something, too.

Have A Nice Trip

Imagine yourself in this setting: You're at work, and a natural disaster is looming in the very near future. Being a team player, you're helping to stack sandbags two-deep just inside the door, to keep the expected high water out.

Because you're concerned about safety, you want to warn people outside the building about the new tripping hazard, so you post a sign on the door.

Your mission of reinforcing the structure goes on uneventfully. After battening down the hatches, you and your colleagues settle in to wait out the impending deluge Mother Nature is about to throw your way.

Later that evening, the base's mandatory evacuation order comes down, but you're in an essential position and can't leave. There's nothing happening yet that would keep you from venturing outside, so you skip nimbly over the sandbags at the door and go to your car in the parking lot.

On your way back into the facility, one of those pesky sandbags, bored with just lying around, reaches up and grabs your foot, giving you an ant's-eye view of the floor. Your night-shift cohorts pick you up and do what they can to make you as comfortable as possible, while you all hurry up and wait for the storm to pass. Even if it was safe to go outside now, there's no point in taking you to the base hospital, because after the mass bug-out, there's no one there to treat your now-tender joint.

The next morning, after the threatening weather has passed, you hobble into a nearby civilian clinic. The doc makes it official: One severely sprained ankle, complete with torn ligaments. You find it easy to agree with his treatment plan—stay off the ankle, keep it elevated, and put ice on it. He adds an air splint for good measure.

Congratulations—you've become your duty section's newest safety celebrity for tripping hazards.

Filet-O-Finger

In this episode of Kitchen Cutlery Adventures, a hungry fellow prepares to enjoy a fish dinner, when he finds out just how sharp a filet knife really is. The slippery object of his dining desire just won't give up without a fight. The knife and the pinky meet unexpectedly, but macho man shrugs off the damage as a minor flesh wound, provides some self-aid, and then goes to work the night shift.

Several hours later, he mentions to his boss that he's having some discomfort in the dinged-up digit. The supervisory second opinion is that a trip to the base ER is in order. The attending physician there stitches up the lacerated tendon, and puts the owner on quarters for a few days.

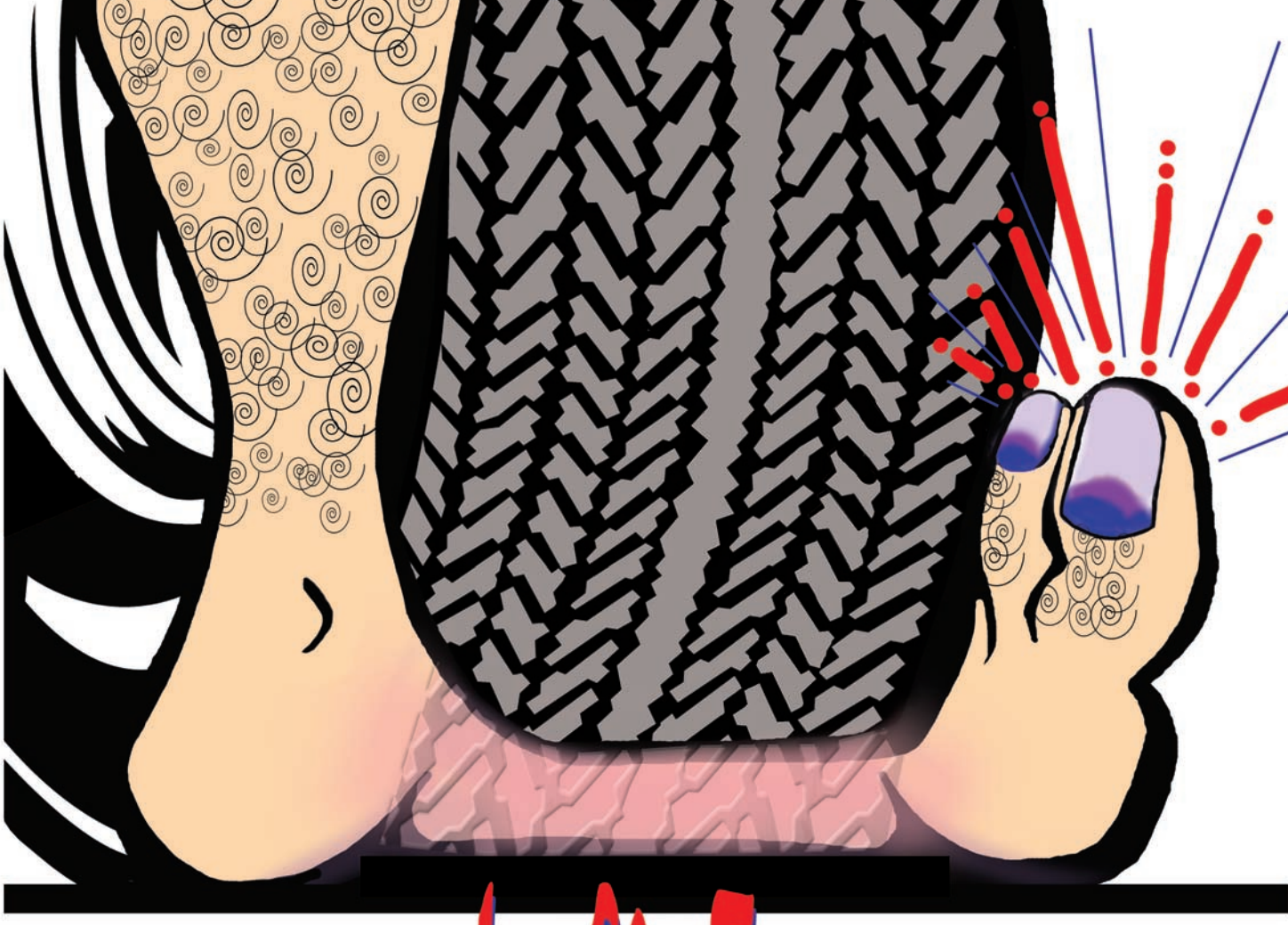
The moral of the story? Fresh fish is fine, but when a hand with a sharp knife meets a hand with a tender tendon, the hand with the sharp knife always wins. Don't bring a pinky to a knife fight.

Fractured Follies

The unsuspecting star of this drama was innocently walking downstairs at home one evening when she stepped on a toy and fell down, fracturing a foot. That domestic disturbance got her foot in a cast. Not an unusual occurrence among parents, perhaps, but the painfully ironic part is that she had only been out of a cast for three days, after a month of wearing it while a previous foot fracture healed. Although the foot hurt, she opted not to seek treatment just then.

A few hours into work the next day, that increasingly familiar fractured feeling led her to decide it was time for a medical opinion. At the base ER, the orthopedist said the original

continued on page 13



Put Your Left Foot In ...

TSGT ROBERT LEWIS
440 MXS/MXMCP
General Mitchell IAP-ARS WI

My car was all packed for my weekend trip to the lake to visit my eldest son, Ben, and his wife. I was sitting in it with the engine running, doing the myriad things I usually do before driving off—putting on sunglasses and seatbelt, turning on the radio and the GPS unit (a neat toy)—all of which caused my wife to accuse me of being encumbered. She was right, and in addition to all that, my mind was definitely on the upcoming beautiful, relaxing drive to the lake; it was probably not on much of anything else.

Had I driven right off, everything would probably have been OK, but I happened to look to my right, where my wife was in the front doorway trying to get my attention. She yelled to me that Ben was on the phone and wanted to talk to me. That's when the comedy of errors began.

I shut off the engine, got out of the car, and went into the house to take the phone call. Unfortunately, I did not shift my manual transmission car into gear or apply the parking brake.

You can probably see where this is going. We live at the high end of a cul-de-sac, and the car was parked next to the

Digital illustration by Felicia Moreland

curb, headed downhill, with the wheels turned away from the curb. Evidently, my car thought I needed a reminder that gravity still works. I re-learned that fact very shortly, as the car started rolling downhill, fortunately in something resembling a nice semi-circle, since the wheels were turned left. You probably have seen this coming, but what you may not have anticipated is that, having found out that gravity does indeed still work, I then felt obligated to press on and find out just how well it works.

I'd already made error one, and the car was tracing out a nice arc on the pavement. All I could think of was that it might collide with one of the other cars parked in the cul-de-sac. I "thought" it might be a good idea to try to grab this 3000+ pound vehicle and prevent it from doing so.

At this point, my guardian angel had arrived and was looking out for me—somewhat. She did not let me be so stupid as to get in front of the car and try to stop it that way. However, she did decide to have some fun with me and let me run alongside the car, grabbing for a handhold and preparing to jump in when it came to rest at the bottom of its arc. Her fun was complete when I received my final gravity lesson, and found out what it feels like when the left front wheel of my car rolls over my left foot.

Fortunately, the foot was fairly flat on the pavement and the rollover didn't hurt much. I remember thinking, "Oh—my car has run over my foot." It was more painful later that night, but nothing that over-the-counter painkillers couldn't handle. Later, my foot turned all kinds of pretty colors, and took several months to get back to normal.

All in all, I consider myself lucky, after having been so stupid. You can probably excuse the initial error, because everyone makes mistakes occasionally. But I compounded that mistake by risking my life to prevent mere property damage, which, in this case, never happened anyway. My car could have come to rest ON TOP of me! As it was, the worst injury was minor to my foot and major to my pride. ■

Bumbles, Fumbles & Stumbles cont.

fracture had not healed before the unfortunate victim added the latest insult to the injury. Her door prize was a soft cast and two days of quarters, then a brand-new plaster cast. The docs threw in a free pair of designer crutches at no extra charge.

With Friends Like This …

You've probably had an outdoor evening cookout with friends. With any luck, one of your friends did not fill a bottle with gasoline and toss it into the dying campfire to get it going again. This happened to one attendee, who then put another log on the fire, not knowing what Mr. Molotov had just done. The ensuing explosion and injury led to a quick drive to a local ER, then a medevac airlift to a major military medical facility. The unhappy camper had first- and second-degree burns. However, he was well enough to be released from the hospital after treatment.

Tool Man In Trouble

This home-improvement project involved trimming tree limbs in the backyard. While you're eight feet off the ground, with a running chain saw in your hand, is not the time when you want your ladder to shift and slide off the tree trunk. The tool man dropped the chain saw, reached for a limb, missed it, and fell to the ground, landing on his back.

A neighbor, whom we'll call "Wilson," saw the fall and helped the tree trimmer get inside his house. Shortly thereafter, the tool man felt severe pain in his back. After the ambulance ride to the hospital, his X-rays showed a chipped vertebra. Five days later, he went home for convalescent leave.

Dog Days

A guy was visiting a friend's house and was playing with the dog in the backyard. Trying to start a game of "chase," he takes off running, then looks back to see if the dog is still in pursuit. That's when he slammed into the swing set. A visit to the base ER results in a diagnosis of a bruised shoulder and three days on quarters. ■

CSAF Emphasizes Motorcycle Safety

A1C ALEX SALTEKOFF
11 WG/PA
Bolling AFB DC

Gen. John P. Jumper attended the Motorcycle Foundation Safety Course Aug. 9 at the Naval District of Washington Anacostia Annex.

The Air Force chief of staff's visit was to raise awareness of increasing motorcycle deaths within the Air Force family.

"We've lost an average of 14 people per year for the last five years to motorcycle accidents," said Gen. Jumper. "Last year, we lost 23 people.

"The loss of any Airman is something we have to take steps to prevent," continued the general. "There is nobody on a (motorcycle) who shouldn't take this class."

The highways around Washington can be hazardous, whether driving in a car or riding on a motorcycle.

"People ride around on our streets like they are on a racetrack," Gen. Jumper said. "Racetracks don't have oil and debris. Our roads are dangerous in any situation. Defensive riding keeps you safe."

Marine Staff Sgt. Tim Minter has been teaching motorcycle safety at the Anacostia Annex for two years.

"I see people popping wheelies on

USAF photos by SSgt Amber Whittington

the freeway and that scares the hell out of me," he said. "It's just a matter of time before they're in an accident."

The course teaches students to ride defensively and to be aware of traffic, because drivers don't always see motorcyclists.

"I've had a car brush past my leg while it was passing me in my lane," said Staff Sgt. Minter.

"Our roads are dense traffic with no escape routes," said Tech Sgt. Nelson Ayers, a volunteer motorcycle safety instructor from the Air Force Pentagon Communications Agency.

The course is free and members can take it during duty time without having to take leave.

The course can replace a department of motor vehicles motorcycle-riding test.

The 15-hour long, two-day basic riding course is required before a military member can receive a base decal. Service members can be refused access to the base if their motorcycles do not have the sticker. Service members must also have current tags and registration before taking the class.

The Air Force also requires members to wear a protective helmet with a full-face shield or goggles. A brightly colored, contrasting or reflective upper outer garment must be worn during hours of darkness.

The safety course takes place at least once a month from March through December, and has up to 20 students per class.

"We have two-star generals who have been riding 20 years, through Airmen who've only been riding two weeks," said Tech Sgt. Ayers.

There is also an eight-hour experienced class that is a one-day course. Sergeant Ayers recommends one year of practice on a motorcycle before attending the experienced class.

Gen. Jumper, a motorcyclist, previously attended the safety course in March as a student. ■

Drink *and* Drive?

Sounds fine to me.

Digital Illustration by Felicia Moreland
Produced by HQ AFSC Media Branch
http://afsafety.af.mil./AFSC/posters/postermenu.htm

Tire Blowout

JAMES D. LEACH
AFRL/HEDM
Brooks City-Base TX

I had made a trip to mom's house in Austin a couple of days before Christmas, from San Antonio. Before leaving, my girlfriend asked, "Did you check the tires on the car?" "No need," I answered, "It's a short trip, anyway."

Now the day had arrived for the family gatherings. We don't all get together the way we used to when I was growing up. One aunt and set of cousins near Austin I had not seen in years, so the time for some initiative was overdue. Earlier, I had written to my aunt about the possibility of visiting during Christmas week. Of course, she wanted me there on Christmas Day, the same day my other aunt was having her celebration. OK, two Christmas dinners in one day!

As I drove with my mom to my aunt's house, the trip seemed much shorter than I had remembered. After my uncle passed away, my aunt had moved back to her family homestead in the country. Although both her daughters were grown and married, they had moved back, too, to be close to her on the same property. Traffic on Christmas morning was nearly non-existent. I was out of the city in no time, headed east on a small country road. "This is too easy," I remarked to my mom. "I should have done this years ago."

The visit went well. I met several of my second cousins, probably for the first time, and got to carve the turkey. I was uncertain if I was offered this privilege because I was the senior male present or because everyone else was tired of doing all the work! But I enjoyed it anyway.

When it came time to leave, one of my cous-

Photos provided by author

ins started talking about the tires on my SUV. She noticed I was still driving a brand that was currently under a recall program.

"Aren't you worried about your tires?" she asked.

"No, not at all," I replied. "These were not part of the tires under the government recall," I explained. "They're part of an extended recall conducted by the automaker, and I still have several months to get them replaced. I want to get as many miles on them as I can before I turn them in. Besides, I talked to a mechanic at the dealership and he advised that there should be no problem in driving them out to their expected life."

My cousin was not convinced. I was not concerned, having already consulted with the dealership mechanic. I was more upset that the auto manufacturer had expedited the recall, meaning that I would not be able to put more miles on the tires before the exchange. They had less than 17,000 miles on them.

I pulled away from my aunt's house and headed back toward Austin. There was plenty of time to stop at the house to pick up the food and presents for the next party. Weather conditions were clear and sunny, with a light, cool breeze. I was taking it easy, roughly 55 mph, since the road was only two lanes and had some curves to watch for.

Not more than three minutes out, I began to hear a rough-sounding noise.

"It seems like there is a rough spot in the road," I said.

I looked at the road surface ahead, but could not see anything unusual. The sound I was hearing began to sound like a rumbling vibration. As the sound grew louder, it became something familiar, from the past.

"I cannot believe this—flat tire!" I looked ahead for a place to pull off and saw a dirt road off to my left. As I continued to slow, the sound was unmistakable. Fortunately, I had no steering problems as I turned off the road, stopped and activated the flashers. I imagined what was waiting for me. A bare rim with a few scraps attached?

When I got out of the car, what I saw was disturbing. The tire was still intact, but had a gaping hole in the sidewall, with a trail of smoke pouring out. The pungent odor of burned rubber filled my nostrils. Yet, there were no signs of tread separation.

The equipment I needed to remove the spare and jack up the car was in a compartment behind my mom. While my girlfriend got her out and into the wheelchair, I was reviewing the manual and trying to get the jack and handle pieces separated from the clips that fastened them. I checked the spare and saw that it had to be lowered by cranking.

About that time, someone pulled up and asked if he could help. I was still absorbed in the manual and fumbling with the different pieces. Finally, mom said, "This man is asking if you need some help." I blurted out "Yes." With his help, I got the spare off and he quickly worked to mount it. I was in a bit of shock, but had the presence of mind to check the pressure on the other tires. All checked out OK, although one was a few pounds low, so I aired it up. Another person drove up and also offered help—probably had no choice, since I was blocking his path out! With the spare now on, I inflated it to a safe pressure.

In no time, I was back on the road, feeling grateful but a little shaken. I could still smell the odor of that tire. That sensation would not go away for some time.

When I got to my other aunt's house, I showed off my ruptured tire. Of course, I heard a lot of concerned comments from the relatives.

On further inspection, I could now see the extent of the damage. The rupture in the sidewall extended about three quarters of the way around the tire.

Now, I had to face the prospect of returning to San Antonio without a spare. I called the nearest auto dealer the next day, and they replaced all the tires as part of the recall program. I asked the service manager what pressure to maintain the new tires at. He advised me to keep 32 psi on all four tires. With some peace of mind, I returned home without incident.

However, this is not the end of the story. After returning to San Antonio, I stopped off at a tire dealership to purchase road hazard insurance for the new tires. I asked the attendant about proper tire pressure. He advised me to follow the guidance from the vehicle manufacturer posted inside the driver's door. This recommended 30 psi in front and 33 psi

continued on next page

for the rear. Since the new tires carried a maximum pressure rating of 44 psi, he said that I could inflate the rear tires from 40 to 44 psi when carrying heavy loads in the back end.

A few weeks later, I made another trip to Austin. This time, I performed a complete vehicle inspection before departure. When I checked the tires, I was surprised to find that they were all at 40+ psi! This would have been the pressure they were inflated to by the auto dealership where I had them installed. With doubts as to the credibility of the recommendations I had received, I adjusted all four tires to 35 psi and proceeded.

I decided it was time to visit the dealership where I purchased the vehicle, for advice. This time, they told me to maintain the air pressure at 44 psi in all four tires! The reason was that with a new tire design, the vehicle manufacturer recommendation was no longer valid (remember this one).

There was only one avenue left to try to get a definite answer. I called the tire inquiry service of the auto manufacturer. They were very attentive to the issues at hand, took a lot of information from me (when they asked for my e-mail address, I was hoping I could get an answer in writing, but never did), and then gave me an answer. I don't know why I was surprised, but I could not help but laugh at the service representative over the phone.

Their answer: "We recommend that you call the tire company, since they are the manufacturer of your replacement tires." Another phone call to make—automated answer system, of course ("you have an expected wait time of 13 minutes … "). Were they receiving a lot of calls from confused owners? After an actual wait of 13 minutes (impressive!), a very quick answer from the tire company—operate the tires at the pressure specified by the vehicle manufacturer!

Now, for some lessons I learned from this experience, as well as tips:

1. Follow my own advice. As a safety professional, I advise my workforce to check their vehicles (including tire pressure) before all trips.

2. Always have a portable air compressor in your vehicle.

3. Be familiar with how to remove your vehicle's spare and the jack. Practice removing your jack and lowering your spare at least once after purchasing a vehicle.

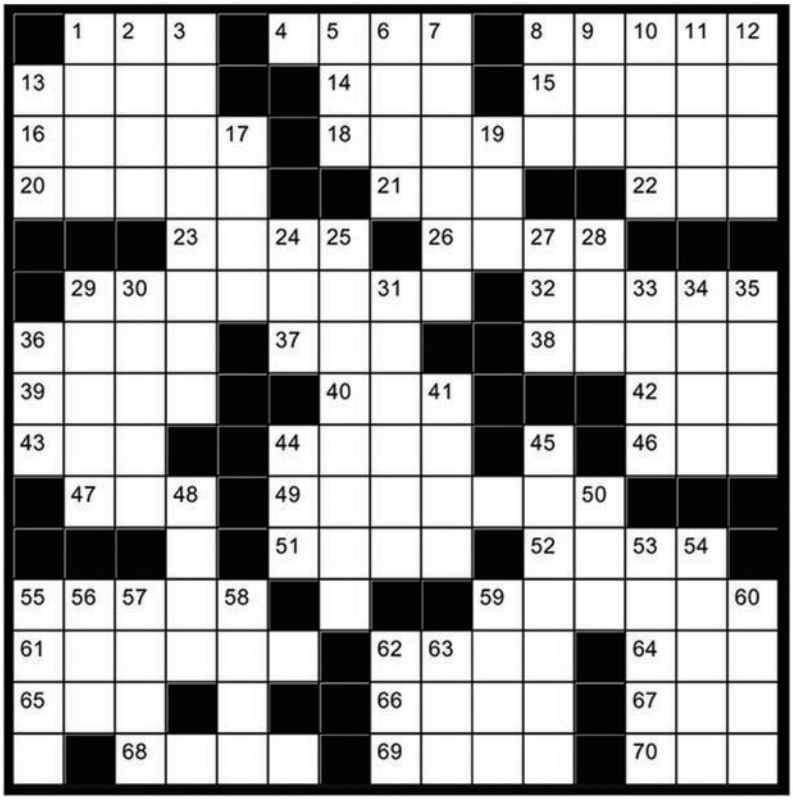
4. Keep a four-way lug wrench (20-inch minimum size) in your vehicle. The lug wrench provided by the auto manufacturer may not give you enough leverage to loosen lug nuts that have been fastened by a power tool. It will also give you extra torque to prevent possible back injury.

5. When replacing tires with those of a different maximum psi rating, in order to prevent excessive tire wear/blowouts, maintain an air pressure from 4-8 psi lower than the maximum psi rating for the tire.

6. If you experience a blowout while driving, get as far off the road as possible, to prevent the possibility of being struck by another vehicle.

7. Use your flashers while stopped for any roadside emergency. ■

1ST LT TONY WICKMAN
ALCOM/J74
Elmendorf AFB AK



ACROSS

1. Gullet
4. NASA precursor
8. Style of dress
13. Cummerbund
14. Edge
15. Left bed behind
16. Once more
18. Drives vehicle too close to another
20. Cold
21. Lyrical poem
22. GMT -0500
23. First wife of Jacob
26. Navy SPECOPS person
29. Most important vehicle safety item to prevent injuries
32. Major contributor to vehicle accidents
36. ___ the night before Christmas...
37. ___ Paulo
38. Piece of dialogue intended for the audience
39. Air Force slogan of old: Aim ___
40. Significant contributor to vehicle accidents, in brief
42. Ump
43. Building wing
44. Baby's place
46. Lord of the Rings character Treebeard is one
47. Guided
49. Ghana cash
51. Military missile to shoot down satellites
52. Evens up, as in baseball
55. Operate a motor vehicle
59. Safety item in a motor vehicle
61. What 44 DOWN performs
62. Military prison
64. Bullring cheer
65. Military organization concerned with household goods
66. Civil rights org.
67. Actor Chaney
68. Becalm
69. Suit or brief
70. Picnic pest

DOWN

1. Wise men
2. Military quick
3. Injury caused by sudden vehicle stops
5. Abstract or fine
6. Goodbye in Florence
7. Between
8. Joke
9. Baseball stat
10. Carry
11. Employs
12. Bother
13. ___ Diego
17. Putin's vote of no
19. Confederate general
24. Vehicle safety system to help cars stop, in short
25. Critical vehicle safety item to alleviate 3 DOWN
27. Crazy ___ loon
28. Records
29. Unappetizing food
30. F-15
31. Little Women writer ___ May Alcott
33. Ireland, of old
34. Earthly paradise
35. Graceful
36. Article
41. Poker saying in Vegas
44. Someone who performs 61 ACROSS
45. Contributor to vehicle crashes; tired
48. 606 to Caesar
50. Military courtesy title
53. Deadly virus
54. Hair or nail place
55. Computer numbers
56. Contributor to 40 Across
57. Fox show American ___
58. Together with further examples, in brief
59. Hurts
60. Archaic for graceful; elegant
62. What police check in 40 ACROSS, in short
63. Sony or Pioneer competitor

If You Can't Dodge 'Em ...

CHUCK KROLL
HQ AFSC/SEPC

In one recent year, both of my brothers-in-law turned down an invitation to spend Thanksgiving in Texas with family, to go deer hunting at home in Michigan. They caught quite a bit of flak for their decisions.

"They would rather eat Manwich, poop in the woods, smell one another's stinky breath, and be shamed by Bambi for yet another year, than sit around the table with family they haven't seen for several years (or ever, in one case) and eat home-cooked, oven-roasted or fried turkey, mashed potatoes and gravy, sweet potato soufflé, mom's stuffing, pumpkin pie, fresh, hot biscuits, drink hot apple cider, and all the rest. While they sit and shiver, we will play cards by the fire or race radio-controlled Zip-Zap cars on the dining room table. While they share their sleeping bags with earwigs and roly-polys, we will be warm and dry on soft mattresses, with our teddy bears. It is entirely up to them, but it sounds like

Digital Illustration by Felicia Moreland

they have made somewhat less-than-optimal decisions."

As things turned out, I was the only successful 'hunter' that year, because I made somewhat less-than-optimal decisions.

I had just finished a contract assignment in Iowa City, Iowa, and prepared to drive the 860 miles home to Plano, Texas. I packed most of my belongings in the truck the night before, checked out of the hotel that morning, finished my final workday on the client site and was on my way home. I had left work at 5 p.m., intending to drive until I was tired, take a nap at the nearest rest stop, and then proceed with my trip.

I started to get drowsy around 10:30 p.m., and pulled into the nearest rest stop for a two-hour nap.

Upon arising, I resumed the trip and drove through Kansas City without incident. It was 2 a.m. and traffic was very light. I was driving the speed limit through Gardner, Kansas, when a rather large (or so it seemed at the time) doe jumped out in front of my truck! She came off the median from the left, and I had nowhere to turn and no time to take evasive action. She met the front end of my truck square on, and bounced off into the ditch.

From the sound of things under the hood, she had rendered my truck inoperative. I was unhurt, and the airbags did not deploy, but the entire front of the truck—grill, bumper and radiator—were smashed back into the fan.

I called 911 to get the local police to file a report. Several calls to AAA finally got a flatbed wrecker to the scene. After providing my information to the police officer, we walked back to locate the deer and verified that I was at least going to be one of the successful deer hunters in the family, if not the only one that year. The wrecker arrived and took the truck to a nearby hotel, where I spent the remainder of the night and all the next day.

On Saturday morning, I investigated many possibilities to get both my disabled truck and me down to Plano, but to no avail. Because of insurance and safety concerns, no one would rent a tow dolly or car-hauler trailer for my 3/4-ton truck, so I called my wife to come pick me up. She arrived Saturday evening and we off-loaded my belongings from the damaged truck into her vehicle.

Someone from a local body shop came by and hauled the truck off Sunday morning. I did not know if I would ever see my truck again, if the insurance company decided to total it. As we departed Sunday morning for Plano, we drove south through Kansas and observed no less than 13 deer strikes on just the southbound side of the highway.

Later, I did get my truck back, after it was repaired up in Gardner, and I did get to spend Thanksgiving with those of my family who traveled to Texas from Michigan, but I did not get to enjoy any venison that year.

The whole incident cost me a 30-hour travel delay and the $500 insurance deductible, plus the time my wife spent driving up to get me and take me back to Plano, and an additional round trip to get the repaired truck a week later.

On the positive side, my wife and I did get to spend some quality time together as we traveled back to Plano.

Lessons Learned:

- Planning for frequent rest breaks after a full duty day does not guarantee alertness and quick reflexes.
- Quick reflexes do not guarantee avoidance of wildlife impacts.
- Once you get drowsy, check into a motel for the night and get some quality rest. The short delay is better than the much longer one … and less costly! ■

Today's Safety-Conscious NCO

MSGT DOUG CROSBIE
352 SOG/SEG
RAF Mildenhall UK

Water cooler conversations often start with an old master sergeant or field grade officer saying, "This isn't the Air Force I joined back in 1985!" It certainly isn't. Back then, CCCP and USSR were more familiar acronyms than TDY. The biggest concern with a TDY was getting a billeting non-availability slip (for the fat per diem), not whether your mosquito net was up to the task, or if you had a light-receptacle adapter to run your laptop inside a temper tent. Chocolate-chip BDUs were an oddity that only a scant few had hanging up in the closet, left over from an exotic exercise in a far-away country, like Egypt or Jordan.

What haven't essentially changed over time are core NCO responsibilities. Even in today's information age, we are still charged with ensuring the safety and occupational health of those airmen and NCOs under our supervision. AFI 36-2618, *Enlisted Force Structure*, paragraph 4.1.10, charges NCOs to "actively participate in Air Force health and safety programs by counseling members concerning any on- and off-duty conduct detrimental to an individual or co-workers health and safety. NCOs instruct subordinates in the safe practices observed in daily operations and enforce these standards." NCOs further are tasked with "eliminating any potential hazard while promoting and employing on- and off-duty mishap prevention techniques (AFI 91-202, *The US Air Force Mishap Prevention Program*) to eliminate and reduce the number and frequency of mishaps."

So we must ensure our workplace is a safe one. But that is only one element in a good safety program. Years ago, safety-conscious NCOs walked through buildings, checklists and OSHA manuals in hand, enforcing building code regulations. Today, they often, er … do the same thing.

Unfortunately, many safety-conscious NCOs can't shake the habit of focusing all their attention on inanimate objects. We often focus 90 percent of our inspection energy on buildings and tools. In my experience as a supervisor and wing/group safety manager, I've found most ground mishaps occur as a result of bad judgment and inadequate risk management.

More facility and tool inspections are not the answer to preventing some of these mishaps. Over the last 17 years, I've seen a lot of dysfunctional human behavior. As NCOs, we should focus our energy directly on dysfunctional behavior—often directly correlated to poor judgment and inadequate risk management.

The problem with observing and evaluating behavior is that it does not always lend itself to checklist writing. A safety-conscious NCO must dig deeper than the AFOSH or OSHA standard, and find out why people are making questionable risk decisions. He or she must look at a risk dilemma from all angles—with an understanding of standards (both the why and the how of the rule), empathy for the troops trying to get a task accomplished, and a sharp focus on accomplishment of the mission. This well-rounded perspective is essential in today's expeditionary environment.

AFPAM 91-216, *USAF Safety Deployment And Contingency Pamphlet*, is a great resource for deployed NCOs. It covers many of the typical situations you will see in today's contingency operations. But it will be the atypical situations that challenge you.

Case in point: On one of my recent deployments, several tractor-trailers carrying pallets of multi-million dollar equipment were stranded in a snowstorm. After the storm, the trucks sank into the mud on the side of the road and the improperly secured cargo pallets listed dangerously to the side. This was an atypical situation.

The safety guy (me) had no regulation that provided a magic, safe solution. So, I relied upon a couple of young NCOs who were experts at pallet weight and balance. We discussed their plan of attack and agreed that it

made sense. After six steady hours, the atypical situation was corrected. The mess was cleared up, and the trucks and equipment survived to "fight" another day.

Even typical situations can be challenging. Have you ever seen a typical deployed C4 (command, control, communication and computer) center? This may be a tent with plywood partitions, part of an old hangar, or a crumbling, Soviet-era building. There will not be enough power outlets to do the job. Eager troops will run cables every which way—under doors, down hallways and up walls. The mission is essential … all the equipment is critical. OSHA never planned for a deployed C4 center. Strict adherence to AFOSH standards and OSHA is impossible. And if you unplug anything, you will be duct taped to your tent. It is your challenge to help the troops plan the layout and set up the facility using risk management. It is a safety-conscious NCO's challenge to communicate the value of involving safety in the planning process from the start.

I have three bits of advice for deployed NCOs charged with safety responsibilities. (By the way, IAW AFI 36-2618, all of us have some responsibility for safety, but here I am talking to the NCO or officer who has been charged by the commander to be the safety go-to guy.)

First, forget how to say, "You can't do that." If the conditions won't allow you to follow the exact letter of the law, find a way to get it done as safely as possible, applying the intent of the safety rules. There is a gray area between some deployed ops and the clear-cut world of Air Force regulations, and certainly ORM is a guide when those situations come up. Also, a deployed safety NCO (or any safety-minded supervisor) must HELP, not hold things up. A deployed safety guy who stands around quoting regulations and putting checks to paper will end up tied to a tent pole. There is no time for reports, staff summary sheets, and slide shows. Get involved early, help formulate a workable solution to a problem, and lend a hand.

Second, I have seen a tendency to overestimate minor risks and underestimate serious risks. But Class As usually result after Class E, C, and Bs have occurred in similar situations. Avoid this trap. While you always want to be helpful, do make an effort to encourage others to fix their own minor safety issues. Many leaders don't thoroughly understand the safety guy's role on the team. You may be directed to walk the camp and "mark the hazards." This is a task that anyone could do; you do not need years of safety training to solve this problem. So, if you have the time and are not needed elsewhere, go ahead and mark away. But you may be more useful if you can get involved with all aspects of planning and implementation, interjecting risk management into the decision making process. People often get tunnel vision and focus on one particular solution without considering other options. You may best serve the organization by encouraging decision makers to evaluate all possible solutions.

Third, remember you are there to advise the commander (or ranking individual), not accept the risk for him or her. You are one member of a team of safety advisors. All NCOs and officers deployed along with you also share that responsibility. One habit I have formed is to periodically brief the top three safety threats to deployed leadership. If there are countermeasures to these threats, then brief them as well. Go back to the ORM model and "check off" each step. And when it comes to making a risk decision—make sure a decision has been made.

Today's safety-conscious NCO has to be much more than a building inspector and black-hat safety enforcer. Think back a few years. (OK, more than a few years for most of us.) Hall monitors were not popular in high school, and they did not get to the root of the problem. Kids still goofed off in the hall.

Digging deeper, understanding a bit about human behavior and motivation, and thoroughly understanding unit operations will get you to the core of most safety problems. It may also keep you from getting duct-taped to a tent pole. ■

MAJ KARL WOODMANSEY
120 MDS/SDG
Great Falls IAP MT

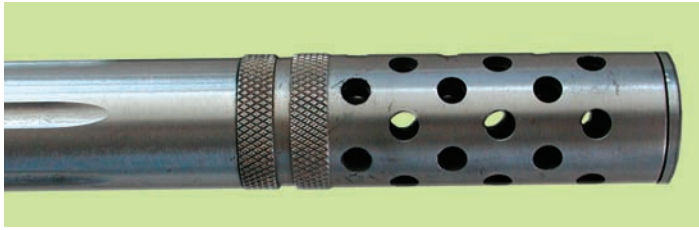
Hunters: H

While deer hunting, I permanently lost most of the hearing in my left ear—a loss that may eventually cost me my military career. This is the story of that tragic and entirely preventable accident. I hope others will learn from my experience and consider hearing protection as essential hunting equipment.

It was Thanksgiving morning, 2002, and I was hunting deer with Capt. John Spencer, a Blackhawk pilot for the Montana Army National Guard. The morning was spectacular, with crisp air, bright sunshine and remnants of last week's snowstorm still partially covering the ground. We were hunting a steep mountain pasture on my family's ranch in the Highwood Mountains, 30 miles east of Great Falls, Montana.

After nearly an hour-long climb to the ridgeline, we rested. We'd been chatting throughout the climb, catching up on each other's activities. I was packing my father's .300 Winchester Magnum rifle. It was an impressive weapon, with a lightweight composite stock, a brushed stainless-steel barrel and a muzzle brake. This weapon pushes a 200-grain bullet to 400 yards with a speed of more than 2200 feet per second, and more than 2200 ft/lbs of energy.

A muzzle brake is a series of perforations near the tip of the barrel. Theoretically, by dispersing the exhaust gases laterally, a muzzle brake reduces recoil up to 50 percent. This makes a .300 feel like a .243. By reducing the recoil and simultaneously reducing



the turbulence of the exhaust gases as the bullet exits the barrel, the round is thought to be more accurate. The velocity of the projectile is said to be unaffected. By minimizing the need for a long barrel to achieve accuracy, a muzzle brake permits the use of a shorter and lighter barrel.

The disadvantage of a muzzle brake is increased muzzle blast, which can be deafening, adding an average of 11 decibels (dB) to the already harmful loudness of standard-barreled rifles. The muzzle blast from a muzzle brake-equipped rifle is so loud that, even with hearing protection, the shooter risks suffering permanent hearing damage. Earmuff-type hearing protectors typically reduce noise by about 25 dB. A muzzle brake-equipped magnum rifle (like a .300 Magnum with an 18-inch barrel) can produce a sound pressure level (SPL) in the 160+ dB range. Thus, the SPL inside the hearing protector can be well above 100 dB (160-25=135), a potentially damaging level.

A hunter's left and right ears may be exposed to different noise levels. A right-handed shooter has his left ear closer to the muzzle, which means that his left ear gets 3 to 7 dB more noise exposure than the right ear. Because the noise source is nearer the ears, shorter barrels are generally louder than longer barrels.

For a hunter shooting without ear protection, the muzzle blast from a rifle with a muzzle brake can be immediately deafening.

USAF photo by TSgt Michael Featherston
Photos provided by author

ear This!

Nearly complete temporary deafness can last for several minutes. Later, almost all the shooter's hearing returns, but some can be permanently lost, and the losses are cumulative.

The physiological explanation for this phenomenon lies within the inner ear. The cochlea is the part of the ear that converts the mechanical energy of sound into electrical nerve impulses that the brain can recognize. The cochlea contains masses of minute hair cells: each with a tiny hair suspended in the cochlear fluid and a connection to the brain's auditory nerve. Sound waves move the eardrum, which in turn vibrates the three small bones of the middle ear—the malleus, incus and stapes. These bones then vibrate the hair cells of the cochlea and thereby stimulate the brain to "hear."

Extreme noise exposure can damage the hair cells, which results in impaired hearing. If the hair cells are able to recover, the hearing loss is temporary. If the hair cells are irreversibly damaged, then the hearing loss is permanent. Damaged hair cells may also output constant gibberish signals to the auditory nerve, resulting in tinnitus, or "ringing in the ears."

If I had read the owner's manual of the rifle I was hunting with, I would have read: "Warning: This rifle with a muzzle brake provides substantial increased noise (muzzle blast). Always wear hearing protection to prevent hearing loss or damage."

Had I known such facts when I went deer hunting that Thanksgiving Day, I might have worn hearing protectors. I had hunted that land nearly every year since my childhood with my father. He and his friends never wore hearing protection. It seemed that wearing hearing protection interfered with the collegial communications and social interactions of the hunting experience. Sometimes my ears would ring for a day or two after hunting, but I never noticed any permanent hearing loss.

After we reached the ridge crest and caught our breath, John noticed a big whitetail buck walking below us, across the base of the ridge. John was 10 feet in front of me and to my left. He decided to try a long shot at the buck. He had a rifle similar to mine: a .300 Magnum. KABOOM! My left ear was deafened and the buck ran off untouched. Since I had experienced temporary deafness before, I was not alarmed.

We continued our hunt and almost immediately encountered several mule deer that had likely been startled by John's loud shot. With two shots, I dropped a two-point buck. Although my shots seemed loud, my left ear was already deafened and filled with a constant ringing.

I expected that my hearing would recover by the next day, but it didn't. I then assumed that my hearing would return by the following Monday, when I returned to work, but it didn't. Then I began to worry. I saw my physician that day for a simple audiogram. This rudimentary hearing test documented what I knew: profound high frequency loss in my left ear. I could hear the bass notes of my car's stereo clearly, but I couldn't hear much else with my left ear.

continued on next page

I went to a local audiologist for more thorough testing, and after a month without improvement, I was referred to a regional ear, nose and throat hearing sub-specialist, a neuro-otologist, for a definitive diagnosis. He confirmed the permanence of the hearing loss and advised me to return to the audiologist to be fitted with a hearing aid.

I now wear a $2000 hearing aid in my left ear. It is an aid, not a replacement for my lost hearing. I have persistent tinnitus, such that even in a quiet room my brain hears a constant, annoying ringing. The hearing aid amplifies sounds in the frequencies of my deficits, but the tinnitus distracts from comprehension.

The Air Force has an outstanding hearing conservation program for Airmen with occupational exposures to loud noises. I have always been issued hearing protection whenever I qualify with the M9 pistol or visit potentially noisy areas, like the flight line. Although noise exposure on duty is well-monitored, off-duty exposure maybe an even greater threat to an Airman's hearing.

Because of my hearing loss, I was concerned whether I would be able to maintain my membership in the Air National Guard. I consulted the State Air Surgeon, who reviewed the regulations and concluded that I merit an H-3 hearing profile. As such, I remain eligible for military service in non-flying status as long as I am able to safely and effectively perform my duties. I am concerned, however, that possible further hearing loss may jeopardize my military career.

To prevent further hearing loss, I now wear hearing protection whenever I use power equipment, ride my motorcycle or even vacuum my carpet! I acquired specialized electronic hearing protectors for hunting. These devices permit the sounds of normal conversation to reach my ears, but automatically block harmful, loud gunshots. Despite the expense of such sophisticated hearing protection, I now appreciate the true value of my hearing.

I will never again use a rifle with a muzzle brake for deer hunting. I have read that such rifles are illegal in some African jurisdictions, where they have proven damaging to the unprotected hearing of hunting guides. In North America, an increasing number of big game guides now refuse to let hunters use rifles equipped with muzzle brakes, for the same reason.

I urge you to realize the value of your hearing and encourage you to protect it at every opportunity. Hearing protectors can range in cost from a few cents for a pair of foam plugs to several hundred dollars for custom-made electronic protectors. For being able to hear the subtle rustle of leaves on a fine fall day, followed by a frosty buck snort, no price is too great. ■

Solutions to Driving Safety Puzzle, page 21

	M	A	W		N	A	C	A		G	E	T	U	P
S	A	S	H			R	I	M		A	R	O	S	E
A	G	A	I	N		T	A	I	L	G	A	T	E	S
N	I	P	P	Y			O	D	E			E	S	T
			L	E	A	H		S	E	A	L			
	S	E	A	T	B	E	L	T		S	P	E	E	D
T	W	A	S		S	A	O			A	S	I	D	E
H	I	G	H			D	U	I				R	E	F
E	L	L			C	R	I	B		F		E	N	T
	L	E	D		P	E	S	E	W	A	S			
			C		A	S	A	T		T	I	E	S	
D	R	I	V	E		T			A	I	R	B	A	G
A	U	D	I	T	S		B	R	I	G		O	L	E
T	M	O		A			A	C	L	U		L	O	N
A		L	U	L	L		C	A	S	E		A	N	T

Safety Shorts

In 2001, 5,300 people died and 3.9 million suffered disabling injuries on the job in the U.S. The true cost to the nation, to employers, and to individuals of work-related deaths and injuries is much greater than the cost of workers' compensation insurance alone. The estimated total economic costs of occupational deaths and injuries are:

- Total cost: $132.1 billion
- Cost per worker: $970
- Cost per death: $1.02 million
- Cost per disabling injury: $29,000
- Total time lost: 130 million days

Source: National Safety Council

Air Travel Way Safer Than Driving

The University of Michigan Transportation Research Institute reports that driving is 65 times as risky as flying. Michael Sivak, head of the institute's Human Factors Division, said, "For flying to become as risky as driving, disastrous incidents like those from 9/11 would have to occur about once a month."

Source: National Safety Council

The Law Of The Land

Eighteen states have passed primary-enforcement laws, meaning that a police officer can stop motorists who are not buckled up, and cite the driver. Secondary laws are on the books in 31 states, meaning that police can issue seat-belt citations only after stopping vehicles for other violations. New Hampshire has no seat-belt law. About 60 percent of New Hampshire motorists buckle up.

Source: National Safety Council

Improving Your Odds

In 2000, safety belts helped more than 11,000 Americans survive motor vehicle crashes. More than 9200 of the 43,000 people who died in motor vehicle crashes that year would have survived if every occupant older than 4 had buckled up.

Source: National Safety Council

By The Numbers, U.S. Trailing

In 2002, 75 percent of U.S. drivers and passengers used their seat belts. Only four states—California, Hawaii, Oregon and Washington—met or exceeded the 90 percent use level. In contrast, 92 percent of Canadians used their seat belts in 2002.

Source: National Safety Council

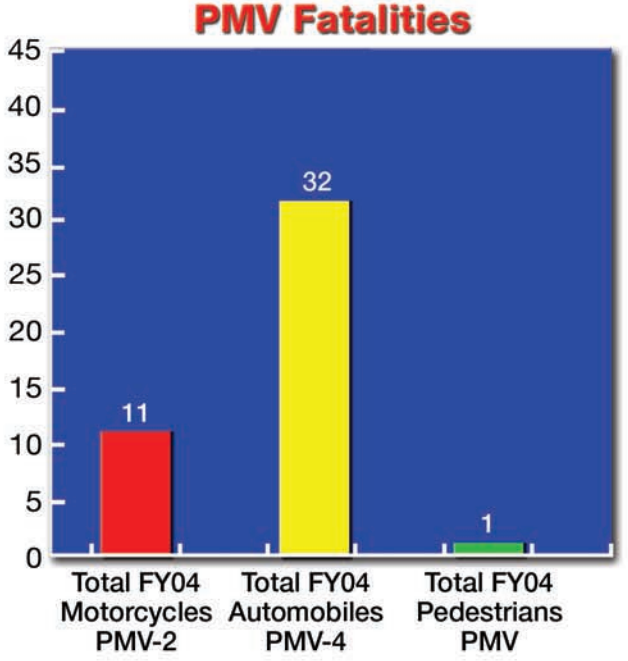
Teens No. 1, In A Bad Way

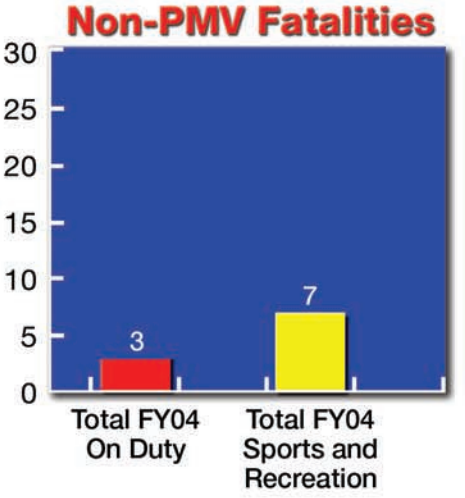
Teenagers have a higher risk for vehicle crashes than any other age group, and their seatbelt use is lower than other age groups. Among 16-19-year-old drivers killed in crashes between 1995 and 2000, only 36 percent were wearing seatbelts. Nearly 4700 young drivers, ages 16-19, died in motor vehicle crashes in 2002. Of those, 2700 were driving. ■

Source: National Safety Council

Digital Illustration by Felicia Moreland

Snapshot on Safety





3rd Qtr FY04 Update

Motorcycle riding is more popular today than at any time in history. There are several reasons for this popularity. Speed, acceleration, attractive financing, economy, and last but certainly not least, the feeling of freedom that is accentuated when riding a motorcycle. Along with popularity comes a significant problem: Deadly mishaps. As you can see from the chart above, 11 Airman died in the first three-quarters of this fiscal year. Motorcycle riders must understand and appreciate the laws of physics, the effects of centrifugal force in curves, and how split-second decisions can affect the rider and the operation of a motorcycle. In the following mishaps, the adverse affects of these laws and what happens when we push the envelope of our limits is evident.

Motorcycles Kill More Airmen

An Airman was riding his motorcycle on a local highway when he encountered a long left curve in the roadway. The Airman was traveling on a two-lane asphalt road with numerous long straightaways and S-curves. The posted speed limit is 55 mph, with a recommended speed limit of 45 mph for most of the curves. As he attempted to negotiate the curve, he strayed onto the grassy shoulder. He remained upright for approximately 112 feet before the motorcycle rolled and ejected him. He struck a fence post and was fatally injured. The Airman was wearing all required safety gear and had attended a motorcycle safety course. Toxicology tests were not conducted. The investigating law enforcement agency cited speed too fast for conditions as the cause of the mishap.

Lesson learned: Excessive speed and the resulting pull of centrifugal force in a curve is often deadly.

An Airman was riding her motorcycle on a paved, two-lane state road with many hills and curves. She entered a curve at an estimated speed of 80 mph, applied the brakes, locked the wheels, slid left of center, and began to lay the motorcycle down when it struck a pothole. The motorcycle spun around, struck a guardrail and bounced back on the road.

The Airman was separated from the motorcycle when it struck the guardrail. A review of her driving history indicated she had two previous speeding citations. There was no indication she had ever attended a motorcycle safety course. Interviews with other people who knew her indicated she had a propensity to operate the motorcycle in an unsafe manner. There are many recounted stories of her doing wheelies and operating her motorcycle at excessive speeds, as well as people cautioning her regarding her behavior. She was wearing denim pants, a cloth jacket, leather boots, and a helmet.

Lesson learned: No matter how much of an expert rider you think you are … we are all subject to the laws of nature, and the limits are very real. This rider had plenty of warning that she was about to exceed her limits.

An Airman was riding his motorcycle on a residential street. As he was approaching a curve near an intersection, he braked suddenly. The motorcycle skidded, hit a curb, and flipped over. The motorcycle continued to travel forward and struck a light pole; the Airman was ejected and struck a nearby sign. A witness stated there weren't any other vehicles or obstructions in the area. The road was dry, the surface was clear, and there weren't any potholes or bumps. The Airman was wearing all the required safety gear, but had not attended a motorcycle safety course. Local law enforcement investigators cited speed too fast for conditions as the cause of the mishap. The Airman had returned from a 90-day deployment four days before the mishap.

Lesson learned: Speed and centrifugal force kills another Airman. Maybe, just maybe, had the Airman attended the MSF Motorcycle Safety Course, he would have learned techniques that would have allowed him to recover from his loss of control. Additionally, his riding skills may have been a little rusty, after not riding for the three months he was deployed. Bottom line: After you enter a curve too fast, it's too late to decide to attempt to slow down.

Other Deadly Mishaps

An Airman was traveling in his truck on a two-lane asphalt highway. He approached a curve in the road but continued in a relatively straight line. There were no signs of braking as he left the pavement. The vehicle traveled approximately 135 feet before it rolled over. The Airman was not wearing a seatbelt and was ejected from the vehicle. Toxicology tests revealed the Airman's blood alcohol content was .35.

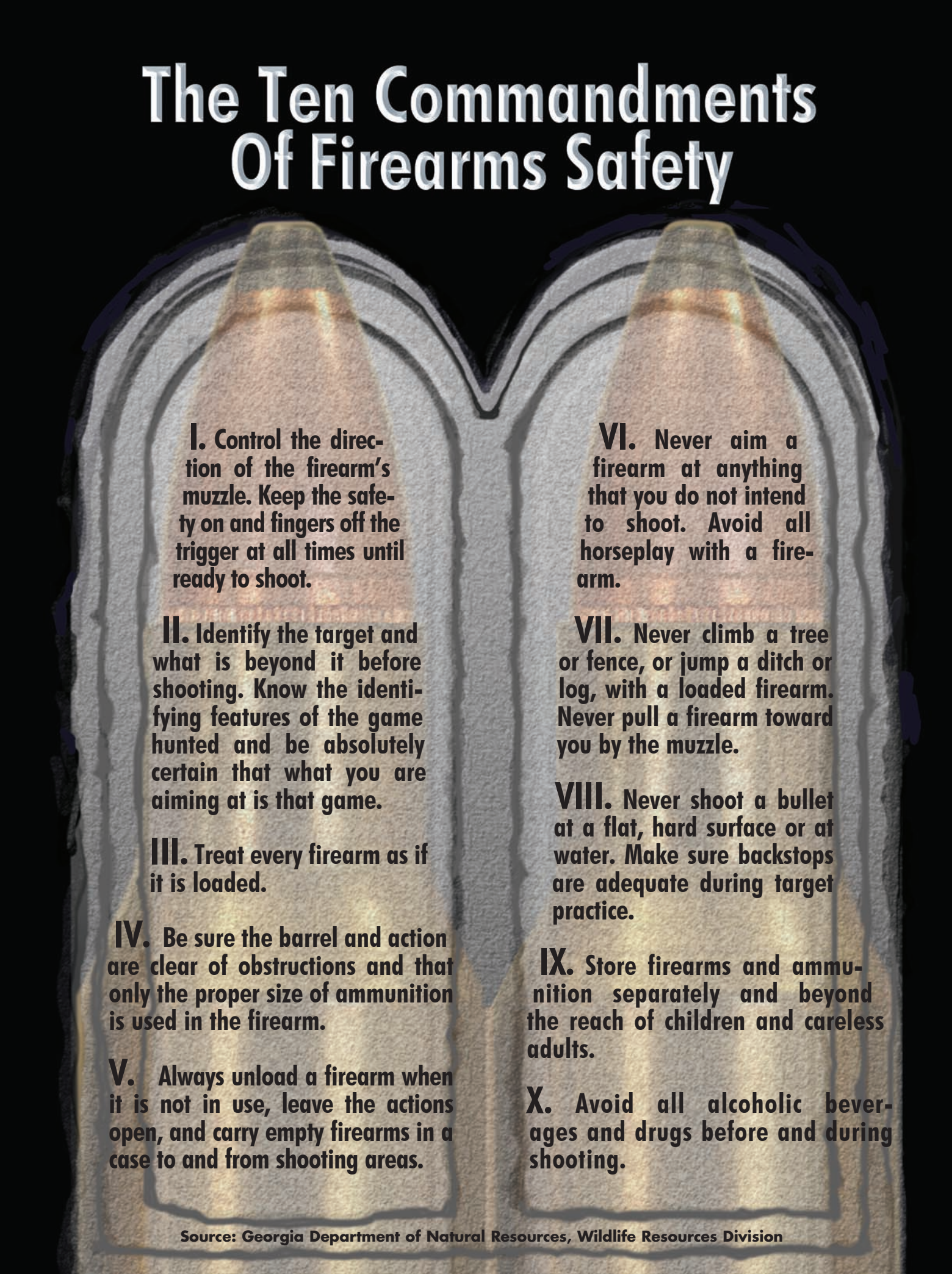
Lesson learned: Since the mishap happened just before midnight and the Airman's BAC was .35, four times the legal limit, we could assume the Airman passed out at the wheel and never regained control of his vehicle. A seatbelt may have saved his life, had he used it.

An Airman went boating at a local lake with three friends. Winds were gusting up to 20 mph, the temperature was approximately 80 degrees, and the water temperature was about 60 degrees. After launching the boat, they circled the lake a few times and then drove the boat to the center of the lake, about 300 yards from shore, stopped the motor, and let the boat drift. The Airman decided to jump in the water to cool off. Before he jumped, he asked if he should, and his friends attempted to dissuade him. The Airman jumped in the water anyway. Meanwhile, the boat continued to drift across the lake. One of the group members noticed the Airman flailing in the water. They started the boat and headed in the direction of the Airman, 40 yards away. They stopped the engine when they were nearing the Airman, to avoid striking him with the propeller. One of the friends tried to grab the Airman's arm as the boat's momentum carried the boat past the Airman. Another jumped into the water to attempt a rescue. He reached the Airman and attempted to keep him above the water. The boat continued to drift away from them, and the others were unable to immediately get the boat started for a second pass. The member struggled to hold onto the Airman but was unsuccessful. Toxicology tests were negative.

Lesson learned: The Airman was an experienced boater and swimmer. He exceeded his limits and didn't consider the wind drift of the boat and temperature of the water. His friends showed poor judgment by attempting a rescue without first donning a personal flotation device (PFD). ■

☆ U.S. GOVERNMENT PRINTING OFFICE 2004-573-322 / 53074

The Ten Commandments Of Firearms Safety



I. Control the direction of the firearm's muzzle. Keep the safety on and fingers off the trigger at all times until ready to shoot.

II. Identify the target and what is beyond it before shooting. Know the identifying features of the game hunted and be absolutely certain that what you are aiming at is that game.

III. Treat every firearm as if it is loaded.

IV. Be sure the barrel and action are clear of obstructions and that only the proper size of ammunition is used in the firearm.

V. Always unload a firearm when it is not in use, leave the actions open, and carry empty firearms in a case to and from shooting areas.

VI. Never aim a firearm at anything that you do not intend to shoot. Avoid all horseplay with a firearm.

VII. Never climb a tree or fence, or jump a ditch or log, with a loaded firearm. Never pull a firearm toward you by the muzzle.

VIII. Never shoot a bullet at a flat, hard surface or at water. Make sure backstops are adequate during target practice.

IX. Store firearms and ammunition separately and beyond the reach of children and careless adults.

X. Avoid all alcoholic beverages and drugs before and during shooting.

Source: Georgia Department of Natural Resources, Wildlife Resources Division