

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

ROAD & REC

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Winter 2003



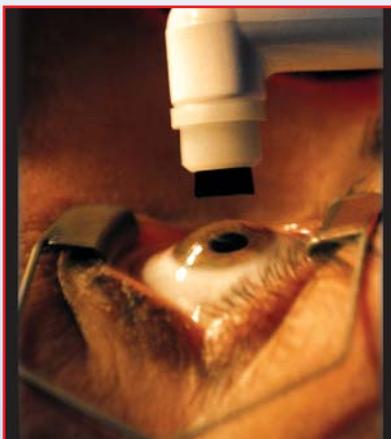
The Air Force Journal of Occupational, Recreational, and Driving Safety

ROAD & REC

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WINTER 2003

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Back cover photo illustration by Dan Harman and photos by TSgt Michael Featherston and PHC Johnny Bivera

Short Circuits



The National Highway Traffic Safety Administration (NHTSA) has announced the following recalls:

2002 Honda Silver Wing, Honda FSC 600. Number involved — 2,454. Defect: On certain motorcycles under certain riding conditions such as continuously bumpy roads, the rear wheel could develop stress cracks where the spokes attach to the hub. The spokes could eventually fail, causing the wheel to collapse without warning. (NHTSA Recall No. 02V250)

2000-2002 Daewoo Nubira. Number potentially involved — 38,181. Defect: Certain passenger vehicles fail to conform to the requirements of Federal Motor Vehicle Standard No. 106, "Brake Hoses." A crack can develop in the outer rubber layer of the front brake hoses, resulting in a brake hose rupture, brake fluid leakage, and loss of vehicle braking. (NHTSA Recall No. 02V257)

2002 Kawasaki VN1500-N3, VN1500-E5, VN1500-P1. Number potentially involved — 698. Defect: On certain "Mean Streak," "1500 Classic" and "1500 Classic Fi" motorcycles, a flange on the transmission output shaft can fracture, resulting in engine damage and possible engine lock-up. Failure of the flange could cause the outer gear on the shaft to contact the transmission housing. This could cause

pieces of the flange to interfere with the transmission operation, or operation of the transmission in first gear could allow two sets of transmission gears to mesh simultaneously. These failures could cause the transmission to suddenly lock-up, causing both the engine and the rear wheel to stop and increase the risk of a crash. (NHTSA Recall No. 02V261)

2003 Nissan Infiniti G35. Number potentially involved 18,300. Defect: On certain passenger vehicles, the fuel hose connection for the outlet of the fuel pump — which is located at the top of the fuel tank — may not have been properly attached when the vehicle was assembled and could come loose while driving or when starting the engine. If the connection comes loose while driving, the engine will stop running due to lack of fuel, increasing the risk of a crash. Also, if the connection comes loose while driving or attempting to start or restart the engine, some fuel will discharge from the fuel pump. If this should occur in the presence of an ignition source, a fire could result. (NHTSA Recall No. 02V245)

2001-2002 Triumph Speed Triple, Sprint ST, Daytona, and Centennial Motorcycles. Number potentially involved — 1,557. Defect: On certain motorcycles, the rear wheel needle roller bearings can deteriorate and seize, causing the rear wheel to lock-up. This can

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JAMES G. ROCHE
Secretary of the Air Force

GENERAL JOHN P. JUMPER
Chief of Staff, USAF

MAJOR GEN KENNETH W. HESS
Chief of Safety, USAF

JOHN RUSSELL
Chief, Ground Safety Division
DSN 246-0780

COL MARK K. ROLAND
Director, Safety Education and Media
Editor-in-Chief
DSN 246-0922

BOB VAN ELSBERG
Managing Editor
DSN 246-0983

MRS. PAT RIDEOUT
Editorial Assistant
DSN 246-1983

FELICIA M. MORELAND
Electronic Design Director
DSN 246-5655

TSGT MICHAEL FEATHERSTON
Photo Editor
DSN 246-0986

Web page address for the Air Force Safety Center:
<http://safety.kirtland.af.mil>

Commercial Prefix (505) 846-XXXX
E-Mail - Robert.VanElsberg@kafb.saia.af.mil

DEPARTMENT OF THE AIR FORCE
CHIEF OF SAFETY, USAF

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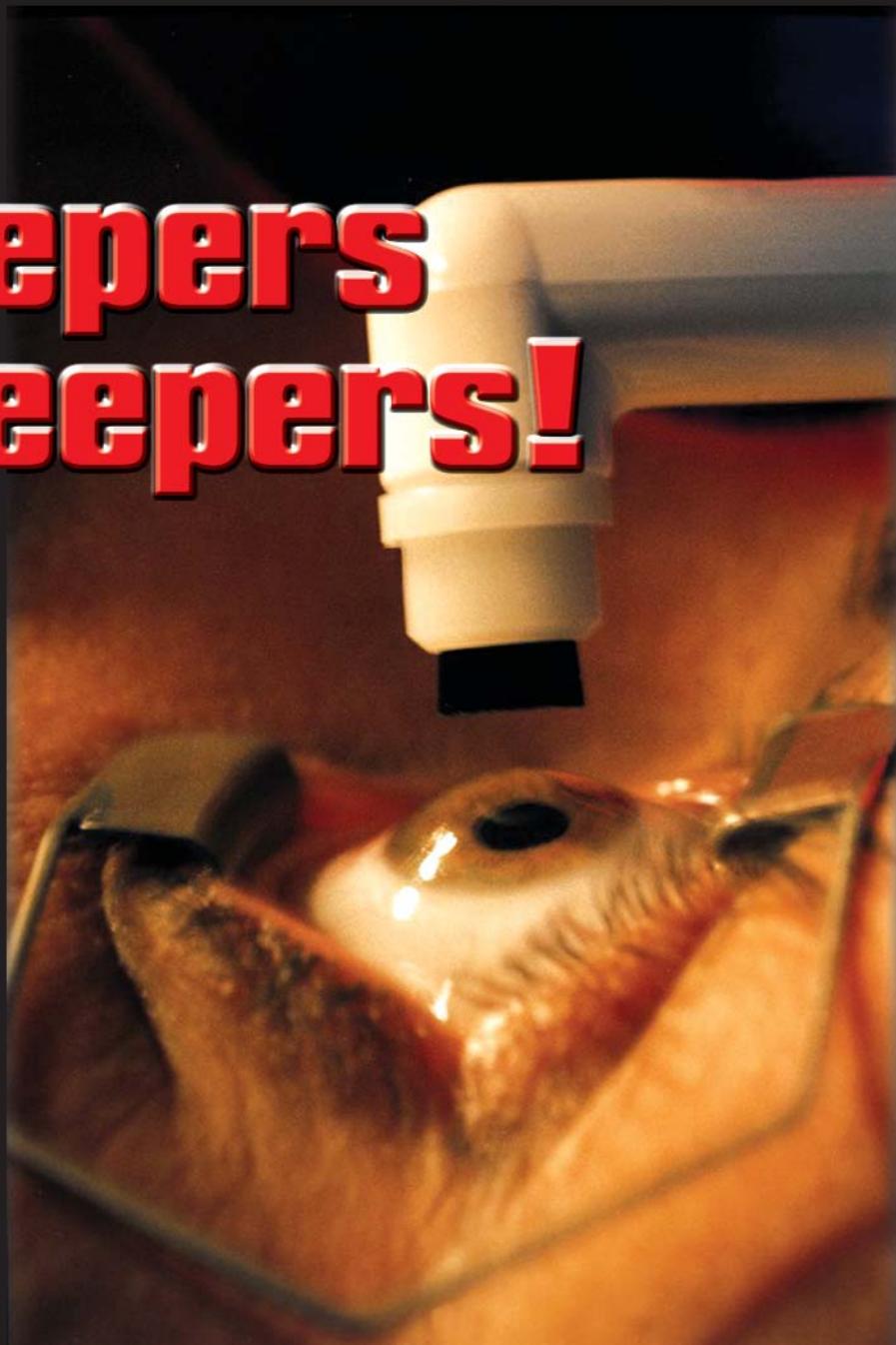
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CONTRIBUTIONS
Editor
Road & Rec
HQ AFSC/SEMM
9700 G Avenue SE, Ste 285B
Kirtland AFB NM 87117-5670

Jeepers Creepers!



BOB VAN ELSBERG
Managing Editor

"Just keep your eye on the red light," the surgeon said as I pressed my face forward into a brace designed to hold my head steady. He had given me a local anesthetic, something to make it easier on me as he removed some tiny steel shavings from the cornea of my left eye. Something moved toward my face. I only saw it briefly because of the glare of a bright light the surgeon was shining into my eye. The "thing" looked like an X-Acto knife with a 90-degree turn in the blade — and it was coming toward my eye!

"Oh no — you're not going to stick **THAT** into my eye!" I thought as I tried to hold myself steady.

I tried to think about anything else that I could to get my mind off what was happening. Mercifully, I only felt a little pressure, then it was over quickly — or was it? The doctor pulled the knife away, and then looked into my eye again. After a moment he said, "There is something deeper inside and I'm going to have to get it out."

He walked away for a moment as I sat there, wondering what was going to happen next. I didn't have long to wait. He returned a few moments later carrying a small drill with what looked like a pointed grinding bit. He said, "You may feel this some," then I heard the high-pitched whine of the drill's electric motor.

The feeling in my eye was like having a tooth drilled when the Novocain hadn't quite deadened all the nerves. It was more a dull ache than a sharp sting. All of my life I had been very careful about



Where'd Ya Get Those Peepers?

USAF Photos by MSgt Lance Cheung

my eyes. I hated anything getting near them. Now there was a spinning drill bit grinding against my left cornea. I didn't have a choice if I wanted to save my vision, but I hated the experience.

Finally, it was over. The doctor checked my eye with a bright light and told me everything was clear. I heaved a sigh of relief. Enough was enough.

I left the Long Beach Naval Hospital the next afternoon. I now had a black eye patch held in place by a narrow elastic band that went around my head. It nicely complimented my 1970s-vintage "cracker-jack"-style Coast Guard uniform and the beard I'd grown. All I needed now was a peg leg and a parrot and I could be a regular pirate.

I was fortunate because the surgeon did his job well and I never had any problems with my vision after I recovered. However, as I look at eye injuries in the Air Force, I see that the injury I had — getting

metal shavings in the eye — is all too common. In addition, maintainers sometimes get chemical burns when they get aircraft-washing soap into their eyes. Even worse, last year a maintainer at Dyess AFB, Texas, stuck a screwdriver into his eye while trying to pry off an aircraft panel.

It's not just the on-duty environment that leads to eye injuries. Softballs aren't so "soft" when they hit you in the eye. A poorly anchored bungee cord can — and has — let go, sending the unhooked end flying into a person's face. A few years back a driver reached for what she thought was eye drops as she went down the road. What she got instead, was superglue. You can imagine the results.

Since you only get one pair of peepers, you might want to "eyeball" the following suggestions for protecting them.

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- Wear chemical safety goggles when handling household cleaning products that can splash into your face and eyes.

- Wear safety glasses or goggles when using power tools, lawn movers and weed eaters, fertilizers and pesticides.

- Wear eye protection when jump-starting your car (batteries can explode).

- For maximum eyewear protection, look for the ANSI Z87 logo. Polycarbonate lenses are more impact resistant than other lenses.

- Goggles that fit over glasses are available in most hardware, department and hobby stores.

- Wear sunglasses that are designed to block between 99 and 100 percent of the sun's harmful UVA and UVB rays.

- The best colors for sunglass lenses are grays, green or brown. Other colors may distort color perception.

- In bright sunlight, wear a wide-brimmed hat. It will block about 50 percent of the ultraviolet radiation that might enter the eye around sunglasses.

- For the sports-minded:

- Wear polycarbonate sports eyeguards for basketball and racquetball.
- Be sure the lenses in your sports eyeguards stay in place.
- Wear goggles when swimming.
- Consider paying extra for glasses with polycarbonate lenses.

- For more information on eye protection, contact

Prevent Blindness America at 1-800-331-2020.

Tips for Buying Sports Eye Protectors

Prevent Blindness America recommends athletes wear sports eyeguards when participating in sporting activities. Prescription glasses, sunglasses and even occupational safety glasses **do not** provide adequate protection. Sports eyeguards come in a variety of shapes and sizes. Eyeguards designed for use in racquet sports are now commonly used for basketball and soccer, and in combination with helmets in football, hockey and baseball.

The eyeguards you choose should fit securely and comfortably and allow the use of a helmet if necessary. Expect to spend between \$20 and \$40 for a pair of regular eyeguards and \$60 or more for eyeguards with prescription lenses. The following guidelines can help you find a pair of eyeguards that is right for you.

- If you wear prescription lenses, ask your eye doctor to fit you for prescription eyeguards. If you're a monocular athlete (a person with only one eye that sees well), ask your doctor what sports you can safely participate in. **Monocular athletes should ALWAYS wear eyeguards.**

- Buy eyeguards at sports specialty stores or opti-

cal stores. Ask for a sales representative who is familiar with eyeguards to help you.

- Don't buy sports eyeguards without lenses. Only "lensed" protectors are recommended for sports use. Make sure the lenses either stay in place or pop outward in the event of an accident. Lenses that pop inward against your eyes can be very dangerous.

- Fogging of the lenses can be a problem if you're active. Some eyeguards are available with an anti-fog coating. Others have side vents for additional ventilation. Try on different types to determine which is the most comfortable for you.

- Check the packaging to see if the eye protector you select has been tested for sports use. Also, check to see that the eye protector is made of polycarbonate material. Polycarbonate eyeguards are the most impact resistant.

- Sports eyeguards should be padded or cushioned along the brow and bridge of the nose. Padding will prevent the eyeguard from cutting your skin.

- Try on the eye protector to determine if it is the right size. Adjust the strap and make sure that it's not too tight or too loose. If you purchased your eyeguards at an optical store, an optical representative can help you adjust the eye protector for a comfortable fit.

First Aid for Eye Injuries

Specks in the Eye

- DO lift the upper eyelid outward and down over the lower lid.
- DO let tears wash out the speck or particle or use an eye wash.
- DO — if the speck doesn't wash out — keep the eye closed. Bandage the eye lightly and see a doctor.
- DO NOT rub the eye.

Blows to the Eye

- DO gently apply cold compresses without pressure immediately to reduce pain and swelling.
- DO seek emergency medical care in cases of pain, reduced vision or discoloration (black eye), which could indicate internal damage to the eye.

Cuts and Punctures to the Eye or Eyelid

- DO bandage lightly without pressure and see a doctor at once.
- DO NOT wash out eye with water.
- DO NOT try to remove an object stuck in the eye. ■

Information for this article was provided by *Safety Times* and *Prevent Blindness America*.

Be Seen & Be Safe

MSGT KENNETH RICE
Reprinted Courtesy *The Combat Edge*

Accidents caused from either not wearing or improperly wearing reflective gear are infrequent but still happen to Air Force personnel. During my 22 years, I have heard of several people who were injured by motor vehicles because they were not wearing their reflective gear. There was even an Air Force member run over while riding his bicycle on base because he couldn't be seen on a dark stretch of road. You simply can't afford to let your guard down — people get hurt.

As our operations tempo increases, the potential for accidents also increases. Nighttime operations, unfamiliar working environments, inadequate lighting, dark maintenance coveralls and inclement weather can also increase the risk of a mishap. Therefore, it is critical that you not only wear your reflective gear, but that you wear it properly.

A reflective night belt should be worn all the way around your body, not just on your front and back. On occasion, you may have to adjust your coat, coveralls, rain gear or personal items to ensure the belt is visible. Also, the belt should not be twisted because only one side is reflective. The belt must always be in a serviceable condition. After prolonged use and exposure to the sun, reflective belts become faded and difficult to see. A reflective belt does absolutely no good if it can't be seen. So, if it is unserviceable, replace it.

If you're in charge of a nighttime aircraft launch and recovery, a bright orange vest is also recommended. Pilots need to be able to identify who is in charge and be able to follow that person's instructions. A reflective vest provides the increased visibility needed during aircraft marshalling and helps ensure safe flightline operations.

All these instructions and suggestions seem pretty basic and easy to follow. However, you would not believe the number of people I come across who have to be reminded of these simple facts. In poor lighting, wearing a reflective belt should be something you do automatically each time you enter the flightline. After all, it's your life and well-being that is at stake. You don't want to become the statistic everyone hears and reads about. That's 15 minutes of fame you can LIVE without. ■



Get Your Buck with a Buick?

MAJOR RUSS BRYAN
(Former) Asst. Safety Officer
North Dakota Wing, Civil Air Patrol

Editor's Note: *I was dead tired. I had pulled reserve duty with the 908th Airlift Wing all weekend at Maxwell AFB, Ala., and was well into my 180-plus mile drive home. It was November, and the sun had set long before I got onto Georgia State Road 96. The headlights of my 1983 Buick Skylark illuminated the road ahead and reflected back from the trees that lined both sides of the road. During the daytime, I enjoyed the scenery. At night, it was just boring.*

The monotony was just about to get to me when I suddenly saw a brown blur to my right. Before I could react, I saw the back legs and hooves of a deer in my headlights. It looked like the deer had jumped over my hood. I wasn't bored anymore – it was more like instant heart attack! I was lucky not to have had an accident on the road that night. There is not much I could have done to control the way the deer acted but I could have done a better job of being prepared, especially on a road that was familiar to me. Here

are some good suggestions on how to do that.

One - Know the type of deer that live in the area where you routinely drive. Why is this important? Whitetail deer have a relatively small range area -- or area where they feed and live. If you see whitetail deer in a particular location, there is a very good chance that they will be in that area again. Mule deer, on the other hand, have a much larger range area. There is less of a chance (although it's not impossible) that you will see them in the same area.

Two - Roadway deer signs are there for a reason. If a road sign indicates deer during the next 5 miles, use additional caution even when you are **past** the posted area. Deer can't read, therefore they are not governed by what the signs say. Often where there is one deer, there are more nearby. Report areas where you see deer so that signs can be posted.

Three - Deer often move about when the light is fairly low, such as at dusk and dawn. However, they can move about at mid-day and during nights when there is a full moon. Remember, there are no guarantees with deer.

Four - Deer, like all animals, are unpredictable. Things like mating seasons, hunting seasons and weather changes can cause them to alter their habits and get out of their routines. Use additional caution

in urban areas when driving near parks or wooded areas. Vehicle/deer collisions don't just occur in rural areas.

Five – Don't overdrive your vehicle's headlights. We hear this frequently, but often don't abide by it. Use your high beams to the extent the law and safety will allow.

Six – Keep your windshield clean *inside* and *out*. The same goes for the glasses you wear. Glasses with *any* tint – to include yellow -- will reduce available light at night. You may also want to consider getting an anti-glare coating on your glasses. National Highway Traffic Safety Administration standards only require 70 percent of available light to pass through a windshield. So, just being inside of a vehicle reduces your night vision. Also, keep your headlights properly cleaned and aligned.

Seven – Turn dash lights down to the lowest setting that still illuminates the speedometer and instruments. Bright lights shining back into the driver's face will diminish night vision and contribute to eye fatigue.

Eight – Contact law enforcement agencies, such as state troopers, game wardens and others, to learn the location of deer hot spots. Pass this information on to other drivers.

Nine – Vehicles with deer warning whistles have still struck

deer. Don't let your guard down just because you have these whistles.

Ten – Slow down. Deer usually enter the road from the shoulder so you will likely first see them in your peripheral vision. The faster you go, the less peripheral vision you have. At 40 mph, you can see 60 degrees on either side in your peripheral vision. However, at 60 mph, your peripheral vision is just half that. The slower you are traveling, the greater your chances of seeing something entering your path from the side.

Eleven – Read the traffic ahead. If there is a vehicle ahead and its brake lights come on when there is no other traffic, start slowing down. Those lights came on for a reason. That reason may have been a deer.

Twelve – If at all possible, plan to drive during daylight hours and avoid night driving.

Thirteen – Keep updated on changes in road signs and markings.

Fourteen – Think of additional ways to avoid these types of accidents and share them. ■

USAF Photo by TSgt Michael Featherston

Don't Toboggan on Your



BOB VAN ELSBERG
Managing Editor

"Cool!" I thought, as I watched my best friend slide down the hillside on an impromptu sled made from a piece of cardboard. One benefit of being in Germany was that snow wasn't something I had to drive hours to see, as it was when I grew up in southern California.

I got my own piece of cardboard and hiked to the top of the hill. The run wasn't long – maybe 100 feet or so – but the slope was steep enough to make it fun. There were also some good bumps on the way down and a stand of trees at the bottom of the slope. With no means of steering the cardboard, each run concluded with a spectacular "bail out" before the tree line was reached. Or at least that was the plan.

The snow had been smoothed from my friend's several runs. I sat down on the cardboard and pushed off from the top of

the hill. Things were going well until I hit one of those bumps. My feet went up in the air and I was suddenly on my back on the cardboard. I must have dug at least one foot into the snow trying to right myself. That caused me to veer to the right toward the tree line bordering the run. To make things more interesting, I was now sliding sideways down the hill. Bailing out was going to be a lot harder and, when I did, I was going to roll side-over-side. However, the trees were getting close and I was hardly in control of anything at that point.

Somehow I got off the careening piece of cardboard before the tree line – but only just. I heard the cardboard scuff against a tree trunk, then moments later rolled into a tree and hit it with the small of my back. Talk about "kidney punched" – the impact really knocked the wind out of me. As I lay there trying to get my breath, my wife and friend ran up to see how I was. I think one of them said something like, "Can you still wiggle your toes?" Fortunately I could. That ended my impromptu cardboard sledging for the afternoon. And while the damage was confined to my pride and some

sore back muscles, I did spend the next few days walking around rather stiffly. I looked more like an 80-year-old man than one in his 20s.

It's pretty hard to resist the temptation to grab a sled, toboggan or even a piece of cardboard when the white stuff powders the hills where you live. So have fun and take advantage of these tips to help you enjoy your day on the snow.

- Keep all equipment in good condition. Broken parts, sharp edges, cracks and split wood invite injuries.
- Most injuries involve collisions with fixed objects such as trees, telephone poles or fences, so steer clear!
- Dress warmly enough for conditions.
- Sled on spacious, gently sloping hills that have a level run-off at the end so that the sled can come to a halt safely. Avoid steep slopes and slopes located near streets or roadways.
- Check slopes for bare spots, holes, rocks, tree stumps or other obstructions that might cause injuries. Bypass these areas or wait until conditions are better.
- Make sure the sledding path does not cross traffic and is free from hazards such as large trees, fences, rocks or telephone poles.
- Do not sled on or around frozen lakes, streams or ponds because the ice may be unstable.
- The proper position for sledding is to sit up or lay on your back on top of the sled with your feet pointing downhill. Sledding headfirst increases the risk of head injury and should be avoided. Sit upright if you're riding on a snow disc.
- Choose your sledding equipment carefully. Some, such as sleds and toboggans, offer a measure of control. Others, such as snow discs or inner tubes, can leave you completely at the mercy of inertia.
- Don't sled at night unless the area is well lighted.
- Never hitch or give a sled ride behind a vehicle.
- If a spill is unavoidable, don't fly off headfirst; instead roll off the sled to the side. One-third of all sledding injuries involve the head or face.
- Sledders should wear thick gloves or mittens, and insulated boots to protect against frostbite as well as potential injuries. ■

Information for this article was provided by the National Safety Council and *Safety Times*.

Short Circuits...continued from page 3

cause the rider to lose control of the motorcycle. (**NHTSA Recall No. 02V242, Triumph Recall No. 313**)

Owners who do not receive a free remedy for these recall defects within a reasonable amount of time should call the following numbers: Honda Motorcycle, 1-800-289-8226; Daewoo Motor Company, 1-877-362-1234; Kawasaki Motors Corporation, 1-949-770-0400; Nissan North America Inc., 1-800-662-6200; and Triumph Motorcycles, 1-678-854-2010. ■

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Interview with the Air Force Chief of Safety

MAJOR GENERAL KENNETH HESS

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

Foremost, we need to pay attention to those priorities that come from the Chief of Staff of the Air Force and the MAJCOM commanders. Our highest-level goal therefore is to continuously reduce Air Force

mishap rates and make the Air Force a safer place to live and work. In order to be truly successful the Safety Center will support MAJCOM commanders by giving them the tools they need to execute safety at the point of attack. Here at the Safety Center, we need to balance our concentration equally on mishap investigation and prevention. The Center will help shape the debate on a range of issues that will make tomorrow's Air Force even safer than today's. We

will get involved again in systems safety, become a living advocate of risk management and study of future capabilities, like FOQA (flight operations quality assurance), that will keep bringing our mishap rate down. We are studying how to organize for space ... current efforts are rather meager. We will ensure some research is looking at specific technologies and training to reduce aviation mishaps caused by loss of control, controlled flight into terrain, midairs, etc. We need a quantum leap in our ability to harness information technology.

Toward that end, we will accelerate and deliver the Safety Automated System by FY04. On the ground side, our traffic safety IPT recommended a host of changes to current driver's education/training, starting with Course I. We are going to get that done. Anything we can do in this area to stem the slaughter of our airmen on the nation's highways is money well spent. Weapons safety has been our most successful prevention program. We need to really press in order to complete the update/review of explosive site plans by 2005. Key to this effort is fielding the Assessment System for Hazard Surveys and GeoBase to improve the ease and accuracy of site planning. Lastly, we need to take a serious look at how we develop the civilians and enlisted in the safety career field. It's time for some fresh ideas in how to recruit, train and educate tomorrow's safety professional.

We have had an alarming increase in off-duty mishaps this year, so what is your most pressing concern when it comes to off-duty accidents and injuries?

I've already talked some about what we're doing in traffic safety awareness and training. Our target is the 18-25 year-olds ... and we need a lot more target study to determine the best way to communicate with them through our training programs. The problem is that fixing traffic safety training will not have an immediate effect on the numbers of airmen we're losing on the highways. We need for our airmen to consider seriously the risks inherent in their off-duty pursuits. Therefore, the supervisor remains our first line of defense. The Air Force depends greatly on them to guide, counsel and be aware what their people are doing, so that we might head off bad ideas that lead to unnecessary loss of life.

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

I don't think we completely understand all the issues that bear on this problem. It is not enough to say that the rate is going up so supervisors need to work harder. Even though we never want to remove the supervisor from the equation, we have to understand more about the environment. Historically, the on-duty and off-duty ground mishap rates tracked fairly close together — a person who was safe on-duty tended to be safe off-duty and the behaviors that gave

us a safe on-duty environment carried over to the time off-duty. However, in the last few years the trend is quite different — the off-duty rate is much higher than the on-duty rate. We don't know exactly why this is happening. Therefore, in addition to our driver's training efforts, we're going to partner with AETC this year in some human factors surveying to try to understand the 18-25-year-olds we are recruiting a little bit better, and to understand their lifestyles and behaviors. We've contacted a few of the major insurance companies and they are very interested in partnering with the Air Force in our education programs. They have a wealth of knowledge from which we can benefit. We intend to attack the problem.

What about our flight safety efforts?

Over the years we have made tremendous gains in making our airplanes and the environment we operate them in safer. That said, the FY02 aviation mishap rate of 1.62 per 100K is the third worst rate we've experienced in the last 15 years. We had 35 Class A mishaps, destroyed 19 aircraft and had 22 fatalities. Twenty-four accidents were attributed to operations where the major causes have been collision with the ground and pilot induced loss of control. Eight of the mishaps happened during OEF, but none were considered combat losses, i. e., the mishap was not the result of direct enemy action. The operational environment in Afghanistan presented some difficult challenges that we needed to overcome. The learning curve of how to operate at extreme altitudes with narrower safety margins was fairly steep. As has always been the case, risk management in the planning phase and during execution is the key to controlling aviation mishaps. The Safety Center will undertake a major push in human factors to help attack core issues like illusions and attention management.

Do you feel our current ops tempo poses any special safety concerns?

I don't know that we have any indication that any of this year's accidents are directly attributable to ops tempo. Typically, whenever airmen are engaged in contingency operations they stay very focused and avoid distractions, so the mishap rate doesn't rise. The down side of having so many contingency operating locations is the burden placed on those who remain at home. After all, only eight of our 35 Class A mishaps happened in a contingency AO ... the rest happened during normal training or during "routine" operations. That doesn't mean I don't think "tempo" is an issue. Another aspect of this question that often gets overlooked is the tempo caused by the combination of aging aircraft and a relatively junior/inexperienced work force. Our airmen are doing a marvelous job producing sorties, but there is a cost. Maintenance hour per flying hour as well as cost per flying hour have been trending up for the last several years.

continued on page 14

What about the support side of aviation, our maintainers, weapons, security, supply, transportation and the rest of the Air Force?

We've already talked about this a little when we talked about tempo at home. Our best indicator is the on-duty Class A mishap rate. Last year we had seven on-duty fatalities, all of which were avoidable if we had the proper attention to detail and risk management. We've studied the rate and its causes and can't determine a consistent trend because the numbers are so small. Our security forces seem to be having more than their share of the mishaps, but it is not clear whether this is the result of their operating environment or the need for more safety awareness in their training. Generally speaking, we have good supervisory oversight of the workplace ... if we didn't the rate would be absolutely through the roof. When it comes to doing your job safely and providing a safe working environment you can't take anything for granted — you have to earn your spurs every day.

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

Our safety program is executed through the commanders and supervisors. At wing level, the ultimate safety officer is always the wing commander, and I know each of them take safety very, very seriously. However, commanders won't be effective unless their supervisors have a safety mindset in everything they do. The harder supervisors are about safety, then the better the safety record. If everyone is thinking about safety in the conduct of their daily duties, then the mishap rates will go down. In areas where a unit might be a little bit loose, it's up to the commander and supervisors to change the attitude before it shows up in the statistics. Additionally, we are finding that the peer is an important member of the safety team. It is not uncommon during the post-mishap analysis to find out that lots of people were aware of risky behavior long before it resulted in a mishap. But, nobody felt it was his or her job to try and change the behavior. In order for a commander to have an effective safety program he/she needs to write down their policy and expectations, the supervisors need to execute at the point of attack every day, and peers need to help peers to be safe as an integral part of safety. Remember, the mishap rate is the ultimate lagging indicator of problems that have been long ignored.

Earlier, you talked about risk management and some of the risks we have taken in the past year. What role do you see ORM playing in our on-and off-duty safety efforts?

I think we made a slight misstep in the beginning stages of deploying ORM into the field when we made people think of ORM like another "quality" program when, in actuality, it is a very effective deci-

sion-making tool. ORM can help prevent mishaps because it makes you think about the hazards and find ways to mitigate the risks. My job here at the Safety Center, quite frankly, is to reduce mishaps through risk management. Every organization, every person can use ORM. It's not just an on-duty tool ... it can be used to decide how to control risk off-duty as well. Risk management is another area where peers helping peers could really help lower risk.

In your opinion, why do some Air Force members choose to not follow T.O.s and safety guidance and cause us to lose people and productivity?

Basically, the problem is discipline and not having a real safety culture. Adherence to the T.O. is key to being a successful air and space force. We need to understand that the books are not "technical recommendations" or "just data" ... they are technical **orders**. Because they are orders, they are to be followed. It's not like you really have a choice. There are many reasons why one might choose not to follow the T.O.: short on time, familiarity, or poor discipline to name a few. Leadership and better communication can help keep the pressure off of our airmen who will produce an airplane or complete a task "at any cost" because it's needed for the mission. So, they cut corners and do things the commander never intended. Our only hope is to talk the talk and walk the walk. Building a safety culture means that sometimes we may have to accept "NO" for an answer if "YES" means being unsafe or doing the job without reference to published guidance. Familiarity is another area of concern ... it really does breed contempt. You've done a job so many times that you really don't need the T.O. ... besides, it "just slows you down." The unintended consequence of these first two reasons is that they become a teaching tool for everyone involved in the task...our most junior airmen in many cases are learning these behaviors "as the way we really do things around here." Once this virus is in the workforce, you'll work months and years to stamp it out. And, unfortunately, there is a third category comprised of a few who just don't want to follow the T.O. By and large, we have outstanding airmen who are busting their humps to deliver for the Air Force, and they deserve all the credit for any success we might enjoy.

Finally, when you have completed your tour as Chief of Safety, what would you have liked to accomplish?

At the beginning of the interview I gave a pretty good rundown of the priorities. The prime directive is to focus the entire Air Force on reducing the total mishap rate through hazard identification and risk management. The key to achieving this goal is for the Air Force to have a Safety Strategic Plan that will transform today's processes to suit tomorrow's Air Force. It's going to be an exciting time to be at the Center. ■



Space is Life

ROBERT VAN ELSBERG
Managing Editor

I was driving northbound on Interstate 25 headed to work during typical morning rush hour traffic. With people riding each other's back bumpers and madly changing lanes to pass at every opportunity, keeping a safe following distance in front of me was challenging. I'd get a decent interval established only to have three or four cars pull into it.

And that wasn't all.

I was doing 65 mph when I looked into the rearview mirror and saw a woman following me in a red car at a distance of about three car lengths. She was much too close for safety at the speed we were going. With her so close, I knew I would have to brake more gradually if something happened in front of me. That meant allowing an even greater distance between my pickup and the car I was following.

I was watching the car ahead and gradually slowing down to reestablish a safe following distance when I saw the car's brake lights come on. The front of the vehicle dipped, then the car veered to the right side of the lane. That got my attention because it could only mean one thing — something was in the road ahead.

I was glad I had allowed some following distance as I backed off the gas and prepared to maneuver around whatever was in the road. The obstacle, it turned out, was a large plastic bucket lying on its side in the middle of the lane. At least it wasn't an animal. They often move erratically, making it hard, if not impossible, to miss them.

I steered to the right to miss the bucket but not so far as to go onto the shoulder. After I passed the bucket I looked into my rearview mirror. The woman

behind me jumped on her brakes and then got off of them. Apparently she quickly realized that she could not stop in time to miss the bucket or steer around it. Also, she had a car on her back bumper. Perhaps she realized that if she braked too hard, she would have been rear-ended. So, as a result, she hit the bucket dead center. It started to squeeze beneath her front bumper, then shot out to the left and careened across the fast lane. Fortunately, it missed hitting any cars and no one in the fast lane panicked. The woman was clearly shaken and backed off my bumper. She had been fortunate to come through the experience suffering little more than some scratched paint.

After I got to work, I thought about how things might have gone. What if instead of an empty plastic bucket, there had been a cinder block or something else substantial in the road? She would have hit it and probably lost control of her car. Because she was also being tailgated, the result would have almost certainly been a multi-car pileup. At the speeds we were going, that could easily have been deadly.

There were some simple, but worthwhile, lessons to be learned that morning. On the highway, space equals time and time equals options when you have to dodge a roadway obstacle. Even if you can't come to a complete stop, your chances of steering around an object are much better if you see it for a few seconds before you get to it. Also, you can't keep yourself from being tailgated. However, you can lessen your chances of being rear-ended by leaving enough room ahead so that you can brake gradually if there is a problem. Being able to either maneuver quickly or brake gradually are two options that can save you from a potentially serious — even deadly — wreck. But those are two options tailgaters don't have. ■

A LEAP INTO TH

CAPT MARK FALSANI
81 FS/DOB
Spangdahlem AB

"Imagine a man with a snowboard and a closed ski run. Imagine that man ignoring the "Closed" sign, lifting the rope, strapping on his snowboard and pushing off. As he streaks down the mountain at better than a mile-a-minute, little does he know that he is about to take a leap into The Twilight Zone."

And so our story begins ...

It was early in the season, right after Christmas and our snowboarder, Kevin, was at Okemo, Vt., for a giant slalom race. On the slopes, giant snow-making machines steadily sprayed out a new powder to cover the snow that had thawed during the day then refrozen at night. It was a day or two before the race and Kevin was on his board getting ready for the competition. As he rode up the lift, he spotted a run no one had been on yet. The snow was smooth. No bumping and vibrating down a rutted-up run – something that could get hairy on a race board when you're trying to turn on only one edge at 55-65 mph.

He knew the mountain well. He knew where the run dumped out and how to get on it. Getting off the lift, he ducked under the rope, strapped on his board and raged downhill. He was about halfway down the run when his goggles suddenly glazed-over – it was the snow machines! He had run right into the water they were spraying and the droplets were freezing on his goggles, turning his world into an opaque blur. Unable to stop, he hit a bump then hurtled into the sky.

He was off-balance when he launched. With a horrendous thud he crashed onto the snow, landing on his back. The impact knocked him senseless. When the ski patrol finally found him, they couldn't believe that he wasn't dead. He had launched going full grunt and landed 150 feet down the trail. The ski patrol knew that because they measured where his tracks stopped and started again. Although he was still breathing, he had broken several vertebrae and hit his head hard enough to have a mild concussion. Had he not been wearing his helmet, it could have been A LOT worse.

He had to cool it for the rest of the season but, with rehabilitation, was able to get on his board again



E 'TWILIGHT ZONE'



Photo Illustration by Felicia Moreland

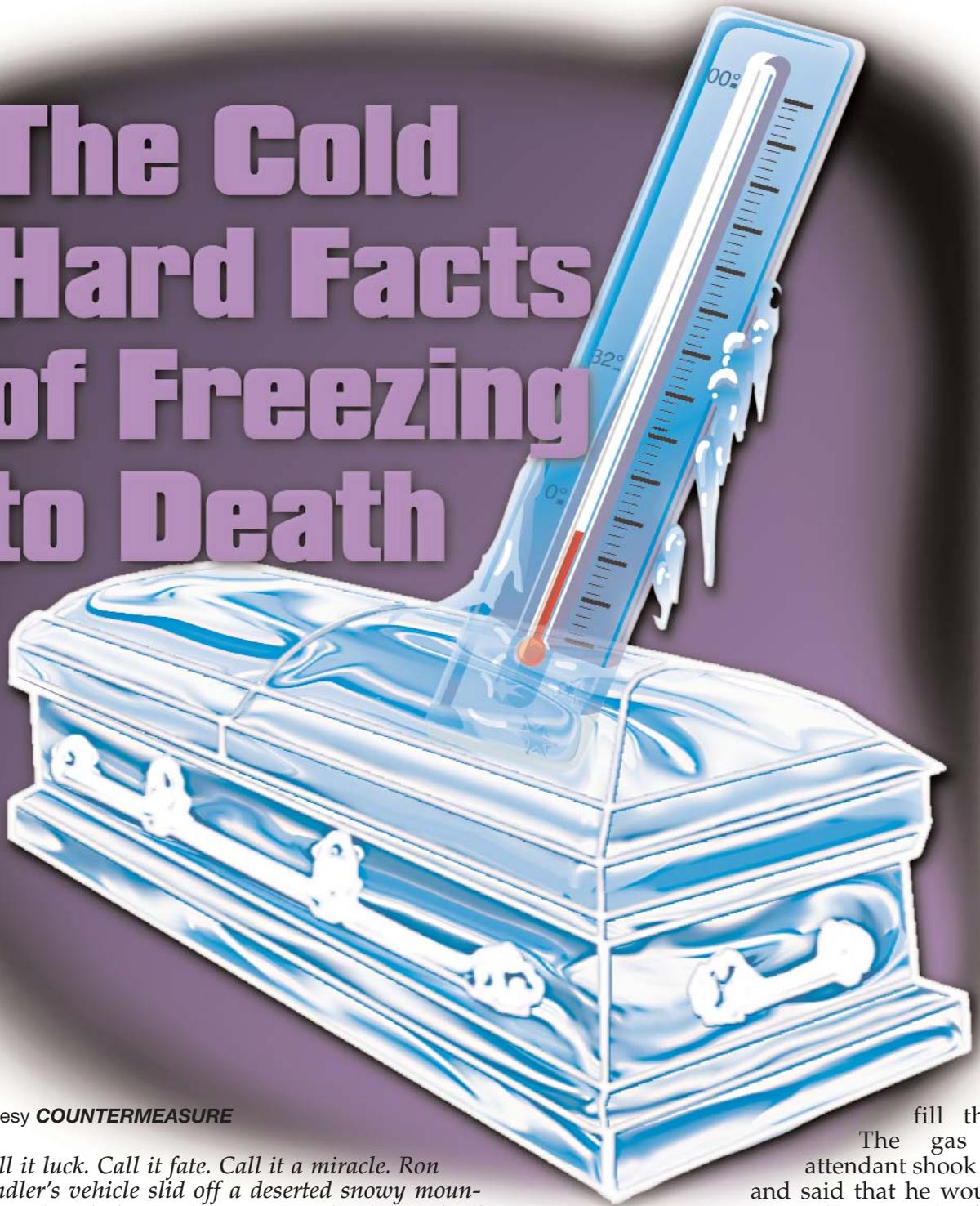
the next year. But you can chalk that up to his helmet. The snow wasn't soft as he barreled down the mountain at 65 mph. If he'd crashed without his nugget cover, it would have been like dumping a bike on the autobahn without a helmet -- really dumb!

Nugget covers aren't "optional." You can't compete at most competitions without a helmet. In fact, in some cases, it's a good idea to go a bit further and wear motocross-style body armor. Also, taping your wrists can help protect you from a wrist injury should you wipeout and put your hands out to break the fall.

Finally, raging down a closed run like Kevin did can have some very unpleasant consequences. You can get your ticket ripped or be fined or arrested. If you're out west in deep snow, it could be even worse -- you could get buried. And, think about it -- if you crash and need immediate medical help, it's going to take longer because you're not where you're supposed to be.

You only come up on the weekends, so do you think you know more about the mountain than the ski patrol and the people who work the slopes? Trust them and help them do their job by staying off the closed trails. Don't follow Kevin's example by taking a leap into ***The Twilight Zone.*** ■

The Cold Hard Facts of Freezing to Death



Courtesy **COUNTERMEASURE**

Call it luck. Call it fate. Call it a miracle. Ron Chandler's vehicle slid off a deserted snowy mountain road and slammed into a snowbank. His badly frostbitten feet ached as he trudged through the bitter cold to find help. After only a couple hours in the frozen snow, his strength was gone and he believed death was near.

It was Christmas Eve and I was headed home to Georgia to be with family and friends during my winter break from the University of Tennessee. Driving out of town, my defroster roaring, I could barely see the bank's thermometer in the town square. Did it say 18 degrees Fahrenheit?

The radio weather report had warned of a possible snowstorm. I stopped at the local gas station to

fill the tank. The gas station attendant shook his head and said that he wouldn't be going anywhere tonight if he were me. I just smiled. A little snow never hurt anybody. Besides, I had my trusty 4-wheel-drive Jeep, some tunes, and plenty of munchies and hot coffee. There was nothing to worry about.

That's what I thought until I got about 150 miles out of town on a two-lane curvy road. The weather had worsened and I couldn't see the lines on the road. I tried to keep an eye on other terrain features to stay oriented. My head hurt because I was concentrating so hard on my driving as I went down the slippery road.

Suddenly, in my peripheral vision, I picked up a blur off to my right. A brown mass jumped right at

me, causing me to brake and jerk the steering wheel to the right. My Jeep suddenly started spinning out of control off the mountain road and into a snow bank.

Luckily, I wasn't hurt, but my Jeep was stuck in an avalanche of snow. After jamming the gearshift into "Low," I tried to muscle my way out of the drift. No such luck. Frustrated, I shoved the gearshift into "Park" and forced my door open. Brrr! – the cold air slapped my face and made my eyes tear.

My first thought was that I had just dented my bumper. My second thought was that I had failed to bring a shovel. My third thought was that I would be late for dinner. My family was expecting me at the house around 8 p.m. for a Christmas Eve dinner. Nothing could keep me from that.

I looked around the area for lights from a car or house but saw nothing. I checked my map for the nearest town, but it was five miles away. I said aloud, "I can punch that out in no time!" My breath came out in short, frosted puffs. I wasn't worried about the cold at that time.

My Jeep was cocked sideways in the snow bank right beside the deer that had darted into the road and become an unwanted passenger.

I donned my fleece jacket, gloves and cap, grabbed my flashlight and map, and started to walk. Within a few minutes I noticed my fingers were tingling and then my toes began to go numb. After about 10 minutes of hard climbing, my body temperature increased and the blood started seeping back into my fingers. Sweat trickled down my chest and back.

Treading slowly through the deep, soft snow, I felt the 18-degree air bite at my face. I was wishing I had borrowed my friend's cell phone. Man, it was cold!

After an hour, I still hadn't found any sign of anyone. I double-checked the map. I flicked on the flashlight and its cold-weakened batteries threw a yellowish circle in the snow. "It had to be right around here somewhere," I thought as the frigid air pressed against my body and my sweat-soaked clothes. The exertion that had warmed me as I climbed uphill was now working against me.

My body temperature began to plummet. Within 17 minutes, it reached the normal 98.6 degrees, and then it slipped lower. At 97 degrees, my neck and shoulder muscles tightened (what's known as pre-shivering muscle tone). My hands and feet ached with cold. Ignoring the pain, I trudged through the snow for another 10 minutes.

Nearly 45 minutes later, my body temperature was 94 degrees and I entered the zone of moderate hypothermia. I was trembling uncontrollably – a natural response to help generate additional body heat.

All that I could think about was how the gas station attendant had been right – it had been a mistake to come out on a night like this. I wondered, "Had I gone too far to turn back to the Jeep?" I fum-

bled for the map in my jacket. Would I be able to guide myself back to the warm Jeep? I was too cold to even think about eating Christmas dinner. I could only think about the warm Jeep that waited for me somewhere at the bottom of the hill.

I turned around and began to walk back towards the Jeep. I saw the Jeep's shell as I came over the crest. The wind was picking up and I heard it whistling. I hurried toward the Jeep but, unfortunately, didn't see a buried log and tripped over it. I lay very still. There was dead silence except for the sound of my heart thumping in my chest. My ankle throbbed with pain. I had gouged my head on a tree branch. I also felt a draft on my head ... I had lost my cap!

The snow that had gotten packed down inside my shirt started to melt and trickle down my chest and stomach. Realizing this was not a good position to be in, I tried to get up but collapsed in pain as my ankle crumpled beneath me.

I sank into the snow, shaken as my body heat drained away at an alarming rate. My head alone, accounted for 50 percent of my heat loss. The pain of the cold soon pierced my ears so sharply that I rooted around in the snow until I found my cap, then mashed it onto my head.

As the time passed I checked my watch. It was 11:52 p.m. Surely, someone would come looking for me soon. I lowered my head into the snow and heard it softly crunch. In the 18-degree air, my core temperature would fall about one degree every 30 to 40 minutes. I'd become apathetic at 90 degrees – at 86 degrees I would be in a stupor.

I crossed the boundary into profound hypothermia. By the time my core temperature had fallen to 86 degrees, I was so cold I could no longer shiver. My blood had thickened like crankcase oil in a cold engine. My oxygen consumption had fallen by 25 percent. My kidneys however, were working overtime to process the fluid overload. I felt a powerful urge to urinate – the only thing I felt at all.

At 86 degrees, I lost the ability to recognize a familiar face when one suddenly appeared. My heartbeat had become erratic. It now pumped less than two-thirds the normal amount of blood. Meanwhile, the lack of oxygen and my slowing metabolism began to trigger visual and auditory hallucinations. I wondered if I was unconscious?

Suddenly, I heard bells. Jingle bells? I tried to lift my head but realized my neck muscles felt like they had rusted shut – unused for years. Then I realized that I was hearing the welcoming bells hanging from the door of my parent's house. I was home. Someone had found me!

I had learned a lesson and almost died in the process. In the future, I will plan to stay home during bad weather. If I have to drive and end up getting stuck somewhere, I will stay with my car. Never again will I try to walk in a storm. ■

It Only Takes



Courtesy *Ashore*
RON CAMPBELL
Naval Safety Center

Studies show that it takes an average of three seconds to fasten your seatbelt. I know at least one young woman who wishes she had taken those three seconds.

I was driving home from work when I came upon a two-car collision in which the rear of the young woman's vehicle had been slammed into by a minivan. Only half of her car remained. The other half had been squashed like a soda can.

On impact, the young woman had been thrown from the driver's seat into the windshield on the **passenger** side. How do I know she hit the passenger side? The imprint of her head was clear. When her pinball-machine-like ride inside the car finally ended, she was lying on the passenger-side floorboard. Neither the air bags nor the shoulder belt had restrained her. Does that surprise you? It shouldn't. Those devices cannot effectively protect a person during a crash if the lap belt is not also used.

An off-duty nurse had arrived shortly before I did and found the young woman trying to get out of her car. When I ran up, the young woman had just stood up — barely. We laid her on the ground, took her vital signs, and waited for an emergency vehicle to

arrive.

In less than a minute, she was in shock and couldn't tell us who she was, where she was, or what she felt was wrong with her.

After the emergency vehicle had taken her away, I took the time to examine her vehicle. The rear was nothing but twisted metal — which had been pushed into the backseat — but the front seat was in perfect condition. If only she had been wearing her lap belt, she might have walked away with nothing more than a stiff neck. As for the woman driving the minivan, she walked away with only scratches on her hand and nose. Why were her injuries so much less than the other woman's? The driver of the minivan had been wearing her seatbelt.

What was the young woman's excuse for not wearing her lap belt? Perhaps it was one of these; "I'm not going far," "It's uncomfortable," "Nothing will happen to me," or "I'm in a hurry." Whichever excuse she used, she was only kidding herself. I'd be willing to bet that the next time she drove after

A Few Seconds

this accident, she took the time to fasten her shoulder AND her lap belts.

Three seconds is a very small part of the 86,400 seconds that make up a day. If buckling-up can make the difference between walking away from a mishap or going to the hospital, isn't it worth the time to make that very important "click?" ■

Editor's Note: New cars include a three-point lap and shoulder restraint system that clicks into one buckle. However, some older cars have separate lap and shoulder belts that must be individually secured. A study conducted by the University of North Carolina found a disturbing number of drivers with these kinds of vehicles failed to secure their lap belts, assuming their shoulder belt and air bags would adequately protect them. The flaw in this thinking revolves around the fact that an occupant who is not wearing a lap belt can slide out of position inside a car and be thrown around violently. If you have an older car with separate shoulder and lap belts, make sure you use both at all times.

be sitting in a car. Time and again, statistics show you're more likely to avoid serious injury or death by wearing a seatbelt, even if you're a backseat passenger.

How Do Seatbelts Help?

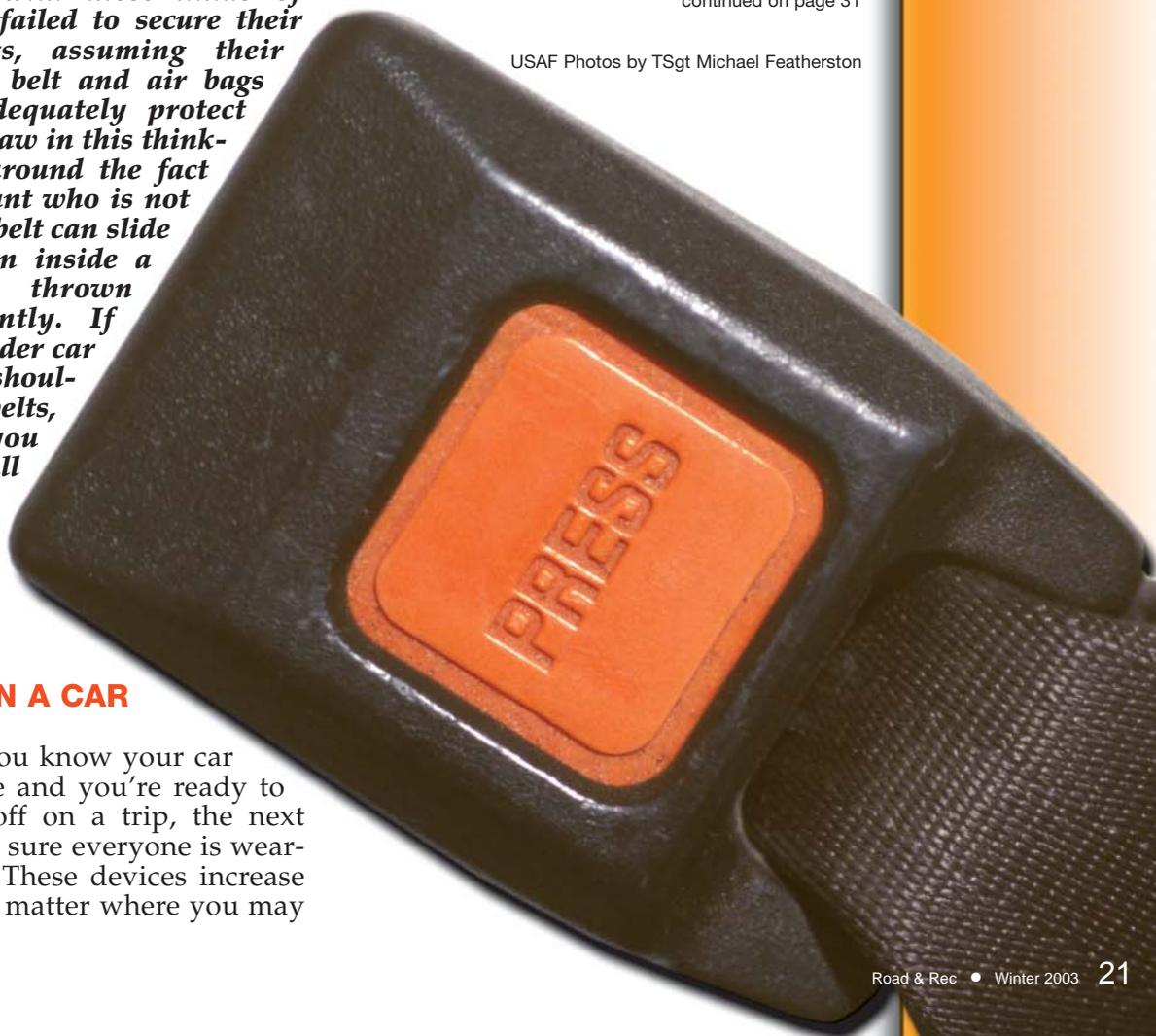
- They keep you in your seat and inside your vehicle. Being thrown out of a vehicle typically leads to serious or fatal injuries.
- Seatbelts do a particularly good job of protecting you in front-end, rear-end and rollover crashes.
- Seatbelts keep you behind the wheel and help you keep control of your vehicle.
- When used with a child safety seat, seatbelts can keep children from being thrown around inside of a car and more seriously injured.

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USAF Photos by TSgt Michael Featherston

YOUR BEST DEFENSES IN A CAR

When you know your car is safe and you're ready to take off on a trip, the next step is to make sure everyone is wearing a seatbelt. These devices increase your safety, no matter where you may





FY 2002 Ground Safety Mishap Wrap-Up

MSGT CURTIS GONTER
HQ AFSC/SEGO

A review of our FY 2002 fatal mishaps reveals that we have experienced one of our worst years in recent history with increases in nearly every category. Our on-duty losses have increased by four over last year (see Chart 1). The trends in our

on-duty mishaps include inadequate training or guidance and failure to follow prescribed instructions. Of the seven fatalities, four involved specialty vehicles while the other three included a maritime drowning, an industrial accident, and a sports and recreation mishap. Unfortunately, we lost an additional 84 airmen to off-duty mishaps this fiscal year,

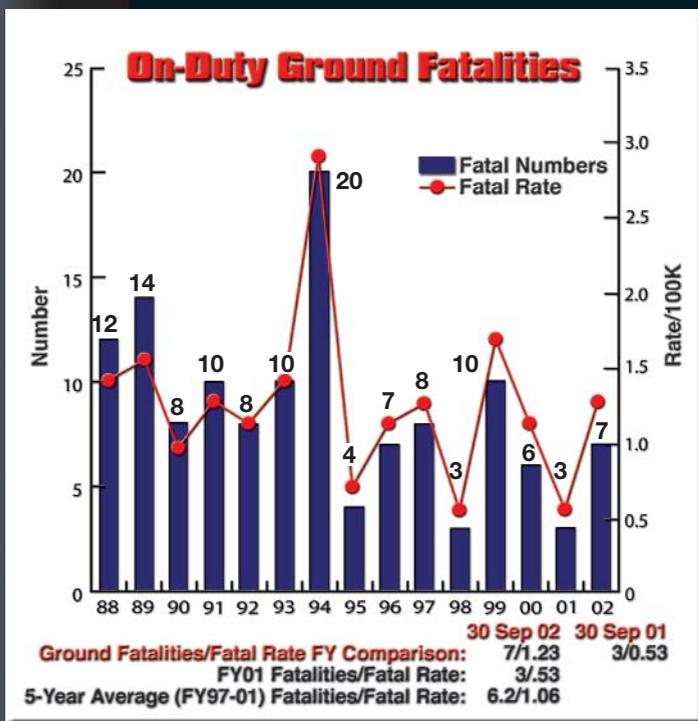


Chart 1

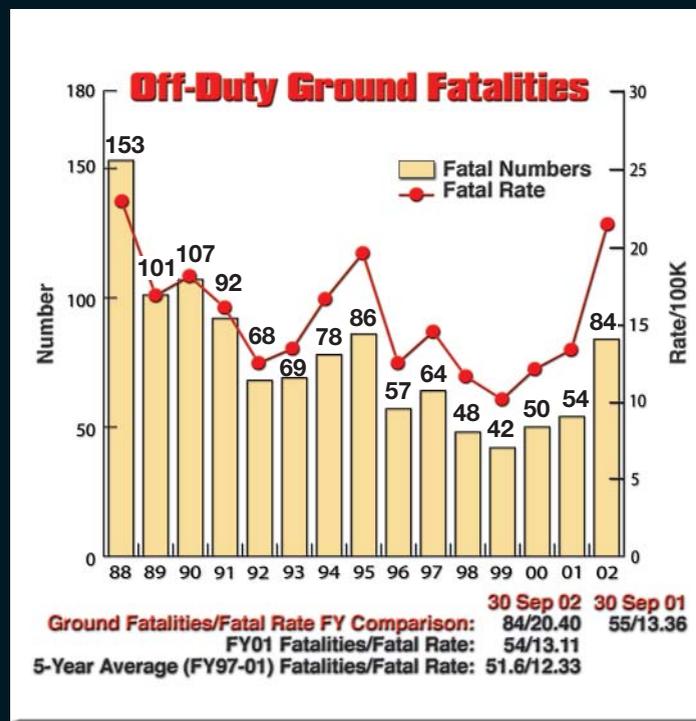


Chart 2

a 38 percent increase over the 55 airmen lost last year (see Chart 2).

The "101 Critical Days of Summer" continues to be a vulnerable period. This year's experience only reinforces the importance of focusing on safety during the summer months. We saw a 37 percent increase in fatalities this year compared to the two previous years. In terms of numbers, we lost 30 airmen this summer compared to 19 and 18 during the two previous summers, respectively. The summer brings increased off-duty activities and their related hazards. Therefore, this campaign attempts to change the hazardous behavior of airmen during this at-risk time. In several of the mishaps we analyzed, airmen were killed or injured when they took significant risks even though their peers were in a position to limit or stop them.

A case in point concerning peer influence is the seven multiple-fatality automobile mishaps involving airmen drivers and passengers (Chart 3). These mishaps resulted in the deaths of an additional nine airmen. When compared with multiple-fatality mishaps during previous eight years, fiscal year 2002 far exceeds anything seen previously. In addi-

FATALITIES BY RANK

Airman Basic = 1
Airman = 4
Airman First Class = 28
Senior Airman = 21
Staff Sergeants = 10
Technical Sergeants = 5
Master Sergeants = 3
Senior Master Sergeants = 1
Cadets = 4
Second Lieutenant = 1
First Lieutenants = 3
Captain = 1
Majors = 2

Without a doubt, the most hazardous activity airmen are routinely exposed to is driving a vehicle in traffic. Automobile and motorcycle passengers are also vulnerable because they have little immediate control. Passengers are often reluctant or do not know when to say, "Knock it off," to a driver who is

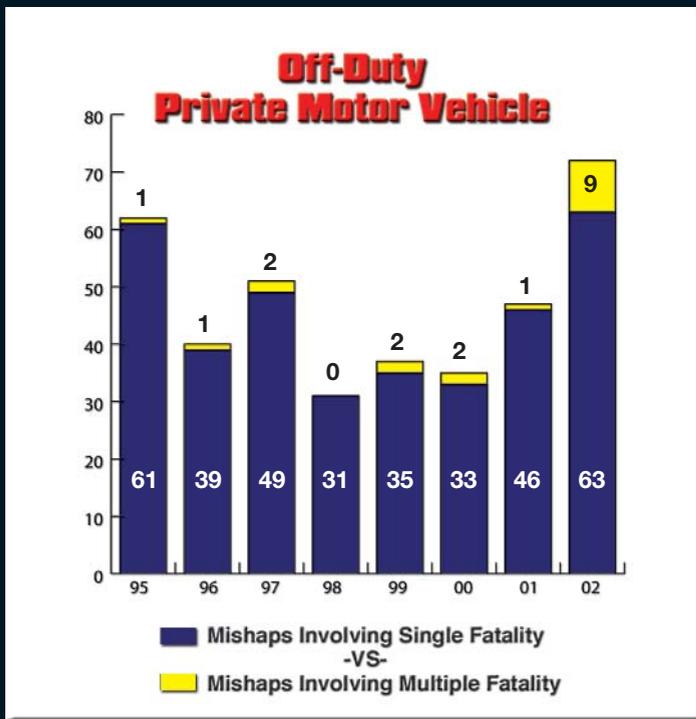


Chart 3

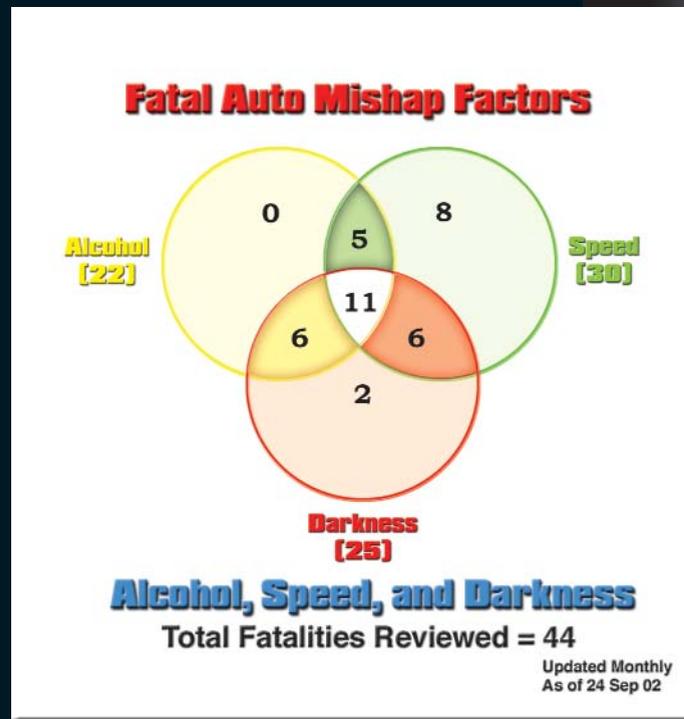


Chart 4

tion, one motorcycle mishap resulted in the operator's death and permanent disabling injuries to the passenger.

The following is a breakout of our off-duty fatalities by rank. As you would expect, our lowest enlisted grades composed of our youngest airmen — dominated our losses. Approximately 70 percent of our off-duty fatalities involved airmen between 18 and 25 years old.

driving dangerously. As previously mentioned, nine airmen died while riding as passengers in vehicles driven by other airmen. There were, however, an additional seven airmen who died as passengers where the driver was either a civilian or, if military, survived the mishap.

Charts 4 and 5 reflect the principal risk factors that contributed to our automobile and motorcycle deaths.

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Fatal Motorcycle Mishap Factors

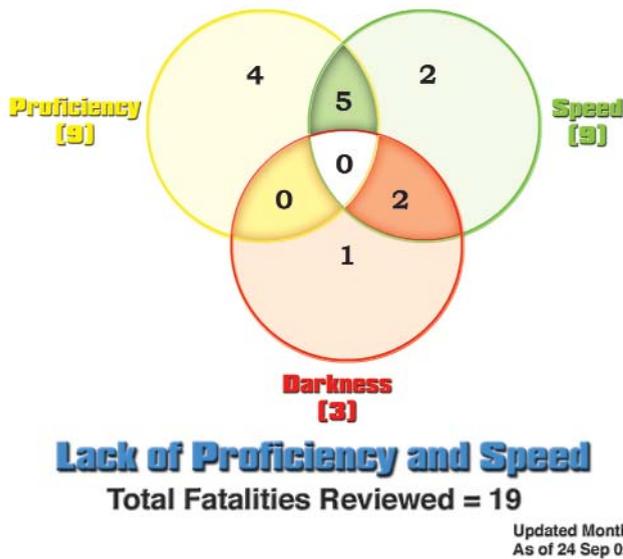


Chart 5

The key common factors for automobile accidents were SPEED and ALCOHOL. For motorcycle accidents, PROFICIENCY and SPEED were the key factors.

All of the major contributing factors resulted from the actions (or inactions) of drivers and, sometimes, their passengers. This makes judgment the critical linchpin in preventing such mishaps.

The Air Force continues to promote motorcycle safety, including training. Yet, despite that, we have seen a measurable upward trend in motorcycle

Class A Motorcycle Mishaps

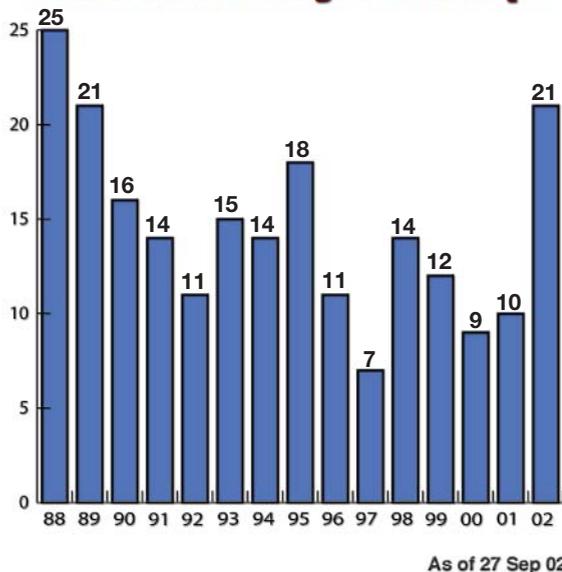


Chart 6

mishaps since 1997 (See Chart 6).

Our analysis of the 602 motorcycle mishaps that occurred between fiscal years 1998 and 2002 showed that 63 percent were the fault of the active duty Air Force (ADAF) member. Speed and proficiency were the prevalent causes.

These trends are significant and indicate that we must take action. When airmen are killed on their motorcycles, their families are forever changed and our mission capability is affected.

When all of the fatal mishaps are considered, the cost in human terms has been 91 fatalities and their grieving families. In addition, nine airmen were permanently disabled. The operational cost of losing these 91 maintainers, operators and supporters has been 561 years of experience and \$19 million.

Take Away Point:

We have learned the following from our losses:

- Alcohol use was involved in 22 (40 percent) of our fatal traffic accidents. We need to focus on not driving while impaired.

- Young airmen continue to be the most at-risk group. Therefore, first-line supervisors and peers must focus on identifying risky behaviors and actively intervening to prevent them.

- We need to stress that passengers, who are normally the driver's peers, have a responsibility to help prevent vehicle mishaps. They must be willing to speak up to influence the driver's behavior when the driver is taking dangerous risks.

The identifiable trends in automobile mishaps are: driving too fast for conditions, darkness, and alcohol. Alcohol impairs judgment and reaction times.

- Of the 48 airmen who died in vehicle mishaps, 14 were not wearing seatbelts. Of those 14, eight tested positive for alcohol while operating a vehicle. Not wearing seatbelts and drinking and driving are both risky behaviors.

- Motorcycle mishaps resulted in 20 fatalities this year — 11 more than last year.

- Riding too fast for the conditions and lack of proficiency were prominent factors.

- Eleven riders died in single-vehicle accidents when they lost control of their motorcycles.

- Three riders had a history of reckless behavior.

- Only two fatalities involved alcohol.

- Only two riders had not received Motorcycle Safety Foundation training.

- Only two riders were not wearing a helmet.

Final Note:

Undeniably, the most significant factor in all of our losses was a lack of sound personal risk management. Regardless of whether you are riding in a car or operating a motorcycle, you must identify the risks and find ways to limit them. Equally important is making sound decisions regarding self-discipline, remaining alert, controlling distractions, and avoiding complacency. ■

From the Editor's Desk — "Checkin' it Twice"

Bob Van Elsberg
Managing Editor

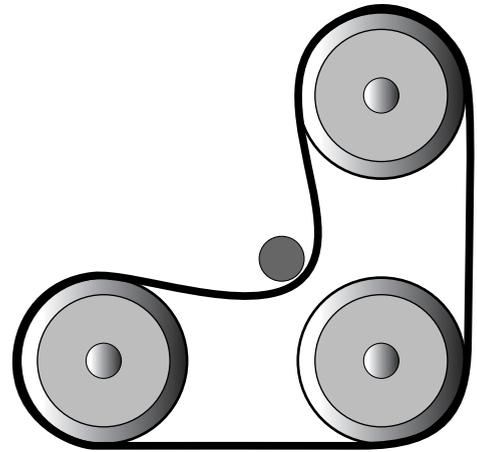
Ever have that nagging feeling — that knot in the pit of your stomach — warning you that you may have overlooked something? Maybe it's a form of Extra Sensory Perception, or perhaps it's a long-submerged memory of a time when you inadvertently screwed up a vehicle repair and paid the price.

In any case, on a recent road trip to Arkansas to see my parents I wound up in the parking lot of an auto parts store changing the alternator on my 1998 Chevy Lumina. In past years this was a simple enough chore that involved loosening a couple of bolts, swinging the alternator in a little closer to the engine to slip the drive belt off the pulley, then removing the alternator and replacing it with a new one. However, this was a 1998 vehicle and I had not reckoned on how creative Chevrolet engineers had become at making simple jobs complex. The *new improved* approach had a couple of interestingly shaped metal braces and some air-conditioning plumbing attached to the alternator. Predictably, part of the bracket for the air-conditioning lines and the nut for the alternator's bottom bolt were almost impossible to reach. After all, if it were easy to repair a Chevy, Mr. Goodwrench would be out of work.

After spending three hours under the hood tugging and grunting and questioning the mental horsepower of any engineer who would use both metric and American-sized bolts on the same part, dad and I finally had the job done. Or so we thought.

The Chevy sat for most of a week, but finally it was time to pack up and head for home. Heading south on Highway 67/167 from North Little Rock toward the I-40 interchange, I couldn't quite shake the fear that maybe I had overlooked something in doing this repair. Since it was only a few miles back to dad's house and his reasonably well-stocked toolbox (I'd left mine at home — the first time I'd ever done that on a road trip), I decided to pull off the highway and check the repair one more time — just in case.

We took the exit for McCain Mall and I pulled into the parking lot. Popping the hood, I checked the alternator. Everything seemed OK there. I was just about to close the hood when my eye caught something. As I looked closer, I



Example of a "Serpentine" belt.

saw the serpentine belt, which is used to turn the alternator along with other vehicle accessories, was riding on the raised edge of one of the pulleys. It didn't take much imagination to see that either shredding the belt or throwing it off the pulleys. Had that happened, I would have instantly lost my power steering, power brakes, alternator, water pump and air-conditioner. That wouldn't have been fun wherever it happened, but if it happened while passing an 18-wheeler or during Oklahoma City rush hour traffic, it could have led to a serious accident.

Since it required a special tool (which my dad had) to loosen the tensioner for the serpentine belt and properly align it on the pulley, we turned around and headed back to my parent's house. Needless to say, they were surprised to see us back so soon. But when I lifted the hood and showed dad the misaligned serpentine belt, he was grateful we hadn't tried to drive home that way. It only took a minute to fix and we were on the road again with a much better prospect of making the 960-mile trip home safely.

And the moral of the story? Almost any repair you can make on your vehicle can potentially affect your safety. If you're a "shadetree mechanic," take the time to double check your work or, if possible, have another set of experienced eyes look at your repairs. Zipping down the interstate at 70 mph is not the time to find out that you forgot to tighten a bolt, reattach a hose, or overlooked some other detail of your repair. Sometimes even the most careful of us — including this safety magazine editor — can make mistakes. ■

I 'LOST FACE' ON THE SLOPES



HEADWALL WARNING

**WHEN YOU PASS BEYOND THIS BOUNDARY
YOU ARE ENTERING AN AREA WHICH HAS
MANY UNMARKED HAZARDS INCLUDING
AVALANCHES AND HIDDEN OBSTACLES.
YOU ARE AT RISK FOR THESE NATURAL
HAZARDS. YOU ARE RESPONSIBLE FOR
YOUR OWN ACTIONS AND YOU WAIVE
ALL CLAIMS FOR INJURY. YOU MUST NOT**

The first ski trip of the year is always the most anticipated, especially when you want to try out your new gear and are traveling with a group of friends. I found myself in this situation one year, heading home for Christmas break with my buddies and my new skis. It seemed as though it would take all the strength of the world to wipe the grin off my face.

We woke up very early for our three-hour drive north to Brian Head ski resort in Utah. After the long trek, the time had come to hit the slopes. We started off pretty slowly. However, just like remembering how to ride a bike, you pick it up pretty fast and your confidence rises quickly. In light of my newly found confidence, I decided halfway through the run to dart off to the side near the deep powder and trees. Not knowing what lay ahead, I charged on feeling like I was on top of the world.

But was I? Before I knew it, I had lost control. Thinking I had regained my riding skills very quickly, I was dumbfounded when my skis didn't go the way I wanted and I planted my face in the snow. Just beneath the snow lay something that would make what should have been a great day of skiing into one of the worst days of my life.

As my face hit the snow, my forehead hit a rock only a couple inches beneath the surface. I lifted my head in disbelief, thinking I had broken my nose — but my face was just numb from the snow. As I sat there stunned by the blow, people skied past just staring at me as if I was naked. I didn't know what to think. One of my friends then came up and asked me if I was all right. As I turned to talk to him, his mouth hung open. I still didn't know what was so ghastly about my appearance. He told me I had better go see the ski patrol about getting some medical attention. I headed down the mountain to see why everyone was fussing over me.

As I went into the bathroom, I was still being greeted with looks of shock and horror. When I looked into the mirror I finally realized why. There was a one-inch gash in the top of my forehead that looked like it had penetrated all the way to my skull. The entire right side of my face from my forehead to my cheek was caked in dried blood. I immediately told my friends that I needed to get to the ski patrol. After they examined me, I was taken to the on-site medical office where I received several stitches to close my wound. They bandaged the wound, and I decided that I was not going to let my lift ticket go to waste because of my unfortunate mishap. I cautiously skied the rest of the day.

However, I could have avoided all of this if I had just invested a little extra money in an important safety device — a helmet. The Consumer Product Safety Commission has found that helmet use by skiers and snowboarders can prevent, or reduce the severity of, 44 percent of head injuries to adults and

53 percent suffered by children under the age of 15. Since that day, I have never gone skiing without wearing a helmet and it has protected me during numerous accidents. Helmets are not that expensive and will save you a world of trouble if you ever have the need for one. Helmets and proper attire are the best form of preventive safety. Even if you are renting equipment, most ski rental businesses will rent helmets as well. Also ski schools sometimes provide helmets for your children, so make sure you do your research before hitting the slopes this season.

Here are some tips from the National Safety Council on how to keep your vacation on the slopes from going downhill:

Tips for Before You Hit 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 skiing 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 to keep out the wind. 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, which is comfortable next to the skin, dries quickly, absorbs sweat and keeps you warm. Wear a turtleneck, a sweater and a jacket.

● **Be prepared.** Mother Nature has a mind of her own. Bring a headband or hat with you to the slopes because half or more of your heat-loss is through the head. Also helmets aid in this by helping keep the heat where it needs to be. Wear gloves or mittens (mittens are usually better for those susceptible to cold hands).

● **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. ■

Follow the "Skier's Responsibility Code," the seven safety rules of the slopes are:

1. Always stay in control.
2. People ahead of you have the right of way.
3. Stop in a safe place for yourself and others.
4. Whenever starting downhill or merging, look uphill 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

Note: Information provided courtesy of *The National Safety Council*.

I Learned the Hard Way!

A1C JAMIE BOSARGE
354th FW
Eielson AFB AK

D.W.I. Leads to...

Jail Time & Court Appearances

Privileges, Time & Money Lost

Career Setbacks

Loss of Respect



USAF Photo by TSgt Michael Featherston
Photo Illustration by Felicia Moreland

On March 5, 2002, I made a decision that has changed my life every day since. You ask me what that was? The answer is simple — I chose to drink and drive. Looking back, it seems so simple to say, "I *thought* I was OK that night." However, I now know that I wasn't. I have paid for that in my career, in legal costs, and in the respect of those who thought more of me than I proved to be that evening.

I had turned 21 only a few months earlier. I thought it was no big deal to have a few beers, and I felt just fine. However, when I got into my car I started to feel some of the effects of the alcohol. Instead of going back inside and calling for a ride I thought, "It's just a short drive down the road. I'll be there in 5 minutes."

I was only a mile from home when my cell phone rang and I took my eyes off the road to search for it. Had I been sober, I would have been able to find my cell phone without swerving across two lanes on the road. As soon as I looked up, I realized what I had done. I had just thought, "Oh no!" when a patrol car turned its lights on behind me.

I was not a drinker and 2 1/2 beers were more than I could handle. That night I'd been trying not to think about having to go to the desert for six months. I didn't even think about the consequences of drinking and driving. As the cop pulled me over, I promised God if He let me get off this one time, I would never drink and drive again. I'll bet I'm not the only person who has ever done that.

The officer asked if I had been drinking and I answered his question truthfully. He then asked me to step out of the vehicle and we proceeded with a field sobriety test. Being not quite sober, I thought, "Oh yeah, I am doing just fine." Five minutes later I was arrested for Driving While Intoxicated (DWI). We went to the police station where my blood alcohol content was measured at .12. I thought that was impossible — I'd had less than three beers! I was taken to jail and released early in the morning after posting \$500 bail.

The next day was hard because I had to come in and face the people I work with and who had supported me day in and day out. I was the 354th Fighter Wing Airman of the Quarter, the Information Systems Airman of The Year and I had been chosen for "Iceman Salutes." I was on the dean's list in college and was 6 hours away from my bachelor's degree from Wayland Baptist University. I was so ashamed. The hardest part was talking to the people who had respected me, especially my parents.

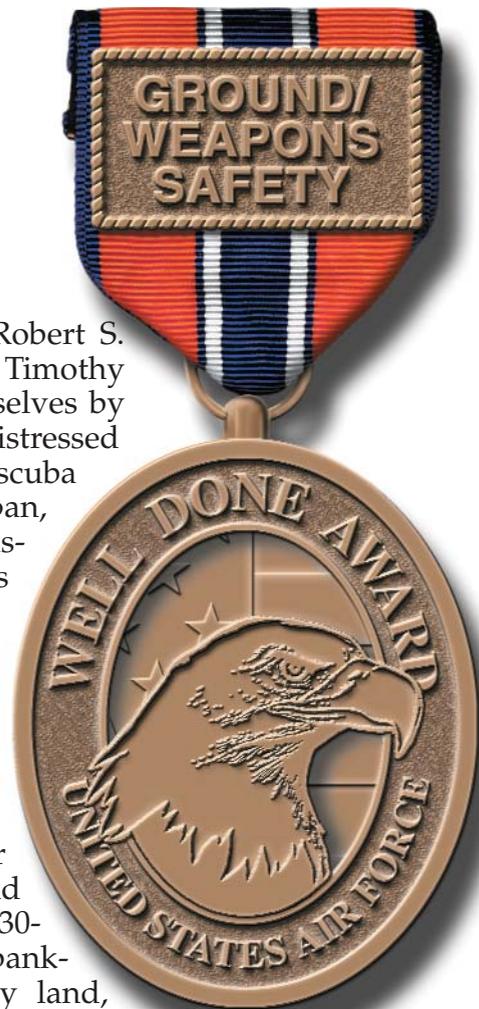
A lot has happened to me since my DWI. On the military side, I was placed on a control roster with a UIF (Unfavorable Information) in my records. That held up my senior airman stripe, kept me from going TDY and bumped me out of the running for Officer's Training School — the goal I had striven hardest to reach. Also, no matter how well I do my job, I can

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The Well Done Awards

SSgt. Tibor S. Beczo
SSgt. Robert S. Gabler
SSgt. Geoffrey G. Gardner
961st AACs
SSgt. Timothy D. Webster
18th LSS
Kadena Air Base

Staff Sergeants Tibor S. Beczo, Robert S. Gabler, Geoffrey G. Gardner, and Timothy D. Webster distinguished themselves by participating in the rescue of two distressed divers on 31 December, 2001. While scuba diving at Onna Point, Okinawa, Japan, this group of deep-sea divers noted distress signals from a pair of divers caught in the surf. They quickly assessed the situation, entered the water and swam to the divers' aid. One of the divers was incapacitated, having difficulty breathing, and was blue around the mouth. Sergeants Gabler and Beczo immediately began to tow the individual to shore. After overcoming choppy surf, currents, and riptides, all four sergeants lifted the 230-pound diver over a 6-foot coral embankment. As soon as they were on dry land, Sergeant Gabler alertly took charge, directed one individual to call base emergency services, and tended to the victim. The local Emergency Services operator could not determine their location, so they immediately proceeded with the victim to the United States Naval Hospital at Camp Lester. As Sergeant Gabler drove, Sergeants Beczo and Gardner kept a vigilant watch on the suffering diver. Upon arrival at the hospital, they immediately transferred care of the diver to trained medical personnel and notified emergency services that the situation was terminated. Their training, situational awareness, and decisive actions prevented a potentially disastrous mishap and loss of life. ■



We'd Like to Publish Your Story!



We know there are some great experiences out there just waiting to be told, so how about jotting them down. We'd like to hear from you — how your use of a seat belt or helmet saved your life or protected you from serious injury, or some lessons you've learned concerning driving or recreational safety. Sharing your experiences with other **Road & Rec** readers can be an excellent, entertaining way of helping us get the safety message out to your fellow airmen.

We accept articles of any length. A double-spaced Microsoft Word® e-mail attachment is best. Any supporting color slides, color photos, or graphics you can contribute will be greatly appreciated. You can be sure your byline will accompany the story so that you will receive full credit for your contribution.

You can reach us by mail at **HQ AFSC/SEMM, 9700 G Avenue SE, Kirtland AFB, New Mexico 87117-5670**, or call commercial at **(505) 846-0983** or DSN **246-0983**. You can also fax to **DSN 246-0931** or E-mail to **Robert.VanElsberg@kirtland.af.mil**.

We look forward to hearing from you and sharing your story!!! ■

It Only Takes A Few Seconds......continued from page 21

How to Properly Wear a Seatbelt

Lap belts should be worn snugly and low across the hips. Shoulder belts should be worn over your shoulder and snugly across your chest. **NEVER** tuck a shoulder strap under your arm.

Child Restraints

Make sure children old enough to wear seatbelts understand the proper way to buckle and wear them. Child safety seats should be installed snugly to keep them in place during an accident. Your owner's manual should provide information on how to properly install the seat. Also, some smaller children — even if they are more than 4 years old — may be safer riding in a child safety seat.

What About Air Bags?

Air bags are not a substitute for seatbelts. Combined with lap and shoulder belts, they offer the most effective safety protection available today for a car's occupants. Air bags are supplemental protection and are not designed to deploy in all crashes.

Sitting too close to an air bag can be dangerous. Drivers should be seated at least 10 inches away from the steering wheel. Children under the age of 12 should not sit in the front seat of a vehicle equipped with passenger side air bags. Also, passengers should never rest their feet on the dashboards of vehicles having passenger side air bags. Should the air bag deploy, the passenger's feet and legs would be blown upward into the windshield, causing serious injuries. ■

I Learned the Hard Way!...continued from page 29

never be the same person in my squadron that I was before. Before my DUI, I had a good driving record. After I was arrested, my insurance went up to \$455.00 a month. I live paycheck to paycheck. I watch my friends go out, knowing that I can't afford to go with them. It was more than three months before I could drive off base, and my on-base driving privileges have been suspended for a year. I will have to make special arrangements to get to work during this winter because the temperatures can drop to minus 50.

What I want people to know is that it's not worth it to take a chance. If you're going to drink, don't drive. Have a designated driver, call someone to give you a ride or, if you have to, take a cab. It's cheaper than being arrested for a DWI. Just ask me — I learned the hard way. ■



Have A Happy and Safe Holiday Season!

Merry Christmas, Happy Holidays and a safe New Year! The weeks between Thanksgiving and New Year's are full of celebration, reflection, joy and hazard. In the spirit of the season we tend to be more distracted and less attentive to the risks around us. Then there is all of the extra travel and the busy schedules we have to meet. And, oh yeah, let's not forget New Year's Eve.

In all this flurry of activity, don't forget that when the new year dawns, we want to see your smiling faces back in your squadrons and duty sections. Your opportunities for the application of personal risk management are rife. Whether it's driving cross-country to grandma's or going to a New Year's Eve party, use risk management to arrive back home safely. Mitigating the risks can range from something as simple as identifying a designated driver and giving that person your keys, to getting a complete tune-up on the van before you take that 1,000-mile trip. Also, instead of driving straight through in one day, relax and don't drive beyond your endurance.

This holiday season, play hard, relax and enjoy yourself. Drive safe, play safe and take the time to mitigate the risks before you act. We want to see your smiling faces in 2003.

MARK K. ROLAND
Editor-in-Chief
Road and Rec

