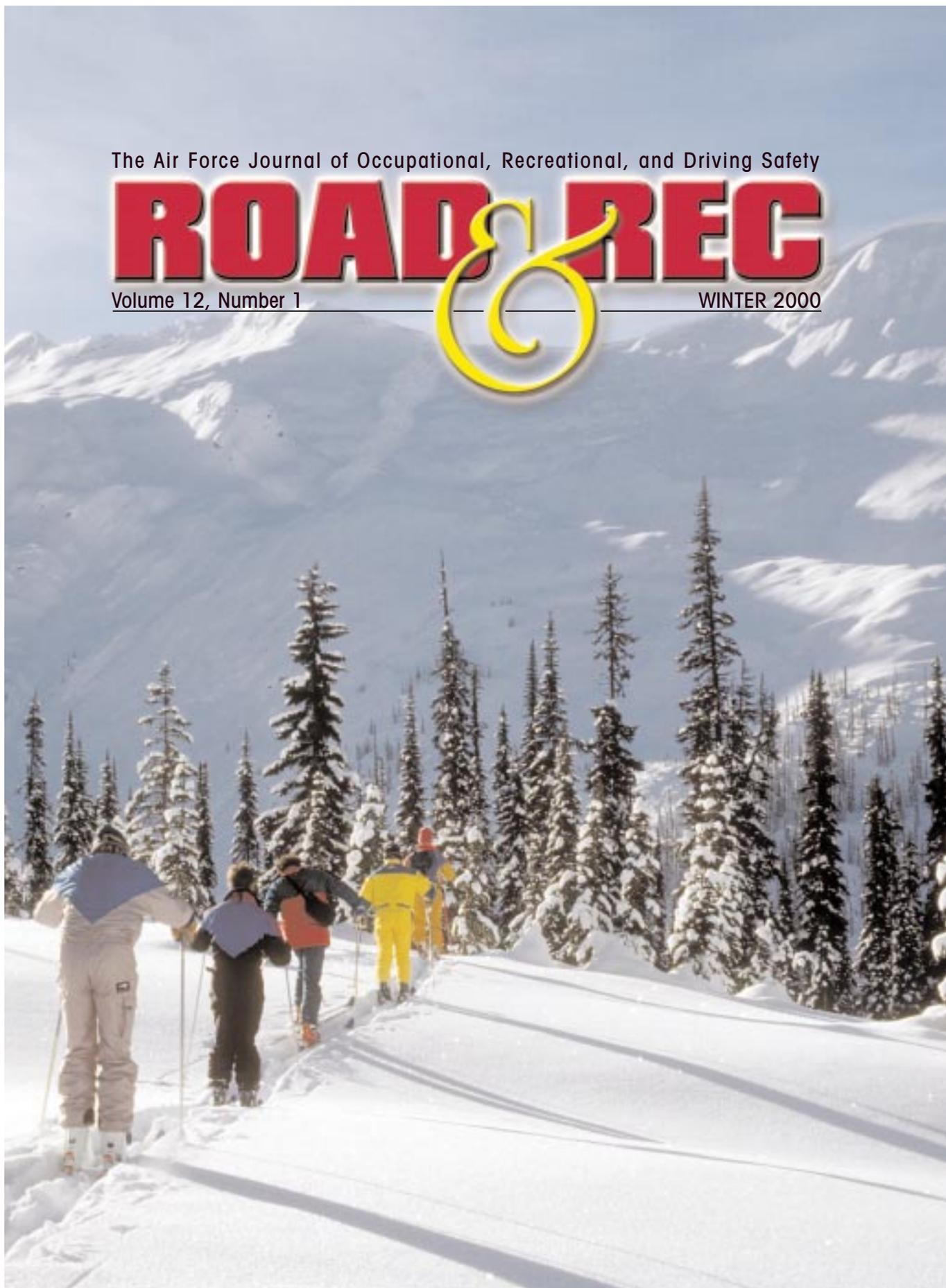


The Air Force Journal of Occupational, Recreational, and Driving Safety

ROAD & REC

Volume 12, Number 1

WINTER 2000



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Back cover photo provided by the Ohio State Highway Patrol

HOW TO DRIVE When You're Drunk



Courtesy *Mothers Against Drunk Driving*

In today's society we seem to have created a myth that says you have to drink alcohol to have a good time. Unfortunately, we've also created myths that tell us how we can drink to excess and drive. How many of these myths have you heard yourself say?

"Two cups of black coffee sobers me up."

Wrong. Coffee – be it black, strong or straight out of the can – can't rid your system of alcohol. It just makes you a very nervous drunk.

"Once I roll down the window, I'm OK."

More myth. No amount of fresh, chilly air can keep a drunk from being drunk. You gain nothing by rolling down a window, turning on the air conditioner, driving a convertible, or living in Alaska.

"I'm bigger. I can handle my liquor better."

Big people don't necessarily make better lovers, better backgammon players, or better drinkers. The fact is, after three-to-five drinks, most everyone under eight feet tall is legally drunk.

"I stay away from the hard stuff."

Alcohol is alcohol. Behind the

wheel, beer can be just as deadly as straight scotch. The same holds true for all of those slushy, sweet concoctions that look like tulips.

"All I have to do is splash myself with cold water."

Splash all you like. You can even take a few cold showers. It won't sober you up, but it may make you cleaner – and keep you off the road.

"I'll just drive slower."

Many people do, believing they can actually compensate for their drunkenness by creeping along at 22 mph. Other drivers creep along at 80 mph. The truth is, drunk drivers are unsafe at any speed.

The Bottom Line

Coffee, fresh air and cold showers – no matter how invigorating – can't sober you up. Nothing except time can rid your system of alcohol. And that takes about an hour for every drink you've had.

This includes everyone, even the champion chuggers. No matter who you are, a few beers, a couple of glasses of wine, or a half shaker of weak martinis is all it takes to dim your vision, slow your reflexes, warp your judgement, and turn your car into a deadly weapon.

So, if you really want to know how to drive when you're drunk, the answer is obvious – you *don't*. ■

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SUICIDE AIN'T PAINLESS

MAJOR RAY KING
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377th Medical Group

Editor's Note: Three years ago we ran an article on the problem of suicide in the Air Force. Since that time, the Air Force has aggressively addressed this problem. The following update shows how far we have come during the past three years.

The song "Suicide is Painless," that opened the movie and later the television show "MASH," may have been lyrical, but it was a long way from the truth. Air Force members who took their lives left a lot of pain behind – pain felt by families, friends and coworkers. The good news is that Air Force suicides have dropped from more than one per week in 1996 to less than one per month in 1999. How we learned to overcome our problems rather than die from them is perhaps our greatest recent success story.

Looking Back At The Problem

Suicide became a growing problem back in the 1980s. During the first half of that decade, an average of 60 to 80 airmen took their lives each year. That number peaked dramatically in 1988 with nearly 100 suicides – a rate of about 17 airmen per 100,000. Mercifully, that rate dipped significantly the following year, however it began rising again as the 1980s gave way to the 1990s. By the mid-1990s, the suicide rate had climbed almost back to the 1988 level. This disturbing increase prompted then Air Force Deputy Chief of Staff General Thomas S. Moorman Jr. to commission a Suicide Integrated Product Team in 1996 to look into the causes for the rise. Adding their work to a 10-year suicide study completed by the Air Force Office of Special Investigations in 1993, they found the following trends: (1) between 1990 and 1995, almost one-fourth of all Air Force deaths were suicides, and (2) the group most at-risk was young white senior

airmen and staff sergeants who were in their second enlistment and having marital problems.

Turning The Tide

The story of how we began to turn around this tragic trend dates back to the spring of 1997 when the Secretary of the Air Force and the Air Force surgeon general began the Suicide Prevention, Education and Community Training Initiative, described in AFI 44-154. Its goal was to help us recognize fellow Air Force members who might be at-risk and encourage them to get help, emphasizing they could do so without the fear or embarrassment often felt in the past. Termed the "LINK" program, the acronym stood for:

- "L" – Look for possible concerns
- "I" – Inquire about those concerns
- "N" – Note the risk
- "K" – Know your referral sources and strategies

Here's how the LINK program might work in practice:

Airman 1st Class Smith notices Airman Rogers has been showing up late to work during the past several weeks. When Airman Smith asks Airman Rogers if anything is wrong, he replies that his wife is leaving him and taking custody of his two children. He adds that he has had problems sleeping and concentrating and feels hopeless and trapped in his situation. He mentions that he has contemplated "ending it all" to stop the pain.

Airman Smith finds out Airman Rogers owns a handgun and, in fact, has thought of using it to end his life. Because of the situation, Airman Smith alerts his first sergeant and they, together with Airman Rogers, decide to call to the chaplain and the local mental health office for advice and support.

While the situation described above is fictional, Air Force members using the LINK program have helped reduce Air Force suicides significantly since 1997. For example, while 45 active-duty members took their lives during 1997, the following year that number dropped to 34. During the first seven months of 1999 – the most recent statistics available at the time of this writing – there were only six suicides, 15 fewer than during the same period last year.

The Telltale Signs

Although the numbers are dropping, even one suicide in the Air Force is a tragedy that needs to be avoided. You can help at-risk friends or family members by watching out for the following signs of trouble:

- Are they depressed? Depressed people are at a higher risk for suicide.
- Have they attempted suicide on a previous occasion? A previous attempt is one of the most significant indicators of risk.
- Do they abuse alcohol?
- Are their thought processes impaired or are they emotionally unstable?
- Do they lack social supports – the kind of friendships

- that could help them overcome hard times?
- Are they separated, divorced, widowed or single?
 - Are they suffering a chronic debilitating illness or other health problem?
 - Do they have a suicide plan? If they do, get help for them immediately!

While non-suicidal people can have some of these traits in their lives, the more of these a person has, the more at-risk they are for suicide. Also, a person doesn't have to fit the suicide profile to a "T" to be at-risk. In addition to the items listed above, there are several other factors to watch out for. Those include serious problems with a significant relationship, increased stress – especially job-related, financial problems, and legal difficulties.

What You Can Do

If you are a supervisor, *know* your people and be alert for any telltale signs that they may be at-risk. Listen to them and be supportive. Instill in them the belief that it is more courageous to face a personal challenge head-on than to ignore it or refuse to get help. Guide those you recognize as being at-risk toward getting help through the various agencies on base. These include mental health offices, chaplain's offices, employee assistance programs, Family Support Centers, and family advocacy programs.

The Bottom Line

Why is suicide awareness so important? The first reason is obvious – identifying a person who is at-risk and helping them get help can spell the difference between life and death. You'll also be sparing their families a tremendous amount of grief. In addition, when a person takes their life it can spur others who are at-risk to make the

same tragic decision. You may never know it, but by helping save one life, you may have helped save the lives of others. By choosing to get involved, you can help the Air Force preserve its most precious resource – its people. ■





What Do You Know About Alcohol?

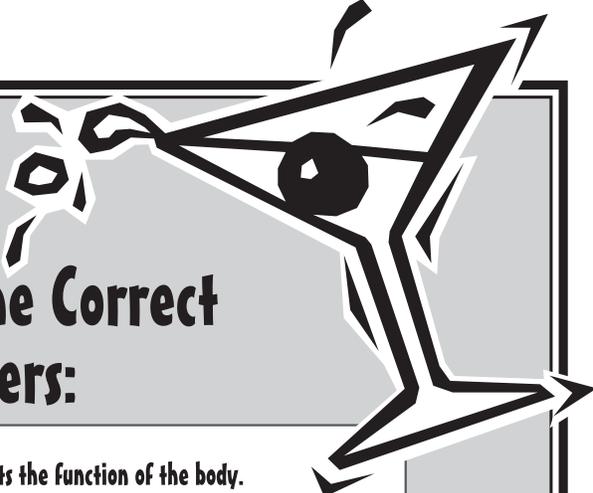
We all hear about alcohol. Some of this information is true, and some of it isn't. To test your own knowledge of the topic, respond to the following questions.

TRUE

FALSE

1. Alcohol is a drug.
2. A hangover is the awful feeling some people have the day after they have drunk too much.
3. A good way to get rid of a hangover is to have a big breakfast.
4. A cold shower is also a good way to sober up.
5. Alcohol slows you down and acts as a depressant.
6. Alcohol is not digested like other foods.
7. Antifreeze and rubbing alcohol have methyl alcohol in them that can blind you.
8. If two people drink the same number of drinks, they both will feel the same effects.
9. Whiskey is 100 percent alcohol.
10. You'll get drunker on vodka, whiskey or gin than you will on beer or wine.
11. You can sober up quickly by drinking black coffee.





Here Are the Correct Answers:

1. True. A drug is any substance that effects the function of the body.
2. True. One explanation for hangovers is that they are caused by the congeners (substances in alcoholic beverages) that remain in the body after the alcohol has been absorbed.
3. False.
4. False.
5. True. Alcohol often accentuates a person's mood. For example, a depressed person may feel more unhappy after drinking.
6. True. Alcohol enters the bloodstream almost immediately and is considered a food only because it contains calories. It is of no nutritional value to the body.
7. True. Methyl alcohol is a violent poison. Many cases of blindness or death have been caused by drinking mixtures containing it.
8. False. Larger people can almost always drink more than smaller people before alcohol begins to affect them. A 180 pound person has more blood and water in his body than does a 120 pound person. For that reason, the same amount of alcohol will be diluted more in the heavier person's blood stream.
9. False. Distilled spirits, such as whiskey, gin, vodka and brandy typically have an alcohol content of 40 to 50 percent.
10. False. Despite the fact that distilled spirits normally contain a higher percentage of alcohol by volume, people can get as drunk on beer and wine — beverages often drunk in greater quantities.
11. False. Time is the only remedy for reducing the alcohol content in your bloodstream. Drinking black coffee just keeps a drunk awake.





I Was a Ski Slope "Yard Sale"!

LT COL MICHAEL McKENNA
35 FW/SE

Skiing is one of the few things in life I can do really well.

It was one of the best days I'd seen at APPI, a major Japanese ski resort about two hours southwest of Misawa. There was no wind, no crowds and good snow. My wife, Amy, myself, and some other ski friends had just finished a great bump run. We'd skied along the right side of a main trail, enjoying ourselves in the perfect conditions. I was about 10 yards behind Amy and Lloyd, all of us making quick short-radius turns, crossing each other's tracks to make perfect eights down the trail.

Totally concentrating on my skiing, my peripheral vision picked up a blur at the 3 o'clock position. It was a big, blue mass heading right at me, and I realized I was about to become a passenger on an unwelcome ride. The collision occurred almost instantly.

I saw the whole thing take place in slow motion. First I saw Amy and Lloyd, who were a few feet ahead of me on the slope, just before I got hit. The next instant I saw the limp, blue mass of the skier who had slammed into me—now lying motionless, face down in the snow. I continued to spin and tumble for another 10 yards or so, seeing sky, snow, leg, ski, sky, snow, until I finally came to rest on my right side. Skis and poles were strewn across the slope in a line between us. I heard moans and eventually figured out they were coming from me.

I heard my wife and friend screaming my name, but I couldn't talk. The wind had been knocked out of me, and I gasped for air. After a mental inventory of body parts, with great effort I was able to raise my left arm to signal I was OK.

I finally caught my breath as Amy and Lloyd climbed back up to my side. I could see lots of people surrounding the blue blur, still lying motionless in the snow way above me. After about 5 minutes I was able to sit up, then eventually stand up and climb up to see how the blue bomber was doing. My right arm hung limply at my side. Miraculously, I had no broken bones, or dislocations—only severely traumatized arm, shoulder, and back muscles on my right side.

I spent the rest of this perfect day in the first aid station and ski lodge, trying to figure out what had happened and how I could have prevented it. I remembered the Skier's Responsibility Code and thought, "If only the blue bomber had known the code and adhered to its principles, this mishap would never have occurred." Everyone who rides snow (skiers and boarders) needs to know the code and abide by its principles.

Two of the rules clearly stand out in this mishap:

1. Always ski/board in control, and be able to stop or avoid other people or objects.
2. Whenever starting downhill or MERGING into a trail, look uphill and yield to other skiers or boarders.

Had the blue bomber been skiing in control and at a speed commensurate with his abilities, he would have been able to avoid blindsiding me at the trail junction. Had he checked uphill as he merged into the main trail we were skiing down, this collision wouldn't have happened.

The second principle above is often confused with another principle—the downhill skier/boarder always has the right of way. Actually, re-

stated, people ahead of you on the same trail you're on have the right of way. It's your responsibility to avoid them. This principle applies when you, as the uphill skier/boarder, are overtaking the downhill snowboarder or skier. In this case, the uphill (overtaking) person must pass well clear of any expected or unexpected sudden movements or turns made by the downhill (overtaken) person. The downhill person (the person ahead) has the right of way.

I learned two things from this mishap. First, not everyone knows the code or skis in accordance with its rules. Second, a collision on the slopes is no fun.

Pain doesn't care whether you're in the right, abiding by the code, or guilty as charged and jeopardizing the safety of yourself and everyone else on the slopes. Pain hurts everyone equally—not to mention ruining a perfectly

good day on the slopes. I'll be "checking six" more often when I ski in the weeks to come (once I get mobility back in my arm again, that is). I'll be more aware of trail intersections and catwalks merging from the sides. You never know when someone might slam into you.

It's every skier's responsibility to know the code; to follow the code; and, even better, to teach the code to the people they ski with.

Also, watch out for the next "blue bomber" at your local ski area! ■



The Skier/Boarder Responsibility Code

1. Always stay in control and be able to stop or avoid other people or objects.
2. People ahead of you have the right of way. It is your responsibility to avoid them.
3. You must not stop where you obstruct a trail or are not visible from above.
4. Whenever starting downhill or merging into a trail, look uphill and yield to others.
5. Always use devices that help prevent runaway equipment.
6. Observe posted signs and warnings. Keep off closed trails and out of closed areas.
7. Before using any lift, have the knowledge and ability to load, ride, and unload safely.

THE HIDDEN COST OF A DUI



SR CHIEF PETTY OFFICER RUSSELL WADE
Safety/NATOPS Leading Chief
FAIRECONRON Four
Tinker AFB, Oklahoma

Photos by MSgt Perry J. Heimer

Everyone knows the financial expenses following a drunk driving arrest are tremendous. In Oklahoma, a person arrested for a DUI charge can expect to pay more than \$1,200 in fines. What many don't think about until it is too late are the hidden costs of a DUI arrest. Auto insurance rates may increase \$1,400 or more (annually) – provided the company is willing to insure a person with a DUI conviction. In most

cases, the financial costs (the fines) pale when compared to the hidden costs.

First and foremost, if you drink and drive and kill someone in a crash, it could cost you a lifetime of guilt. Every day you'll live with the memory of killing someone's father, mother, son or daughter because you drank, got behind the wheel, then drove down the road. In reality, it is no different than taking a loaded gun and aiming it at someone and fir-

ing. How quickly a moment of self-indulgence and pleasure can turn into a lifetime of pain.

Killing someone while driving intoxicated doesn't just cost you, it costs others also. Your victim's family will have to live the rest of their lives with a large emotional void, enduring holidays, anniversaries, graduations and other special days without the loved one you killed. Their lives have been changed forever by your irresponsibility and you can never repay them for their loss.

Regardless of whether or not you kill someone else, how will your parents take your arrest? Your parents, who are so proud of you and your decision to join the military and serve your country. Proud parents who take every opportunity to remind their friends that you are in the service and doing so well. Parents who love telling people about your exciting job, the exotic places you have visited, and your most recent promotion. Will they be so quick to brag about your DUI arrest and the resulting demotion and lost pay?

If you are married and have children, how will you explain to your family why you didn't come home after your arrest or why you had to spend a night or two in jail? Think how embarrassed you spouse will feel when friends find out you have been convicted of a crime? And what about your kids? Will they understand that the vacation you planned had to be cancelled to pay your legal bills and other related costs? Or, how will you explain to your kids why Santa left fewer presents under the tree this Christmas?

How will your friends at work deal with your arrest? Will they avoid you for fear others in the command will assume they are just like you? Perception is not always reality, but why take the chance of being labeled a problem drinker, or as the next person most likely to get a DUI? And if you are a supervisor, some of your people may not trust your advice or guidance anymore. How would you feel about being supervised by someone who used to work for you?

Think of the burden you have placed on a friend who now has to remind himself or herself each day not to forget to pick you up on their way to work, now that you can't drive on base. Sure, you can pay them a few bucks for gas, but now they are responsible for getting you to work on time. Their plans now have to include you – someone who can't take care of himself.

Being arrested for DUI can cost you much more than money. It can cost you your dignity, self-esteem, and change the way you live. It can bring shame and embarrassment to your family, harm your marriage, and hurt your relationships with friends and coworkers. Why put yourself in this situation? Instead, why not use a designated driver or call a cab? A \$50 cab ride might sound expensive now, but compared to the costs of a DUI, it's money well-spent. ■



FROM THE EDITOR'S DESK...



Photos by MSgt Perry J. Heimer

SOME 'DRIVING' CONCERNS

BOB VAN ELSBERG
Managing Editor

Three's A Crowd

Every so often you see something unsafe that is done so frequently that no one apparently notices.

Take, for instance, having three people riding in the front seat of a pickup. Now, you say, that shouldn't be a problem. After all, don't most new pickups have a lap belt in the middle for a third passenger? Well, that's true, but take a moment to think about what that middle passenger *doesn't* have.

For instance, does that middle pas-



senger have a shoulder belt? You know, that thing that keeps you from eating the dashboard if you hit something in front of you. Imagine, for a moment, sitting in the front seat of a pickup that is suddenly brought to a halt by a tree, stopped vehicle or - heaven forbid - another vehicle com-

ing head-on. Faster than you can blink your eye, you're going to be bent over at the waist getting a very close and possibly very painful view of the radio console. Imagine changing the channels with your teeth? It could happen.

Now, just to make things a bit more interesting, suppose that truck has a manual transmission. You know, the kind that has a long shifter with a ball on top sticking out of a hump in the middle of the floor. Where do you suppose that ball might wind up while you're being bent over forward? If you're short, imagine getting a "closed-chest heart massage" by that ball. Or, if you're really tall, how about an opportunity to review the contents of your last meal.

Ah, you say, "I'll just be careful not to hit anything while someone is in the middle seat" (as if we could

really predict whether or not someone else might cause us to have an accident). Well, what about the person who desperately wants to "get together" with you on the highway - specifically, their front bumper and your rear bumper? Ever drive behind a new pickup and notice those nice head restraints (no, they're not "head rests" - that's what your pillow is for at home) that are provided for the driver and passenger? Who *doesn't* get one of those nice head restraints? If you guessed the middle passenger, you guessed right. Suppose it's a standard cab pickup and it gets rear-ended. That middle passenger's "head restraint" is going to be a hard, flat piece of glass otherwise referred to as the rear window. Not only would that likely leave a "dull impression on their mind", it might also lead to a concussion - or worse. Or, suppose it's a king cab-type pickup. Not having a head restraint means the middle seat passenger is almost sure to suffer a nasty case of whiplash.

So, when you think about it, is the front seat of a pickup really a safe place for three people?

- either as a sort of "dashboard surfing" or as an opportunity for people to show off their painted toenails. Of late, this craze has moved east and I've even seen feet sticking out of windows - including the driver's side - as cars were tooling down the road.

Imagine, if you will, a passenger cruising down the road in one of these unnatural positions when something unpleasant happens and the air bags deploy. Air bag deployments, according to those who have experienced them, aren't much fun even when you're sitting up properly. Therefore, imagine the shock one sailor got when he was snoozing with his feet on the dash and the driver hit a truck. The somnambulant sailor got a 200-mph kick in the backside and both legs blown upward through the windshield. Now, that's gotta hurt! When it comes to riding in a vehicle, there are just some places your feet shouldn't go.

A Reader Writes

Dave Davenport of the Office of Safety, Health and Environmental

Management, U.S. State Department, wrote concerning an article we ran in our spring issue:

"Here is one suggestion as a follow-up to the article titled, "Reducing Air Bag Risks" you ran in your Short Circuits section. In addition to the very good advice in the article, I strongly suggest that those who wear glasses (while driving) consider polycarbonate lenses. Other plastic and glass lenses can shatter when struck by an air bag. By contrast, polycarbonate lenses almost never shatter and, as a result, are much less likely to cause an eye injury. In some areas of the country, optometrists routinely provide polycarbonate lenses to anyone under 18 years of age."

Editor: I have never heard this suggested, but it makes a good deal of sense. As we reported in an article some time ago, it is possible to have polycarbonate lenses prescription ground for sports eyewear. If that can be done, then why not also for eyeglasses used when driving? Certainly, the last thing a motorist needs after an accident is to be blinded by an eye injury or denied proper vision because of broken spectacles. ■



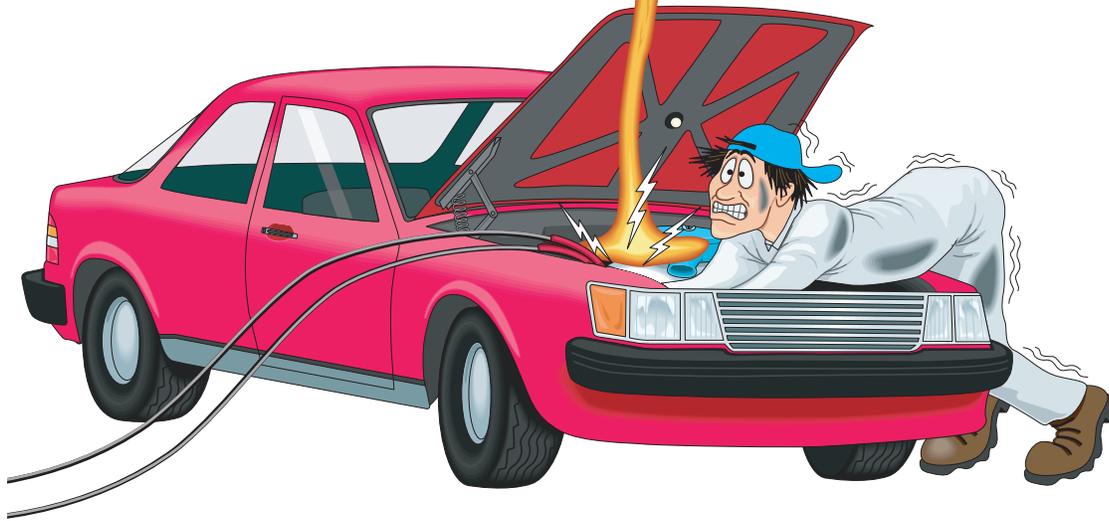
Be Careful Little Feet...

I recently read an interesting Navy POV mishap report I think is worthwhile passing along.

Ever notice how some front seat passengers just can't get comfortable until they assume the fetal position with their feet on the dash? I think this originated in California



From Battery to Bomb in One Easy Blast!



BOB VAN ELSBERG
Managing Editor

I imagine our intrepid hero heading out, battery cables in hand and humming a familiar children's tune, as he attempts to jump-start his car on a cold wintry day.

"Lemme see here...I know how to do this..."

"You hook a red clamp here

"You hook a red clamp there

"You hook a black clamp here

"Then you hook to battery ground

"You give the clamp a wiggle 'till you get yourself a spark

"Uh oh, it just went – KA-POW!"

If our humorous "Hokey-Pokey" lead-in gave you a chuckle, the real event is much less funny. Every year nearly 6,000 American motorists suffer eye injuries when they try to improperly jump-start a car battery.

What many drivers apparently don't realize is that a battery gives off both oxygen and hydrogen. If that hydrogen comes into contact with a spark – such as when you're hooking up the jump-starter cables to the battery clamps – the battery can explode, showering you with battery fragments and sulfuric acid. However, that doesn't have to happen. To avoid accidentally turning your battery into a bomb when jump-starting your car,

try the following tips.

- Wear eye protection, preferably shatterproof and splash-proof safety goggles.
- Be sure the battery vent caps are tight and level and cover them with a damp cloth. If the weather is very cold, try to remove one of the vent caps and check and see if the battery fluid is frozen. Never attempt to jump-start a car with a frozen battery.
- Keep sparks, flames and cigarettes away from the battery at all times.
- Check your jumper cables to make sure they are in good condition. Damaged cables may produce sparks, which can lead to a battery explosion.
- Check the location of the batteries in both the "good" and "bad" cars. Have the good car pull up close enough for the jumper cables to reach, but do not allow the cars to touch.
- Make sure both cars have 12-volt negative ground systems. If in doubt, check the owner's manual. Also it's best if the good car has a larger engine (which usually provides more electrical power) than the engine in the bad car.
- Clamp the red (or positive) jumper cable to the positive terminal of the dead battery. Normally the positive terminal will be marked with a "+" on or near the terminal. At NO time during the jump-starting process should you lean over either battery.



Hook the negative (black) jumper cable clamp to a metal part on the engine or vehicle frame **AWAY** from the battery when jump-starting your car.

- Clamp the other end of the red jumper cable to the positive terminal of the good car's battery. Be careful not to allow the positive jumper cable clamps to touch a metal part on either car during the process.
- Clamp the black (or negative) jumper cable to the negative terminal of the good battery. Normally the negative terminal will be marked with a "-" on or near the terminal.
- Carefully clamp the other end of the negative jumper cable to a metal part on the bad car's engine,



The first step is to hook the positive (red) jumper cable clamp to the positive battery post in the good vehicle.

avoiding the battery, fuel line, and any tubing or moving parts. Often this will result in quite a bit of sparking, so it is especially important to keep well clear of the battery.

- Stand back from both vehicles and have the other driver start the engine of the good vehicle. Once it is running at a fast idle, attempt to start the engine of the vehicle with the dead battery. If the engine doesn't start after a few tries, call a tow truck. Tow truck operators can often fix the problem or recommend a good repair facility.
- Once the engine has started, remove the jumper cables in the reverse order to which they were attached. Be sure to start by removing the negative cable from the engine block.

Are there some times when you shouldn't try to jump-start a dead battery? According to Jerry Haag, general manager of RayMar Automotive in Albuquerque, there are. He explained that if the battery is bulging around the sides or if there is fluid on top, attempting to hook it up and jump-start a car could be very dangerous. He has seen first-hand what happens when a battery explodes. "Normally all that is left is the bottom of the battery case and some of the metal from inside," he said. "The rest of the case – including the metal battery terminals – goes flying in all directions like a bomb going off. It'll definitely hurt somebody." ■

Are You Win for Safety

BOB VAN ELSBERG
Managing Editor

What a master of electrical engineering I am!" I thought as I knelt back and surveyed my handiwork. I had managed to plug in the Christmas tree lights – including the angel at the top of the tree, three miniature electric snowmen, a musical Santa Claus, a Crock Pot™ full of cider, an electrically-heated potpourri pot, AND our microwave oven all on two extension cords with multiple outlets. And miracle of miracles, I'd been able to hide all of the electrical cords by curling them up behind the tree and stuffing them beneath the white "snow" blanket. All of this "Christmas cheer" to dazzle visitors without the distraction of a messy pile of electric cords. What a genius indeed!

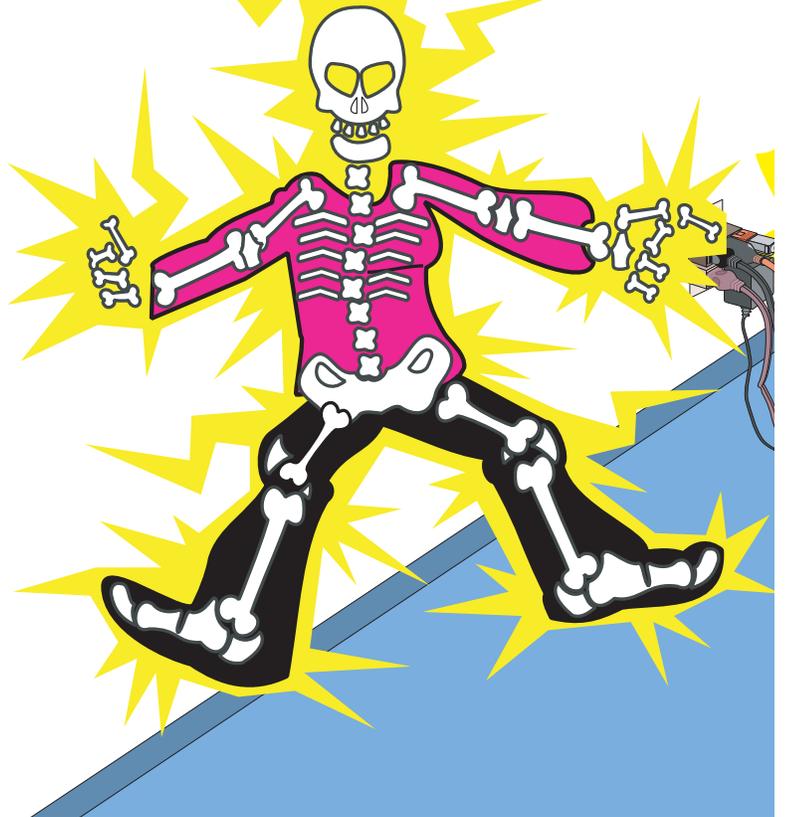
Well, maybe not. The truth is, I was probably uncomfortably close to building a bigger fire in my front room than I could in my fireplace. Every year, families "lighting" their homes up to celebrate a cheerful Christmas wind up lighting their neighborhood as the fire trucks respond. To keep your Christmas cheerful try following these tips.

Plugs And Extension Cords

- New "polarized" plugs have one blade wider than the other. The plug can only be inserted safely into an outlet one way. If it doesn't fit, use an adapter. Don't try to force it.
- Use "safety caps" on all unused wall and exten-

sion cord outlets, particularly when small children are around.

- When you are finished using a small electrical appliance or power tool, unplug it.
- Unplug extension cords which are not in use. The unplugged end in a child's mouth can lead to death or serious injury.



Vired tv?



- Pull a plug from a wall socket by gripping the plug itself, not by yanking the cord.
- Untangle any twisted cords.
- Keep cords off steam pipes, furnaces, heaters or other hot surfaces.
- Replace cords that are cracked or frayed.
- Don't run cords where people walk, or under rugs

or furniture.

- Insert plugs fully. The prongs should not be exposed when the extension cord is in use.
- Never use a cord that is hot or very warm to the touch when in use.
- Only use cords outdoors marked for outdoor use. Use three-pronged, grounded, heavy-duty extension cords.
- Do not overload a circuit. As a general rule, do not plug appliances into the same circuit if the combined wattage exceeds 1500 watts. If the wattage rating is not on the product, multiply the amps by 125.
- To avoid extension cord overload, add up the wattage ratings of all the products plugged into the cord, and compare it to the wattage rating of the cord.

Other Expert Advice

Signs of problems in your electrical system include: blown fuses; tripped circuit breakers; dim or flickering lights; buzzing sounds; odors; hot switch plates; loose plugs; and damaged insulation.

- Buy electrical products, preferably double-insulated, approved by a recognized testing lab such as Underwriters Laboratories (UL).
- Don't try to increase your circuit's capacity by replacing a blown fuse with a penny or installing a larger capacity circuit breaker. You are risking electrical shock or fire. Call in a professional.
- Know how to change fuses or reset circuit breakers.
- Turn off the switch and/or unplug decorations when replacing light bulbs. ■

Editor's Note: Information provided courtesy *Safety Times*.



A New Definition of Cold

Cold Injuries in Extreme (or Not so Extreme) Environments

Photos by author

LT COL JAY C. NEUBAUER
HQ AFSC/SEFL

The approach and landing were definitely different from my usual experience. No concrete, no centerline stripe, no grass, and no trees, just white. The “runway” was marked with orange and black flags that were barely visible in the blowing snow. The landing was literally a slide to a stop with the uneasy feeling that at any moment the LC-130 might break right or left for an unplanned 360. Of course, this is just another day in paradise at 90 degrees south latitude. Welcome to the SOUTH POLE!

As we taxied into the off-load area, local weather reported clear skies with an ambient temperature of -39°C with 20 knots of wind making it an incredible -95°F. I rushed

to get my big-boy pants, parka, ski mask, ski goggles, bunny boots, gloves, and hat on before the crew door and cargo ramp opened. I looked and felt like the proverbial Charlie Brown—but I was warm. Once outside, I remained quite comfortable until I slipped my over-mitten off (you know, the big, lined leather mitten with the fake fur on the back for wiping your nose). My fleece glove did not do much to cut the chill, and within 15 seconds, my hand was starting to go numb. Being a smart guy, I put my mitten on quickly, but couldn’t generate enough heat to warm my hand until I got back on the aircraft. I was fortunate that I had a place to go warm up. Otherwise, this simple act could have been life threatening.

Cold injuries are not usually this sudden in onset, but they can certainly be much more devastating and typically occur in much warmer temperatures because people just aren’t prepared. People usually don’t think about cold injury much because it’s

rarely an issue until they find themselves in a survival situation. So let's review the types of cold injuries and, more importantly, what to do to prevent them.

Most of the cold injuries can be divided into two neat categories—freezing and non-freezing. The freezing injury is frostbite in its various degrees of severity. Nonfreezing injuries include chilblains and trench foot and hypothermia.

Chilblains and trench foot are a result of exposure to temperatures above freezing but, usually, less than about 50°F. Injury results from constriction of blood flow due to exposure to both cold and wet (i.e., turns white, numb, and wrinkly followed by redness, swelling, and PAIN when rewarmed). Prolonged loss of blood flow is a bad thing and can result in nerve and muscle damage with potentially nasty complications (local infection leading to amputation or generalized infection leading to death).

Frostbite, as its name implies, requires freezing temperature and represents the freezing of water in the skin and tissue below. The colder the temperature, the faster it can happen. Fingers, toes, ears, and noses are the most susceptible to freezing because they have less blood flow for surface area. Blood flow is further reduced when exposed

to cold, and these appendages are hard to protect without limiting or compromising function. The depth of skin frozen determines severity. Like burns, frostbite is classified into first, second, and third degree injury. (See the table.)

Hypothermia is the lowering of the body's core temperature. We all walk around with a normal temperature of about 98.6 degrees Fahrenheit. If, for some reason (Help! I've fallen into this snow bank and I can't get out...), the body can't generate the heat needed, the body temperature starts to drop. The response is to start shivering to generate heat. At about 95°F, shivering stops and, as the body temperature continues to drop, loss of coordination, loss of memory, loss of consciousness ensue, followed by other bad things below 86°F.

Now that we have covered the gory details, let's look at what predisposes people to cold injury. In general, anything that promotes heat loss increases the risk of injury. In the survival situation, the big hazard is getting wet (landing in the water or sweating on land). Water increases heat loss 25 times over air at the same temperature. Anything that disturbs circulation also increases the risk. The more common examples are cigarette smoking (yet another reason to

continued on next page

COOLING POWER OF WIND EXPRESSED AS "EQUIVALENT CHILL TEMPERATURE"																								
WIND SPEED		TEMPERATURE (F)																						
CALM	CALM	40	35	30	25	20	15	10	5	0	-5	-10	-15	-20	-25	-30	-35	-40	-45	-50	-55	-60		
KNOTS MPH		EQUIVALENT CHILL TEMPERATURE																						
3 - 6	5	35	30	25	20	15	10	5	0	-5	-10	-15	-20	-25	-30	-35	-40	-45	-50	-55	-65	-70		
7 - 10	10	30	20	15	10	5	0	-10	-15	-20	-25	-35	-40	-45	-50	-60	-65	-70	-75	-80	-90	-95		
11 - 15	15	25	15	10	0	5	-10	-20	-25	-30	-40	-45	-50	-60	-65	-70	-80	-85	-90	-100	-105	-110		
16 - 19	20	20	10	5	0	-10	-15	-25	-30	-35	-45	-50	-60	-65	-75	-80	-85	-95	-100	-110	-115	-120		
20 - 23	25	15	10	0	-5	-15	-20	-30	-35	-45	-50	-60	-65	-75	-80	-90	-95	-105	-110	-120	-125	-135		
24 - 28	30	10	5	0	-10	-20	-25	-30	-40	-50	-55	-65	-70	-80	-85	-95	-100	-110	-115	-125	-130	-140		
29 - 32	35	10	5	-5	-10	-20	-30	-35	-40	-50	-60	-65	-75	-80	-90	-100	-105	-115	-120	-130	-135	-145		
33 - 36	40	10	0	-5	-15	-20	-30	-35	-45	-55	-60	-70	-75	-85	-95	-100	-110	-115	-125	-130	-140	-150		
WINDS ABOVE 40 HAVE LITTLE ADDITIONAL EFFECT		LITTLE DANGER					INCREASING DANGER (Flesh may freeze within 1 minute)						GREAT DANGER (Flesh may freeze within 30 seconds)											
DANGER OF FREEZING EXPOSED FLESH																								



quit), high altitude, and blood loss from injury. Other factors include alcohol, tranquilizing medication, fatigue, immobility or immobilization. Last but not least is the ever-popular child's game of taste-testing metal objects in sub-freezing temperatures.

Motherly advice time. The best treatment for cold injuries is to prevent them in the first place. The best preventive measure is to dress appropriately

for the situation or potential situation. Thinking ahead and planning for the worst goes a long way in the cold survival situation. This means, for example, taking a heavy jacket and wearing long johns when flying or driving in areas where the temperature may fall below 40 degrees (during the flight or at night if stuck out after dark in a survival situation).

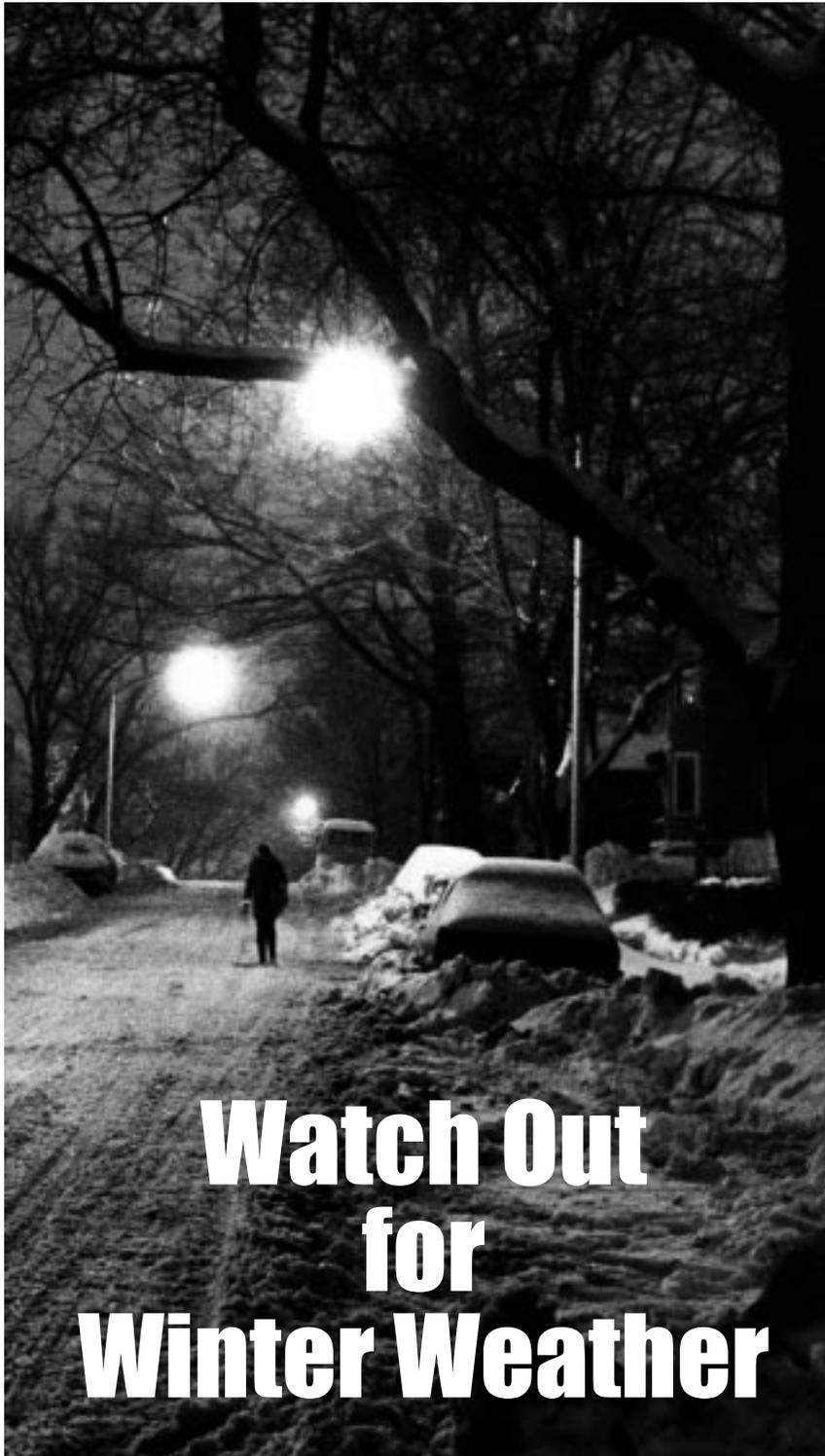
Always dress in layers. Layers allow for flexibility depending on temperature and activity. And don't forget the hat, gloves, and warm boots to prevent injury to those parts

that are most prone to problems. Any good outdoor equipment store can fill you in on the latest and greatest in high tech, lightweight cold weather gear. Off-duty, watch the alcohol and winter activities. Sure, you may feel warmer on the inside, but the risk

for problems increases. If caught in a survival situation or simply out for recreation, moderate activity to prevent sweating. Remember water increases heat loss, and that's a bad thing.

I learned two very important things after I jumped back on the LC-130. One, -95 degrees Fahrenheit is very survivable (you can be warm) if you are dressed appropriately. Two, at this incredibly low temperature, a simple mistake or miscalculation can land you in a world of hurt very fast. Bottom line: Have enough situational awareness to know your current conditions or any potential situation that may come up, and **BE PREPARED!** (Also called decreasing risk in Operational Risk Management). ■

Severity of Frostbite	Characteristics
First degree	Red, swollen
Second degree	Swollen, blisters
Third degree	Dead tissue



Watch Out for Winter Weather

Reprinted courtesy of the *Capp Report*

Photo by Harold M. Lambert

Travel in areas where winter weather includes snow, sleet, ice, and high winds demands special precautions. Travelers should

keep abreast of changing weather conditions, especially if a cold front is expected, because it could arrive hours earlier or later than forecasted.

In addition, travelers who become stranded in their cars during winter storms should stay in their vehicles. Rescue is much more likely and cars offer shelter from wind and precipitation. In addition, the car's heater can be used periodically for up to 10 minutes to help keep warm. However, operators must ensure their vehicle's exhaust is not obstructed. If carbon monoxide can't escape from beneath the vehicle, it will seep inside. In addition, operators should not run their cars out of gas.

A winter survival kit should be as much a part of a driver's standard trunk equipment as a spare tire. That kit should include, as a minimum, a small bag of sand or kitty litter, blankets, water, a flashlight, emergency triangles or flares, jumper cables, food, and a pot for melting snow.

Winter Driving Rules

Drivers should keep the following rules in mind when driving on winter roads:

- Be especially careful when steering on ice or snow. Don't make abrupt changes in direction. Anticipate lane changes and turns and make them gradually.

- Slow down before going over bridges and overpasses, which freeze before other road surfaces because air flows both over and underneath them.

- Allow plenty of following distance on ice and snow. Slow down well in advance of intersections, which may be especially slick.

- Keep your headlights clean. Dirt and grime can coat headlights, reducing nighttime visibility.

- Keep your windshield clean so that you can see ahead clearly. Keep plenty of winter-type windshield washer fluid in your vehicle to help keep the windshield clear of ice and snow.

- Keep air circulating inside of the car. Have your exhaust system checked periodically for leaks. An undetected carbon monoxide leak can be deadly.

- Allow for fewer daylight hours and adjust your trip accordingly. ■



A "Slow Roll" in a Bronco!

LT JAY MATZKO
VAQ 128
NAS Whidbey Island, Washington

"You need to downshift!" was the last thing I said just before experiencing what a martini feels like when it's being shaken—not stirred. After about 10 seconds, my slightly used red Bronco, which I had bought just 2 weeks earlier, was upside down. I stared in amazement at my high school buddy, Phil, as we hung in our seat belts, soaking in gasoline.

I had purchased the Bronco in Las Vegas, Nev., after seeing an ad on the Internet. It was a well-maintained, clean truck with some nice modifications. I visualized a perfect restoration project, minimal time and effort required. My squadron was participating in an exercise at Nellis AFB, so I looked the vehicle over carefully to ensure that everything was in order before attempting the long drive home. I liked what I saw and bought it on the spot.

I decided to wring it out a little and went with a few squadron mates into the hills of Red Rock Canyon on a very rugged four-wheel drive trail. The Bronco performed well, so I felt confident it would make the trip home without incident. After the exercise, I drove from Las Vegas to Anacortes, Wash. (about 1,000 miles) over 2 days. Although the trip was tedious, I learned all of the

idiosyncrasies and peculiarities of driving an older four-wheel-drive vehicle. In my mind, I had driven away with a steal, and I looked forward to my future as a part-time automobile restoration specialist.

A couple of weeks after my return to Whidbey Island, my high school buddy, Phil, came up from Phoenix for a visit. I'd been driving my Bronco fairly regularly and decided to take Phil for a drive through the Cascade Mountains to show him the countryside and show off my new prize. We headed toward some logging trails off of the main roads through the nearby mountains in hopes of experiencing clean mountain air and majestic vistas—and all the other outdoorsy stuff that guys with four-wheel drives do.

We spent several hours driving around and having a fantastic time. Although the roads turned out to be less demanding than I had expected, I engaged the four-wheel drive anyway. Hey, I had to complete the picture of two rugged outdoorsmen braving the logging trails of western Washington—not to mention justifying the four-wheel drive system itself.

Near the end of the day, as we started heading toward home, Phil asked, "Do you mind if I take it for a spin?" I didn't give his request a thought as I gladly stopped and we switched seats. Jokingly, he commented that he was "fully insured and possessed a valid driver's license."

We both strapped in and proceeded downhill. About 30 seconds later, as we were accelerating through 25 miles per hour, I suggested he downshift, not wanting to challenge his status as a true four-wheeler. Although the Bronco is an automatic, Phil's unfamiliarity with the interior layout of the vehicle, and his own history of driving manual compact cars (mere toys when compared to my mighty Bronco), caused him to look down for the shift lever. As he moved his eyes from the road to the nonexistent shifter, his hand followed, pulling the steer-

ing wheel to the right.

Still moving at 25 miles per hour, Phil saw that he was driving off of the road, and with cat-like reflexes, he jerked the wheel to the left. Although the road was flat, loose dirt on the surface refused the turn, causing the Bronco to slide sideways into an eagerly awaiting ditch. "No problem," I thought for a fleeting moment. After all, this was a Bronco, a true four-wheeler made for speed in environments where mortal cars and trucks fear to tread.

Sadly, even the Bronco had its limits. As the wheels left the road for the looming abyss, my prize, my steal, my future hobby flipped one and a half times before settling unceremoniously on its roof. Phil's arm was lodged between the roof and the padded roll bar, but he was fine—aside from mental trauma, of course. My fingers were pressed between the roof and the roll bar as I tried to stabilize myself against the jarring impacts of the rollover, but I, too, escaped uninjured.

I caught my breath, swallowed a few times, and wondered why my sweat had the distinct smell of gasoline. Was I still in a daze? "Wait a minute!" I screamed inside my head. "That's not sweat! It's gasoline, and it's running down the back of my neck!"

Since the vehicle was upside down, gravity was doing what it does best, causing all of my poor Bronco's pre-

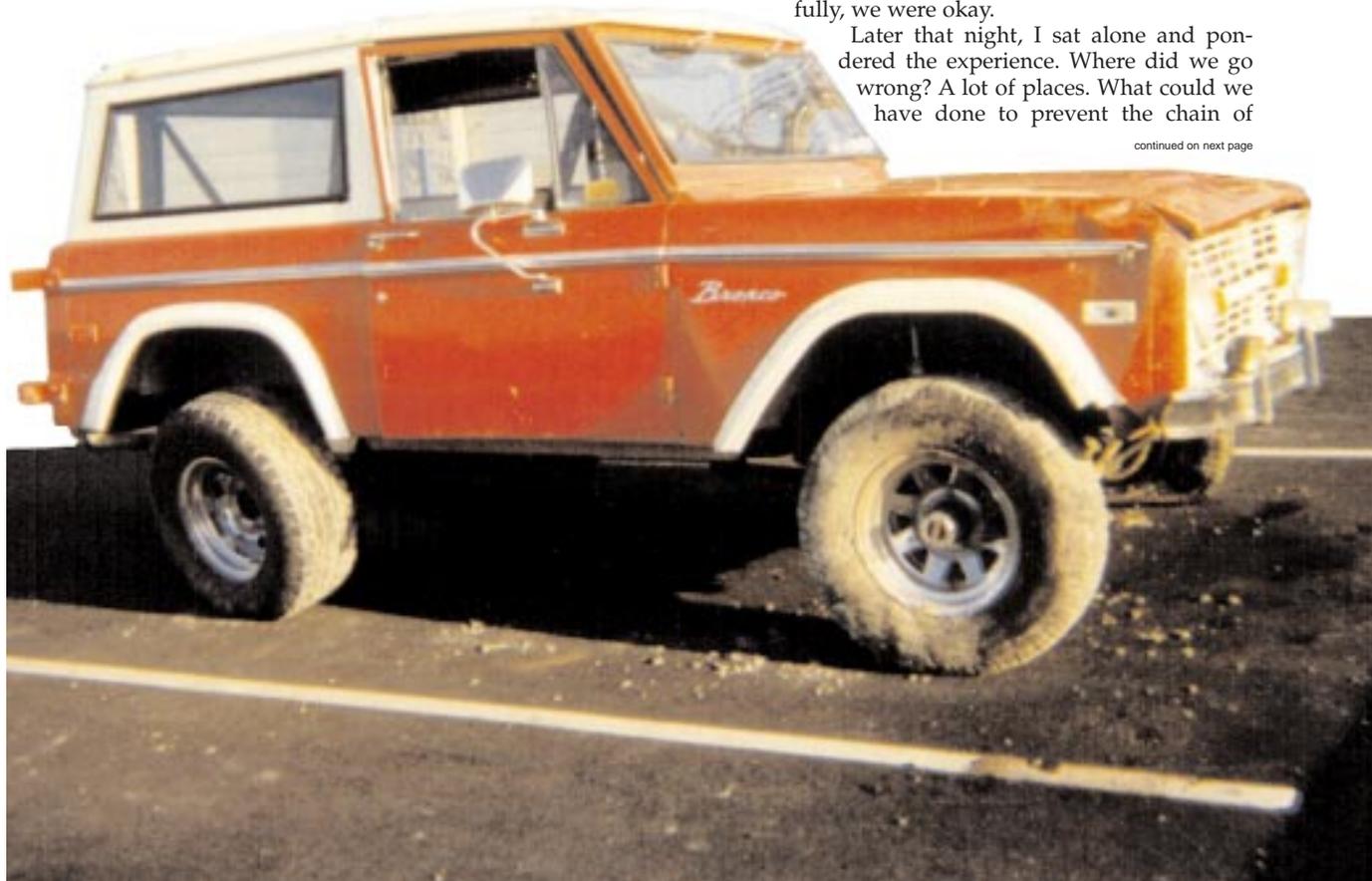
vious fluids to drain through numerous ports and vents. A quick exit seemed appropriate, so I released my seat belt and crawled out of the open passenger-side window since the doors wouldn't open. I helped Phil out of the same window, and we moved away from my wounded Bronco. We sat down and pondered the events that led to this mind-boggling situation.

Believing we could do nothing to right the inverted Bronco, we set out on foot for the main road. We had to walk for only 10 minutes before spotting a truck making its way along the same dirt road. Surely the driver would understand our plight. After all, we shared the four-wheeler bond known only to those who braved the unpaved wilderness. True to form, he drove us to a service station, saving us a 25-mile hike.

At the station, I reached into my bag and withdrew my four-wheeler handbook. Turning to page 1, I read the phone number for AAA and placed the call. This is, of course, a four-wheeler's worst nightmare. There I stood, a once-confident and proud off-road man, calling Sparky's Towing Service for assistance. I arranged for the duty truck driver to meet us for the recovery operation. Phil and I seemed to acknowledge, without speaking the words, the foolishness of the day's events. We were embarrassed and stripped of our pride, but, thankfully, we were okay.

Later that night, I sat alone and pondered the experience. Where did we go wrong? A lot of places. What could we have done to prevent the chain of

continued on next page





events leading up to the rollover? Plenty of things. Here are some of my conclusions:

- The accident occurred late in the day, after we had already been in the truck for many hours. Even though Phil and I didn't feel tired, we weren't at the top of our games.
- Phil is from Phoenix. He's a city boy with little or no experience with four-wheeling. He's used to driving mortal cars on paved streets and was, perhaps, overwhelmed by the steep road and loose terrain.
- Most people, like Phil, are used to power brakes, a standard feature on most modern cars and trucks, but absent on the Bronco.
- Finally, we switched seats and Phil started driving immediately. He neglected to familiarize himself with the layout of the truck, which is markedly different than a car.

It doesn't take a genius to realize the sum of these points equals disaster. In spite of all the mistakes, there were a few things going our way that afternoon.

- Without the roll bar, our injuries would have been serious, if not fatal.
- We were both wearing our seat belts. Incidentally, Broncos of 1974 vintage are fitted with lap belts only. The first modification I'll make to my Bronco is installation of shoulder restraints. We were lucky this time—the lap belts proved sufficient. But I won't trust my life, or the lives of my passengers, to fate again. Had this been a head-on collision, the outcome would have been terrible.

In retrospect, there were some things I learned about four-wheeling that hadn't really occurred to me before.

- A first aid kit is an essential part of the four-wheeler equipment list. In fact, every vehicle should con-

tain one.

- Always let someone know where you are going with a planned return time. Be as specific as possible about your itinerary and route. Had we been injured, we might have been stranded a long time.
- Draw a detailed map which can be easily followed by would-be rescuers.
- A cellular phone or radio can be a lifesaver. We brought a HAM radio on our trek.
- Ensure your vehicle is properly equipped for the task at hand. I'll never go four-wheeling in a vehicle without a roll cage. Seat belts are an absolute must, and a winch might also be helpful.

The last two points were not factors for Phil and me, but they are things to consider before going four-wheeling.

- Consider prevailing weather conditions. Wear warm clothing in the winter months and bring lots of water in the summer. If there's too much rain or snow, even true four-wheeling vehicles like my Bronco may not be up to the task.
- Finally, be sure you know your limitations. The off-road environment is harsh and unforgiving. Practice on less demanding terrain and slowly build up to more challenging surfaces. An inexperienced driver is a danger to himself and his passengers.

One more thing. Phil is still one of my best friends, and my Bronco is in the body shop being overhauled as I write this. *C'est la vie.* (That's how life goes.) ■

Editor's Note: Lt Matzko is a pilot in VAQ-128, a Navy expeditionary EA-6B Prowler squadron.

Letters to the Editor



Dear Editor

I would like to commend you on the subject article (*"Firearms ... They're Only As Safe As You Are"*) which appeared in the Fall 1999 issue of *Road & Rec*. The examples of various mishaps were real "eye openers" and should serve to enlighten many folks on some of the potential mishaps they can encounter if they fail to practice proper safety while hunting. However, I would like to point out one area I found troubling. On page 9, your section titled *"Some Observations,"* you mention in **Mishap 1**, "Because he did not bring his rifle with him when he descended the tree stand..."

This statement would seem to indicate that it is a normal practice (and also safe) to bring your rifle with you, i.e., *carry it*, when descending from a tree stand. This is one of the things you are taught NOT to do whenever you attend any type of hunter safety course. Neither a rifle, nor any other type of weapon, should ever be carried up or down a tree stand. It should be unloaded, then raised to your tree stand via a stout line after you have climbed up and secured yourself with a safety belt. When descending the tree stand, the weapon should again be unloaded, then lowered to the ground before you unsecure your safety belt and begin climbing down.

Again, thanks for the informative article.

MSgt Ernest K. Lhamon
Hill AFB, Utah

MSgt Lhamon,

Thank you for your interest in Road & Rec and your informative comments.

I contacted Mr. Dale Long, a hunter education instructor certified by the New Mexico Department Of Game and Fish, and he confirmed your comments. He added that the weapon should be tied around the butt or handgrip so that the muzzle points away from the hunter while the weapon is being raised up to or lowered from the tree stand. Mr. Long also recommended that the weapon be COMPLETELY unloaded – no rounds in the magazine or chamber – during the process.

Thank you for raising this issue. Your point is well-taken and your comments appreciated.

Dear Editor

First, I would like to commend you on two very fine articles in the fall 1999 issue of *Road & Rec*.

As a certified instructor for the NRA and the National Muzzle Loading Rifle Association, I feel I should raise a couple of concerns about your firearms articles.

In the first article, *"Firearms...They're Only as Safe as You Are!"* on page 13, you state, "The safest practice is to shoot the load out of the gun before placing it in the vehicle."

True, it is very unsafe to transport a loaded gun of any kind. My concern is the method you recommend to unload the firearm. I strongly believe that each muzzle loader owner should at the time of purchase also buy a "Silent Ball Discharger." This device contains a CO2 cartridge to power

the ejection of the load (blow the powder charge and projectile out of the muzzle without igniting the powder charge). The cost for one of these ranges from \$15 to \$40 and there is a flintlock adapter available. I have used these with both my caplock and flintlock firearms and have experienced excellent results.

This device has several advantages. First, it is a nearly silent way to remove the load, so using it will not disturb other hunters or game. Second, although the ejection velocity of the ball is moderate and caution must be used as far as where you point the muzzle, it's not as deadly as firing the load. Third, some hunters feel the need to "not waste the shot" and when shooting the loads out of their rifles take the opportunity to check their aim by firing into a tree, sign or post. Finally, it is safer than using screw or "worm" on the ramrod to pull the ball out of the barrel as this puts the person directly in the line of fire should the firearm accidentally discharge.

In the second article, *"Safety With a Smokepole,"* on page 16 you quote Jim Traver, "I put a small piece of leather between the hammer and the percussion cap, then let the hammer all of the way down."

The leather will not do 100 percent of the time, as Mr. Traver suggests. I assure you this is not condoned by any firearms safety instructors. I encourage you to try this in a safe environment. I think you will come to the conclusion this is an unsafe and uncertain method.

MSgt David Sorrels
Kunsan, Korea

Thank you for your interest in the article and also for taking the time to write.

The "Silent Ball Discharger" is an option which became available relatively recently. Unfortunately, few people buy them according to the local sporting goods dealers I've spoken with. Perhaps your letter will encourage more muzzle loading rifle hunters to consider buying one of these devices. The advantages you stated were all worthwhile, although I certainly feel the need to comment on individuals who "check their aim" on trees, signs, or posts. People who do such things are vandals, not hunters, and should be reported to the appropriate authorities.

With regard to the leather cushion safety, I visited Mr. Traver's shop to put his suggestion to the test. We capped the nipple of an unloaded rifle, laid a piece of leather (approximately 4-6 ounce, medium-soft) on the cap, lowered the hammer, then hit the hammer several times with a plastic mallet. Not once did the cap fire. We even cocked the hammer all the way back and pulled the trigger. In each case the leather sufficiently cushioned the blow to prevent an accidental discharge.

Mr. Traver's technique may be old-fashioned – reflecting his traditionalist approach to the sport – but I tested it and it works. There are more modern methods, such as using a plastic cap. However, for the traditionalist – and many black powder hunters are strict traditionalists – Mr. Traver's method does work. ■

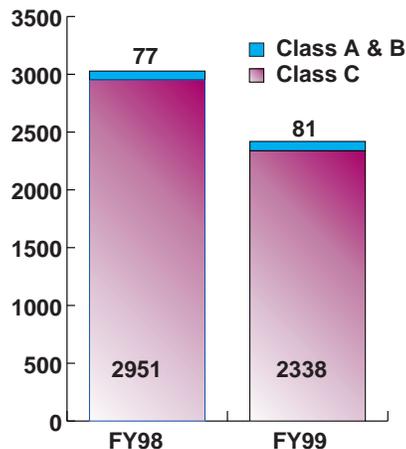
FY99 Ground Mishap Wrap-Up

"A STELLAR YEAR"

MSGT BRYAN PUTTONEN
HQ AFSC/SEGO

Every worker, supervisor and manager deserves a hearty congratulations for their performance during fiscal year 1999. This fiscal year the Air Force set a new record for the fewest number of reportable ground mishaps as of 19 October, 1999. Overall we achieved an astounding 20 percent reduction in total Class A, B, and C mishaps. This continues last year's downward trend and now turns fiscal year 1998 from our "best" to our "second best" year.

Reportable Ground Mishap Totals



And there is no smoke and mirrors or playing with numbers here. This is a bona fide success story with the winners being the Air

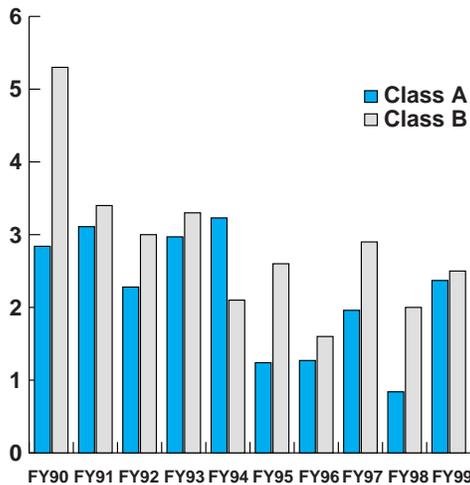
Force populace. In real numbers, we had 613 fewer reportable mishaps this fiscal year than during fiscal year 1998.

Before we get into the statistics a few things must be understood. A "reportable mishap" is one that meets certain lost hour requirements or has \$10,000 or more damage. There are a few exceptions to the general rule, but year after year these rules have been applied ensuring the accuracy and consistency of the reporting process. A second important point is the method used to compute the rates shown in this article. To simplify the data gathering, all rates are computed using the equation below:

$$\text{Rate} = \frac{\# \text{ Mishaps} \times 100,000}{\text{Air Force Population}}$$

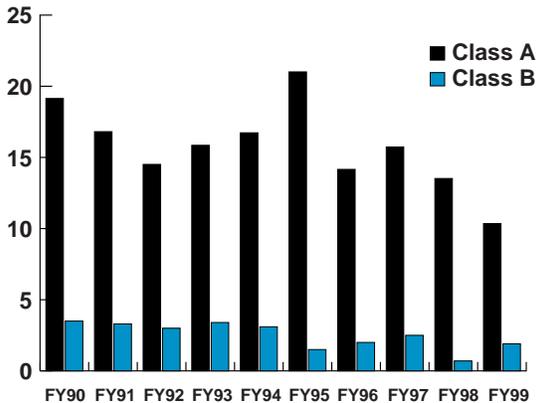
As with all good news we must also identify the bad. In the category of fatal on-and off-duty mishaps, we tied last year's losses with a total of 51 fatalities. We experienced fewer losses during our off-duty activities, but unfortunately our on-duty fatalities increased. Our greatest achievements this year were our reductions in reportable mishaps in the industrial, and sports and recreation categories.

On-Duty Ground Mishap Rates



The first area to look at is our Class A and B on-duty mishaps. These mishaps are identified by disabling injuries, significant property damage, or loss of life. The deaths of 10 Air Force personnel in fiscal year 1999 from on-duty ground mishaps is the most difficult to accept. All Air Force members should take these losses very personally as this is where we as workers, supervisors and managers have the best opportunity for stopping people from taking unacceptable risks. Six of these deaths occurred when people were operating government vehicles, three were related to industrial activities, and one was the result of combat training. We experienced 15 on-duty Class B mishaps, four of which resulted in the individuals suffering permanent - partial disabling injuries. The remaining 11 mishaps each resulted in more than \$200,000 in damage to Air Force property.

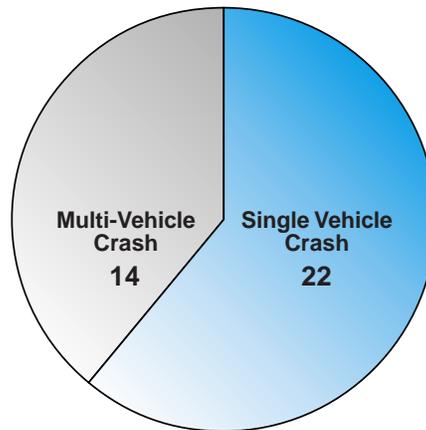
Off-Duty Mishap Rate Comparison



In the Class A and B off-duty mishap category seven

fewer deaths occurred this fiscal year than during fiscal year 1998. This reduction is attributable to fewer sports and recreation deaths, even though fatalities resulting from private motor vehicle (POV) operations rose. Overall, in fiscal year 1999 we had 15 percent fewer fatal off-duty mishaps. We lost a total of 41 military personnel off-duty, with 36 of those as the result of POV mishaps. Motorcycle fatalities decreased by 27 percent, but this was offset by an increase in four-wheel vehicle fatalities.

Private Motor Vehicle Fatalities



Of the 36 POV Class A fatal mishaps, 22 were single-vehicle accidents. Having 61 percent of our POV losses attributed to single-vehicle accidents is alarming. Nine of those deaths were directly related to operators who were driving too fast for conditions. In addition, inattentive driving or inexperience contributed to several POV mishaps.

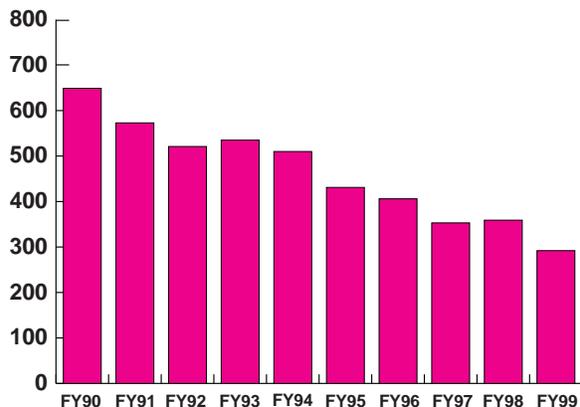
Of the POV deaths, five were passengers. Two of the motorcycle fatalities resulted from riders doing "wheelies" then colliding with a second vehicle. The non-vehicle related deaths resulted from events such as a rock slide, an avalanche, two drownings, and a mishap involving farming equipment.

The greatest gains in combat capability and mishap prevention during fiscal year 1999 were in the area of Class C mishaps. These mishaps are defined by the loss of a duty day or days but without any permanently disabling injuries, or property damage greater than \$10,000 but less than \$200,000.

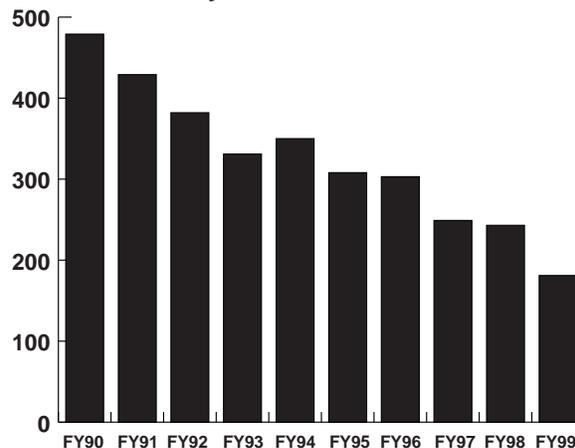
We had 246 fewer off-duty Class C Mishaps in fiscal year 1999 compared to the previous year - a 17 percent reduction.

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Off-Duty Ground Class C Rates



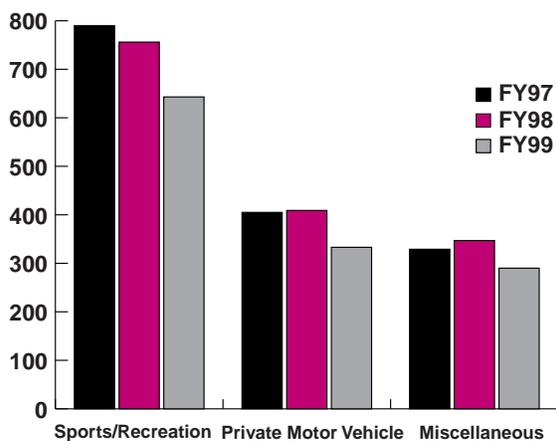
On-Duty Ground Class C Rates



The greatest improvements were a 19 percent reduction in off-duty POV mishaps and a 16 percent reduction in sports and recreation mishaps. In real numbers, that adds up to 76 fewer vehicle accidents and 113 fewer sports and recreation mishaps.

I have saved the best for last – a 25 percent reduction

Off-Duty Ground Class C Totals

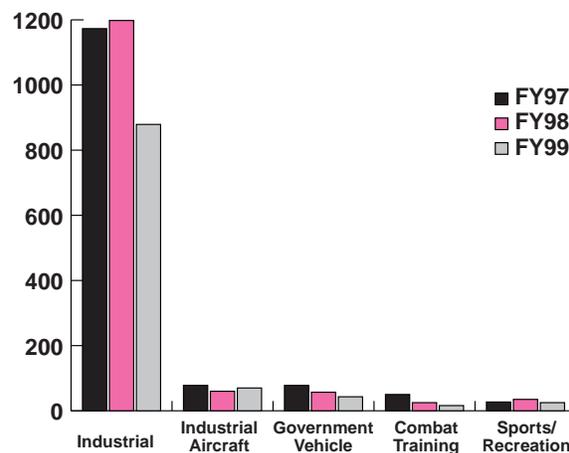


in total on-duty Class C mishaps. This is an astounding 371 fewer mishaps that could have had a negative effect on our mission and resources. This shows our mishap prevention efforts are paying off big in the reduction of injuries and property damage.

Our greatest successes were a 36 percent reduction in combat training mishaps, a 26 percent reduction in industrial mishaps, and a 24 percent reduction in government motor vehicle mishaps.

So, where did we not do as well? Only one on-duty category increased in fiscal year 1999 and that was a 17 percent increase in industrial mishaps involving aircraft. That represented an increase from 60 to 70 mishaps.

On-Duty Ground Class C Totals



We must not look at the continued overall success of the past two years as a reason to relax or let down our guard. Only by continuing our mishap prevention efforts will we increase our combat capability and reduce personnel losses within the Air Force community.

Is it time for a “three-peat”? Will we be able to rise to the challenge and show a further reduction in reportable mishaps during fiscal year 2000? Many factors played into the success of the past two years – but none more so than the introduction of Operational Risk Management (ORM). All levels of command have been exposed to the concepts of risk evaluation, control, and management. If we continue to hold all Air Force personnel responsible for properly managing risks and provide our personnel the necessary training, we can continue this record-shattering trend. ■

Street Smarts



Courtesy *Safety Times*

Kevin was in a great mood. He'd danced for hours, had a few drinks, and exchanged phone numbers with a pretty woman. Things couldn't be better. His head swimming with excitement, he left the nightclub alone just past midnight and walked slowly to his car. It was a perfect summer night. The moon was out, and the stars... and the armed robber who popped from the shadows and robbed Kevin of his wallet, hitting the tall former football player in the face with a gun and knocking him to the ground. Kevin admits he let his guard down that night, and he vows he'll be more attentive to his surroundings and his personal safety in the future. He's lucky to have a second chance.

Walk Proud

- Look aggressive. Walk confidently and briskly. Act like you know what you're doing. Your body language should say, "Don't mess with me." Attackers select people who look vulnerable.
- Know your route, where to go for help, and areas where someone could lurk.
- Stay alert. Be aware of your surroundings. If your intuition tells you something is wrong, it probably is. Leave immediately.
- Make eye contact with people as you walk.
- If a stranger approaches, don't be polite. If a person persists or asks for money, the time or directions, tell him to call the police for help. Briskly walk away.
- Do not walk alone, especially at night or in poorly lighted areas. Wear tennis shoes or flats.
- If you think someone is following you, cross to the other side of the street and change directions several times. Or, go to a business or other safe haven. Do not go home because you may be followed and the person will know where you live.
- Avoid people loitering on the street or near buildings.
- Don't flash cash or expensive jewelry. Keep your money and credit cards in your front pockets, or carry a "fanny pack."
- Cooperate with an armed robber. Don't make any quick movements, and limit eye contact. In gun and knife robberies, approximately 95 percent of people who give up their property without resisting are not injured, and very few suffer serious injuries.
- Carry your purse close to your body. If someone tries to grab your purse, let it go.
- Some experts recommend you throw the money in

one direction and run in the opposite direction.

- Try not to carry a lot of packages at one time. It makes you an easy target, and vulnerable.
- Carry a whistle around your wrist or on your key chain and blow it loud and hard if you feel threatened.
- A set of keys, with one protruding from between each finger, can be an effective weapon.
- If you suspect someone is threatening you, make a scene immediately. Most women who fight off attacks do so in the first moments of the attack.
- Don't expect bystanders to help you. They often won't. If you are accosted, don't yell "Help!" Instead yell, "Call 9-1-1" or "Fire!" That gives people something positive and specific to do.
- When there is apparent danger, running and yelling are two of the most common and successful self defense tactics.

In Your Car

- Keep your vehicle running well, and the gas tank above a quarter full to avoid being stranded in a dangerous location.
- Park in well-lighted areas that are easily accessible. Check the backseat and under your car before entering.
- Don't use the stairways in garages.
- Don't be a pattern parker. Vary your routine so that you don't become an easy target.
- Have your keys in your hand as you approach your car. Immediately lock the doors and windows.
- You may wish to install a car alarm that can be set off remotely.
- Car phones are an important security measure, and are becoming more reasonably priced.
- Keep your purse out of sight.
- At stop lights, leave space between you and the car in front of you for a quick escape.
- Don't travel unfamiliar routes at night.
- Don't leave your car if you are bumped from behind or someone says you have a flat tire. Once you leave your car, you are open for attack. Instead, drive to a well-lighted service station or local police department.
- Some assailants pose as police officers. If in doubt, tell the police officer that you wish to drive to a safe, lighted location where other people are before talking.
- NEVER get into a car with an assailant. It's the worst possible situation. Do anything to avoid it. Run, fight, scream. ■



MSGT REYNALDO GUTIERREZ
12 FTW Life Support

BOB VAN ELSBERG
Managing Editor

"Yee-haw!" I thought as we bounced around the sky. To call the weather for our departure out of Kansas City bad, would have been an understatement. I was in the back row on the right-hand side – right where I could “enjoy” every bounce, yaw and drop to the fullest. As far as I was concerned, the back of the airplane was moving around so much it could have filed a separate flight plan!

With a death-grip on one armrest,

I snugged-up the seat belt with my other hand. At any moment I expected to see the sky break through the fuselage which, I was sure, could not take the stress much longer. As it turned out, tightening my seat belt (and doing some serious praying) were the best moves I could make.

Although, at times, the issue seemed in doubt, I did survive the flight. Should your trip through the “friendly skies” turn into a roller coaster ride, here are some tips offered by Master Sergeant Reynaldo Gutierrez of the 12th Fighter Wing Life Support office.

Stay Seated and Belted In

Actually, this is good advice at any time because you never know when things are going to get bouncy. For instance, during a departure out of Salt Lake City the passenger next to me noticed my white knuckles on the arm rests and couldn’t resist sharing the following story with me.

“We were flying over the Rockies when we hit that – what do you call it? – “wave effect.” The airliner stood straight up on one wing and dropped about four or five thousand feet. It was awesome. The stewardess was glued against the overhead baggage compartment, while cocktails, sodas and airline peanuts went flying all over the place. Funny thing was that we just got it leveled off when it did it again.”

Encouraged by that bit of information, I tightened my seat belt even more and determined to stay planted in my seat.

However, violent turbulence isn’t the only problem. An in-flight structural failure instantly turned an Aloha Airlines airliner into a “convertible,” exposing the passengers to the outside elements. While this is an extreme example, other incidents have occurred where the structural integrity of an airliner’s fuselage has been compromised and passengers



have been blown out in-flight. Being snugly belted into your seat is the most important thing you can do to protect yourself in this situation.

And don't forget the kids. Experience has shown that a child can be torn from your grasp during severe in-flight turbulence. For the child's safety, they should be placed in an approved child restraint system in the seat next to yours. Child restraint systems should be labeled as meeting all applicable motor vehicle and aircraft safety standards. Also, if you're traveling with a child, book your reservations early so that you can get adjacent seating.

Dress For The Occasion

The crash of American Airlines Flight 1420 last June in Little Rock, Ark., was a reminder that landing problems can make it necessary for you to get out of the aircraft quickly. Fire is always a consideration under these circumstances, however, there

are things you can do to reduce your risk of suffering a burn injury. First, wear clothing made of natural fibers such as wool, wool blends, or cotton. These have a higher ignition temperature than many synthetic materials such as rayon, polyester and nylon. Also, cover as much of your body as possible for protection against a fire. Wear shoes that are easy to get around in and will protect your feet in an emergency. Shoes with flat soles and leather uppers and lowers are the best choices. High heels and sandals rank at the bottom of the list.

Read The Safety Cards

I know, you've seen them a hundred times before and you think they're all the same – but they aren't. The location and operation of things such as emergency exits isn't the same for all airliners. Take the time to read the card then look around for safety features such as the emergency exits and flotation devices. Make sure you know how to properly use the evacuation slide. If in doubt, ask a flight attendant. It's a lot easier to familiarize yourself with these things at your leisure before takeoff than try to sort them out during the stress of an emergency.

Overhead Storage Bins

OK, I'll plead "guilty" here. I once stuffed my wife's sewing machine into an overhead storage bin during a trip we made from Kansas City to San Diego. I made it fit, but it weighed a ton and would probably have flown out and become a formidable missile in the passenger compartment had we hit severe turbulence. If you just have to carry something really heavy onto the aircraft, put it beneath the seat in front of you. If it's too big to fit, either leave it at home or check it through with

your baggage.

If It Doesn't Look Right – Report It

During a commuter flight out of Macon, Ga., to Atlanta, I had the disconcerting experience of looking out the window and seeing oil bleeding out of an inspection cover on the engine cowling. This was not a comforting sight at 7,000 feet, so I alerted the flight attendant who went forward and spoke to the pilots. When she came back with the answer, "The maintenance crew apparently overfilled the oil the last time they serviced the engine," I wasn't particularly comforted, but at least I hadn't let the problem go unmentioned. Unfortunately, several passengers on USAir Flight 405 saw ice on the right wing of the aircraft as it sat on the taxiway but chose to keep mum. Moments later the airliner crashed during takeoff.

Listen Up!

The primary role of the flight attendants is not to bring you your airline cuisine, but to provide for your safety. It's easy to be distracted while they're up there demonstrating the seat belts, pointing out the emergency exits, and explaining how to use the emergency drop-down oxygen masks. But pay attention anyway. You'd be surprised at how many people sit in their seats fumbling because they can't properly fasten or adjust their seat belt. Also, some of the other information just might come in handy later on if there is an "oops" during your flight. It certainly beats being number 96 out of 200 people asking the flight attendants, "How do I put this darn oxygen mask on?"

Don't Cancel That Reservation!

Now that you're probably thinking about refunding your airline tickets and traveling by train, remember that airline travel is still the safest way to make that holiday trip. Just pay attention to the safety information you're given, use a little good sense, and lessen your risks by taking advantage of the tips in this article.

Happy holidays! ■

Happy New Year!



**Don't be DUI for Y2K – start off
the new millenium on the
right foot**