

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



AIR FORCE RECURRING PUBLICATION 91-2



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#### BOB VAN ELSBERG Managing Editor

was horrified as I sat stopped in the northbound lane at the intersection. Traffic had seemingly frozen in-place as flames shot out from beneath the hood of a car stopped to my right in the westbound lane. Staring at the burning car, the other drivers around me seemed unaware of the danger they were in should the gas tank explode.

The drive of the burning car, a woman, was standing on the shoulder of the road not far from her vehicle. I yelled at her to get away from her car, then ran forward to the driver stopped in front of me. I explained to him that we needed to get away from the intersection quickly or risk being burned should the car's gas tank explode. The message sunk in, and he carefully pulled through the intersection. Our moving apparently caused the other drivers to recognize the danger they were in, and they too began to pull away. As I thought about it afterwards, I was amazed that the driver and others at that intersection seemed so unaware of the dangers of a car fire.

Here are some tips from the National Safety Council to help you should your vehicle catch fire.

#### If You're Moving :

- 1. Signal your intentions and move to the right lane.
- 2. Get onto the shoulder or break down lane.
- 3. Stop immediately
- 4. Shut off the engine.
- 5. Get yourself and your passengers out of the vehicle.
- Get far away from the vehicle and stay away from it. Keep onlookers and others away.
- 7. Warn oncoming traffic.
- 8. Notify the fire department.
- Don't attempt to put the fire out yourself. Should the gas tank explode, you could be killed or seriously injured.

#### If You're Stopped or Parked:

- 1. Shut off the engine.
- 2. Get far away from the vehicle.
- 3. Warn pedestrians and other vehicles to stay away.
- 4. Notify the fire department.
- 5. See Number 9 above.

#### STATEMENT OF OWNERSHIP, MANAGEMENT, AND CIRCULATION

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

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

Location of Office of Publication — HQ AFSC/SEMM 9700 "G" Avenue S.E., Ste 282A Kirtland AFB NM 87117-5670 Publisher — U.S. Air Force Editor — Col Mark K. Roland Owner — United States Air Force Total no. copies printed — 34,306 No. copies distributed — 34,056 No. copies not distributed — 250 Total copies distributed and not distributed — 34,306



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DEPARTMENT OF THE AIR FORCE CHIEF OF SAFETY, USAF

PURPOSE — Road & Rec is published quarterly for the prevention of vehicle and other ground mishaps. The contents are not directive unless so stated. REPRINTS — Air Force organizations may reprint articles from Road & Rec without further authorization. Non-Air Force organizations must advise the Editor of the intended use of the material prior to reprinting. Such actions will ensure complete accuracy of material amended in light of most recent developments. The inclusion of names of any specific commercial product, commodity, or service in this publication is for information purposes only and does not imply endorsement by the Air Force and therefore do not conform to Air Force grooming standards. DISTRIBUTION — One copy for each five members of the USAF: Air Force units must contact Mrs. Pat Rideout at HQ AFSC/SEMM, Voice – DSN 246-1983, Fax – DSN 246-0931, E-Mail – Patricia.Rideout @ AthS.ais.af.mil, or by letter to:

Road & Rec Magazine HQ Air Force Safety Center 9700 G Avenue S.E., Ste 283A Kirtland AFB NM 87117-567 to establish or change requirements. Back issues of the magazine are

to establish or change requirements. Back issues of the magazine as on limited availability from HQ AFSC/SEMM.

POSTAL INFORMATION — Road & Rec (ISSN 1055-7725) is published quarterly by HQ AFSC/SEMM, 9700 "G" Avenue, S.E., Kirland AFB NM 8717-5670. Periodicals postage paid at Albuquerque NM, and additional mailing offices. POSTMASTER: Send address changes to Road & Rec, Attn: Editorial Assistant, HQ AFSC/SEMM, 9700 "G" Avenue, S.E., Kirtland AFB NM 87117-5670.

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



BOB VAN ELSBERG Managing Editor

#### **Speed Is Expensive**

etween putting out the fall and winter issues of **Road** & Rec, I took three weeks off to take a road trip with my family. During those three weeks I got intimately acquainted with our family car - a 1998 Chevrolet Lumina equipped with a 3.1 litre V-6 — as we put almost 5,000miles behind us. Most of those miles were on interstates, roads that allowed me to test the car's fuel economy at different speeds. With gas prices higher than they've ever been and with so many miles to travel, fuel economy became a real issue.

Here's what I found.

With the cruise control set at 65 mph (5 to 10 mph below the speed limits on most interstates) I got approximately 33 mpg — not bad for a mid-size car. When I bumped up the speed to 75 mph, my fuel economy dropped to around 27 mpg — a significant reduction. I tested this time and again and came up with the same results. Even driving through mountains didn't hurt my fuel economy as much as speeding up from 65 to 75 mph.

What did this work out to in dollars and cents? On average, we paid about a \$1.75 per gallon of regular unleaded fuel. Assuming a 5,000mile road trip with an average fuel economy of 33 mpg, that's 151.5 gallons of fuel. Multiplying that number by our \$1.75 price per a gallon of unleaded gives us a fuel cost of \$265.

Now, let's take a look at what happens when we bump the speed up 10 mph. At 27 mpg, it will take approximately 185 gallons of fuel to cover 5,000 miles. Purchasing that much fuel at our average cost of \$1.75 will nick the pocketbook to the tune of \$324. That's a \$59 increase in fuel costs just for adding 10 mph to your speed.

Were there other issues involved in going faster? You bet! I noticed my transmission shifted down far more often trying to maintain 75 mph going up an incline than when going 65 mph. That translates into additional wear and tear on the transmission - not to mention the engine which has to rev- up to maintain the higher speed. Having paid to rebuild a transmission and an engine in the past, those are the kinds of bills I'd rather avoid — or at least delay — if possible. Why wear your car out prematurely? Cars aren't cheap these days.

There are also safety concerns. During my trip I had several opportunities to dodge road debris, including some massive chunks of truck tires. Hitting these "alligators", as they are called, can not only damage your car, they can cause you to lose control. I found that going 65 mph not only gave more time to respond, but my vehicle also maneuvered better as I dodged these road hazards.

Sure, we all like to make the best time possible during a trip and the increased speed limits of late have made that easier. However, just because you CAN go faster, doesn't mean it's necessarily smart to do so. Try weighing the time saved against the real and potential costs. Is it really worth it?

#### A Pickup Isn't a Station Wagon

Every few days I see a pickup going down the road with a load of people in the truck bed. Apparently for some folks, a pickup is viewed as a sort-of "open-air" station wagon. When you consider that the passengers in the bed have nothing to keep them from being thrown out during an accident or rough road conditions, you have to wonder if they're at all aware of safety.

Take a recent case from our mishap files. Four Air Force members — a driver inside the cab and three passengers in the pickup's bed were taking a late-night drive down a country road. As they were going down the road, one of the passengers was sitting on the left bedrail of the truck, giving directions to the driver. Suddenly, the driver made a sharp turn to the right onto a dirt road. The back end of the truck began to fishtail, first to the right and then to the left.When the truck fishtailed to the left, the passenger on the bedrail was thrown onto the hard-packed dirt road, striking his head.

The driver saw what happened and turned around and drove back to where the passenger lay in the dirt. When his friends checked him, he was unconscious and not breathing. His friends performed CPR on the him and resuscitated him. Meanwhile, a 911 call was made and an ambulance soon arrived to take the victim to the hospital. Later, the victim was evacuated by air to another hospital where he was placed in intensive care with multiple head injuries and brain damage. He did not regain consciousness and had to be placed in a coma stimulation program. Five and a half weeks after the accident, he was still in a coma.

The lesson of this accident is obvious: a pickup bed is a great place to carry cargo, but it's a lousy place to carry people. ■

cal circuits where workers could be shocked or burned. However, hazardous energy also refers to mechanical, hydraulic, pneumatic, chemical or thermal energy. In fact, mechanical and hydraulic energy has been responsible for many serious injuries, including crushed body parts and accidental amputations.

So here's the important question - "Have you ever been working on a piece of machinery or equipment and had the uneasy feeling that it might start-up and hurt you?" If the answer is "yes," then it's time to review your duty section's LOTO program. The program's requirements are outlined in Air Force Occupational Safety and Health (AFOSH) Standard 91-45, Hazardous Energy Control and Mishap Prevention Signs and Tags, and Occupational Safety and Health Agency (OSHA) Standard 1910.147, The Control of Hazardous Energy (Lockout/Tagout). Just to get you thinking ENERGY SOURCE IS on the right track, LOCKED AND TAGGED here's the "Reader's Digest" condensed version of the program requirements. The program must consist of three elements: (1) documented energy control procedures, (2) a training program, and (3) periodic inspections on the use of the procedures.

#### The documented energy control program

must outline the scope, purpose, authorization, rules and techniques that will be used to control hazardous energy sources. Initial training must be given to anyone who is authorized to service, maintain or operate the equipment. Retraining is required whenever a change in job assignments, machines, equipment or procedures presents a new hazard, or when there is a change in energycontrol procedures. **Periodic inspections** are required at least annually to ensure that energy control procedures are properly implemented and that everyone is familiar with their responsibilities.

Want more detailed information on LOTO? Check out OSHA Publication 3120 on the worldwide web at: w 0 s h slc.gov/Publications/OSHA3120/osha3120.html. You can also get more information for your training program at www.osha-slc.gov/SLTC/smallbusiness/sec11.html.

Use 20/20 "foresight." Don't put yourself in a situation where you could end up looking back and saying, "I could have prevented this mishap if only I had ..."

**"LOTO"** No, It's not the Lottery!

#### **KAREN KINKLE** HQ AFSC/SEGS

#### "WARNING! Workers who install or service equipment and systems may be injured or killed by the uncontrolled release of hazardous energy."

Does this safety warning mean anything to you? If you service or maintain any type of machinery or equipment, hazardous energy control — commonly called "lockout/tagout" or LOTO — could prevent you from being seriously injured or killed. The LOTO program is designed to ensure that whenever equipment could be accidentally started or have stored energy released, the equipment is isolated from its energy source.

DANGER

HAZARD

RADIAL ARM SAW IS

TO REPAIR.

CONTROL MEASURE

HISSING GUARD DUE

In most daily operations, the hazards associated with energized equipment or machinery are controlled by guarding devices and/or personal protective equipment. Sure, the machine HAS TO RUN, but you are protected. However, sometimes a piece of equipment must be serviced — such as lubricating, cleaning or unjamming — during normal operations. When that occurs and workers must remove or bypass machine guards or other safety devices and possibly expose themselves to hazards, LOTO procedures must be used. Also, workers who are setting up or making significant adjustments to equipment must use lockout/tagout procedures so they won't be injured should the equipment be unexpectedly energized.

Most of the time we relate hazardous energy to electri-



Major Kurt J. Saladana HQ AFSC/SEFF Canadian Exchange Officer

here are certain

events that are so memorable that they stay in your mind forever, the details etched in some remote corner of your brain. For a male these events include the first home run you ever hit, the first touchdown you ever scored, your first goal (hockey, soccer), your first date, your first kiss, your

first car and your first motorcycle. Unfortunately, this list also includes your first car or motorcycle accident.

In the words of Meatloaf, "I remember every little thing as though it happened only yesterday." I was 16 years old and the proud owner of a custom-painted, burnt-orange 1964 Volkswagen Beetle. On a gray day in November 1971, which we had off from school because of a teachers' development day, a friend and I decided to drive from our town to a large nearby city. We were going to spend the day doing some Christmas shopping and enjoying being someplace other than our town.

Neither of us told our parents about our plans. We were both good students who held down part-time jobs. My parents had never limited what I could do with my car. They respected my judgment and I had never been in trouble. I can't remember if I consciously avoided telling them what I was planning to do, but I know if they had told me not to take the trip, I would have abid-

ed by their decision. I would have reasoned with them and then whined and pleaded for them to change their minds. But I would not have disobeyed them.

I checked the weather forecast before I picked up my friend. The forecast called for temperatures in the high 20s to low 30s, with light snow flurries late in the day. The drive on the six-lane highway to the city was uneventful and took about an hour. We decided to just go to one large mall, have lunch, walk around,

do some shopping and head home.

By 3:00 p.m. we were back on the road. Although the sky was still gray, there was no sign of snow. We turned the radio on to listen to some tunes. We didn't even consider trying to find a weather or highway report. Traffic was heavy, but was moving at, or slightly above, the speed limit. Within 15 minutes, I noticed the wind was becoming gusty (Beetle aficionados KNOW how wind affects this type of car) and shortly thereafter, we were in snow flurries. I considered taking a turnoff and using one of the two-lane roads that paralleled the highway a couple of miles off to either side. However, the traffic flow was good, so I kept my place in the right-hand lane and passed the first turnoff.

As they climbed a lengthy hill, the automobiles worked their way to the left-hand lane to get by a stream of slow-moving tractor-trailers. As we climbed the hill, I noticed that the snowfall was getting heavier and that the snow was beginning to accumulate as slush on the pavement. I also noticed my knuckles turning white every time I passed a semi or went through an underpass. The sudden blanking then reintroduction of the wind made controlling the car difficult.

A few miles farther on as we went down another hill, bad luck, bad judgment and bad driving all combined at just the wrong time. The slush was turning to ice. I had, by then, decided to take the very next turn-off. However, while my right-hand turn signal had been blinking for several minutes, nobody would let me into the middle lane. The tractor-trailers, which had been easily passed on the up-slopes, were making up for lost time as they went downhill. Now instead of just blanking the wind, the trucks' vortices created a vacuum when they went past.

We went through an underpass and I corrected to the left to make up for the sudden reduction in crosswind from the right. As we exited the underpass, the wind broadsided us and I corrected to the right. Almost immediately, a semi passed us on the right, again blanking the wind. The instant the truck passed us, the vacuum behind it began pulling the nose of my car to the right. I tried correcting, but nothing happened. The slush had turned to patchy ice and my front tires could not grip the road.

We were now 45 degrees to the traffic flow and rolling in front of another tractor-trailer. I heard its air horn blast and I gripped the steering wheel even tighter. The tires finally found a piece of asphalt where they could bite the road. Unfortunately, I had the tires cranked as far left as they would go, so they snapped the car to the left, and before I could get them straight, we were once again on ice. This time, however, the tires did not find another grip and we hit the guardrail at a shallow angle doing about 60 miles an hour.

The impact snapped off the left-hand fender. Grinding against the guardrail, the left front tire tore off, leaving nothing between me and the guardrail but the skin of my door—which I was pinned against. I vividly remember looking at the left sleeve of my gold-colored ski jacket and noticing it smoldering as it touched the glowing door.

Eventually we slid to a stop and, miraculously, neither of us was hurt. A semi stopped behind us and stayed there until the police and a tow truck arrived. By then the weather had deteriorated to a full-blown blizzard. The semi driver laid out flares—his actions probably prevented another accident.

By now you are probably asking yourself, "Why is this idiot telling me about his lack of brains and talent?" The answer is risk management and decision-making. On the day of my accident—and even during the days before — I had the information to do a better risk assessment and make better, more timely decisions. As the cliche´ states, "Hindsight is 20-20." It may not be reasonable to think that I, as a 16-year old, would have applied a risk analysis and avoided my first car accident. However, if I had considered the possibility that I would be deprived of a car for the following nine months, I'm certain I would have decided not to make the trip that led to the accident.

I could have identified several potential hazards. I had been driving since the spring, but I had never driven in snow. Before the accident, I had never driven more than a few miles on anything but two-lane roads. Weather, and lack of adequate experience were obvious potential hazards.

I could have assessed the risks. Either of the hazards already discussed could easily have led to an accident. Loss of life is not a concept that means anything to a teenager. However, losing a vehicle has far-reaching and long-lasting economic and social repercussions.

I could have analyzed some risk control measures. It wouldn't have mattered to anyone on the face of the earth if my friend and I had not made that trip. Also, it would only have added a half-hour onto each leg of the drive to take one of the slower county roads.

Considering those measures, I could have made a risk control decision and decided to either stay at home or to take an alternate route.

I also deprived myself of one of the best risk management systems in the world—my parents. Had I discussed my plans with them, they would have gone over all of the possibilities and would have probably prevented me from taking the trip. At the very least, they would have made me more weather-conscious and ensured that I checked the forecast and road conditions for both legs of the drive. My father would have suggested alternate routes that would have been slower and where there would have been snowplows already in operation. My mother would have insisted that I spend the night with friends or relatives in the city if there was even a hint of snow in the forecast for the return trip.

So, what did I learn from my first accident? I learned to always check road conditions and weather forecasts before I travel. More importantly, I now do a "mini" risk assessment before I even get near the car. If the weather is forecast at less-than-ideal, I determine whether or not the trip is necessary. If it is, I decide on my routing, carefully planning alternate routes to avoid bad weather, or delays caused by construction or accidents.

Then I ask myself, "Do I want to stay on a well-traveled, high-speed freeway, or do I want to go slower and pass through small communities where there will be restaurants, gas stations and accommodations?" I carry signalling devices and flashlights in my cars so that I can warn other motorists in case of a breakdown or accident (mine or someone else's). I also carry a first aid kit along with extra clothing and blankets in the winter and water in the summer.

By now, you'll be asking yourself just how any of this made it worth the time it took you to read it. Well, risk management is, for the most part, the application of common sense. And while you can't teach common sense, you can learn from somebody else's mistakes. If just one person can learn from my mistake, then my '64 Beetle wasn't sacrificed for nothing.

#### By Tom Neven

OKAY, remind me why I'm doing this. I'm on a treadmill at the Cooper Clinic in Dallas, ganglia of wires hooked to my torso, a blood-pressure cuff on my arm, walking about 3.5 mph. Not too bad—just a little faster than normal walking speed. But shortly into the stress test the front of the treadmill begins steadily rising, making it seem like I'm climbing a steeper and steeper incline. I think I'm doing pretty good when I start to get my second wind. The problem is my legs. My calves burn, my thighs turn rubbery. I have a bum knee, which doesn't help. The blood-pressure cuff periodically tightens against my arm, a machine beeps constantly, and the CNN broadcast on the television in front of me fades into a blur as I concentrate on my rapidly failing legs.

Wait a minute — I was a U.S. Marine, able to rip off a three-mile run in 18 minutes. But that was more than 25 years ago. During those intervening years, I've spent more time in a chair than on the track.

I finish the stress test. Let's just say I'm not Ironman material. There's good news: The head-to-toe physical exam shows I'm basically healthy with no sign of heart disease. I do need to lose some weight and stop eating junk food.

Another necessary change: mental attitude. I may still think I'm 18 years old, but my body definitely isn't. The law of entropy has had its way with me.

Americans are getting fatter, and fat kills.

The Centers for Disease Control and Prevention says that the number of people considered obese-more than 30 percent over their ideal body weight-increased from one in eight in 1991 to nearly one in five in 1999. No wonder the Journal declares the problem an epidemic, one that kills an estimated 300,000 people a year.

#### **FIGHT BACK**

It's a dilemma faced by many parents into their 30s and 40s. They were healthy and fit when they were younger, but the demands of career and family might have bumped fitness somewhere lower on the priority scale.

If you're out of shape, it's easy to become demoralized. But Dr. Ken Cooper, the founder of the Cooper Clinic and considered the "father of aerobics," says getting back into shape is not as complicated as some try to make it. The first thing is simply to begin doing something, however small. "It's never too late to start," he



says. "Even with 90-year-olds we can see a change" after they start an exercise program.

The secret to good health? In slightly oversimplified form, it's to burn more calories than you take in. "Our recommendation here is a basic diet, which is low in calories, not just low in saturated fat," Dr. Cooper says. "You drop 250 calories per day, you'll drop a half pound per week. You drop it down by 500 calories a day, you'll lose a pound per week. If you drop it by 1,000 calories per day, you'll lose two pounds per week."

But people want a quick fix. "People are not satisfied with that one pound a week," he says. "But weight taken off that way stays off. With these fad diets where you take off five pounds in a weekend, I'll guarantee that you're going to get it back, as 97 percent of the people do." (See "A Dangerous Quick Fix.")

As for an exercise program, there's no need to go out and join a gym or buy expensive exercise equipment that will wind up serving as an extra clothes rack. "Just go out and walk vigorously for 30 minutes three times a week," Dr. Cooper says. "Who can't do that?"

Any exercise program should be combined with muscular conditioning. "You need to do this so you can be totally fit, not just cardiovascular fit," he says. "It doesn't do you any good if you've got a great heart and the rest of your body can't keep up with it." Hmmm. Sounds familiar.

#### MISCONCEPTIONS

You do not need to strive for the sleek, athletic look. Dr. Cooper worries that some hard-core exercisers are actually damaging their bodies by becoming too thin.

The goal is overall fitness, and the key enemy is a sedentary lifestyle. "You're better off to be fat and fit than skinny and sedentary," he says. "I'm in no way endorsing obesity. I'm just trying to show how dangerous it is to be sedentary. The weight of scientific evidence concludes that abandoning the sedentary lifestyle and following a moderate exercise routine will greatly reduce your risk of dying from all causes and enhance your chance of living a longer, more active life."

Yet, one can be aerobically fit and still be unhealthy. That's why balance—diet, aerobic exercise, muscular conditioning—is important. Dr. Cooper cites the example of Jim Fixx, author of *The Complete Book of Running* and the man who started the running craze in the 1970s. "He could have passed all the tests as far as oxygen capacity, resting heart rate and all those things we attribute to being aerobically fit, but he still had serious heart disease," he says.

In July 1984, Fixx died suddenly while running. For this reason Dr. Cooper insists that men over 40 and women over 50 undergo a stress test before

continued on next page



starting a vigorous exercise program. (That's what I was doing on the treadmill.) Such a test done by a knowledgeable doctor will detect any abnormalities or hidden heart conditions.

#### FIT KIDS

Dr. Cooper is worried about today's children, too. "Kids today are fatter and less fit," he says. "Teenagers are five to seven pounds heavier than they were in 1980, and it takes them a minute to a minute and a half longer to run a mile—if they can even run a mile."

He sees four reasons for this: "No. 1, there are no statemandated PE programs in school systems," he says. "They've replaced it with computer technology or math. They keep forgetting that it's not going to be much value if you've got a great brain but you don't have the body to go along with it."

The No. 2 reason he cites is today's society: "It's not safe for kids to walk or ride their bicycle to school anymore. They're being driven to school or they're driving their own car."

No. 3 is what he calls the couch potato generation. "They're spending so many hours now watching television, playing video games and computer games." And No. 4, he says, is a fast-food diet.

So, what's a parent to do? First, he says, is set an example with diet and exercise. Next, encourage your kids to get involved with athletics. But this comes with a warning: "Don't force your children into an activity they don't want to be in," Dr. Cooper says.

There is also the danger of placing too much emphasis on winning. "If you ask a lot of kids what are the 10 reasons they want to participate in sports, No. 1 was to have fun. No. 10 was to win." The overemphasis on winning at all costs can lead some kids to resort to drugs such as creatine or anabolic steroids in the belief that they will improve performance. "Teach and encourage your kids to participate in lifetime sports," he says. "Participate with them in things they can do for the rest of their lives, not just basketball or football, but tennis, walking, jogging, cycling, swimming—things of that type."

Start an exercise program as a family, even if it's just going for an evening walk. "Set aside time for this," he says. "You have to program time with your family just like you program in time for your work."

Dr. Cooper, whose children are grown, cites a habit he and his wife, Millie, have enjoyed for years. "We take our two dogs on a two-mile walk. You know, even our dogs look forward to that time with us. It's just 30 minutes of uninterrupted time with their masters. I wonder how our children would respond if we spent that amount of activity daily with them, listening to their problems and trying to give them wise counsel. If dogs can appreciate that attention, don't you know your children would?"

(Editors Note: "Get Fit" by Tom Neven, Focus on the Family magazine, Vol 24, No. 7, July 2000, published by Focus on the Family. Colorado Springs, CO 80995. www.family.org. Copyright© 2000. All rights reserved. International copyright secured. Used by permission.)

#### A DANGEROUS QUICK FIX

There are a lot of so-called quick-fix diets, and one in particular has received renewed public interest: The Atkins high-protein, low-carbohydrate diet. The Atkins Diet first came out in 1972. It's counterintuitive in its recommendations. Eat all the bacon, hamburgers and other meats you want, and cut down on things such as bread, pasta and the like.

People certainly lose a lot of weight quickly with the diet, but are at great risk. The chief danger is ketosis, a condition in which the body lacks carbohydrate as a source of energy, so the liver begins making sugar out of whatever it can find — including your own muscles. This results in the formation of ketones and a state of ketosis. "Ketosis is not a normal state," says Dr. Ken Cooper of the Cooper Clinic in Dallas. "The body is burning fat and proteins as fuel. Along with that, you start urinating more, and that is one reason people lose weight initially on a high-protein diet. It is the loss of water or fluid. But unfortunately, you rehydrate quite rapidly once you go back to a regular diet."

Another problem with the diet, he says, is the danger from cholesterol. "It's exactly the opposite of what's recommended by the American Heart Association. You may be losing weight, but you may be dramatically increasing your risk of heart disease because of all those saturated fats you're getting from a high-protein diet.

Gaining weight or losing it has nothing to do with the source of fat in foods, he says. "The reason you gain weight is from calories consumption. Whether the calories come from fat, protein or carbohydrates makes no difference. Another problem you have with the high-protein diets is it's deficient in fiber and also deficient in calcium. There are all sorts of negative things with this diet. It may lead to irritability, lightheadedness, bad breath, constipation and kidney problems. Certainly a woman should never go on a high-protein diet during her pregnancy for risk of harming the fetus. I cannot recommend a high-protein, low-carbohydrate diet." ■



**T** o Jack, right-turn-on-red was the greatest thing since sliced bread. He was a person on the go, a man in a hurry. To him every city intersection was just one more obstacle standing between him and his next appointment. Right-turn-on-red was his license to never stand still. Moving, moving, keep that car moving. Bad habits breed bad results, and right-turn-on-red soon progressed to "rolling stop through red" and "ignore NO-right-turn-on-red warnings." He finally came to his senses the day he was broadsided by a city bus and spent several weeks stuck in his hospital bed.

City driving is filled with hassles and delays, but these minor inconveniences aren't going to be avoided through reckless or rude behavior. The best advice is to maintain a calm and patient attitude.

#### **Surviving Intersections**

Almost 50 percent of all city driving collisions occur at intersections, usually because a driver failed to yield the right-ofway. A recent Insurance Institute for Highway Safety study reports that red-light runners are responsible for an estimated 260,000 crashes every year, about 750 of which are fatal. Worse, the number of deaths related to red light running is rising! To keep intersections safe, remember these tips:

• The vehicle on the left always yields to the vehicle on the right.

• Rolling stops can be a dangerous habit. You can miss spotting a vehicle and cause a collision.

• As you approach a "stale green light," cover the brake with your foot and be prepared to stop. Indications of a stale light include: traf-

fic flowing smoothly, considerable cross-traffic, blinking pedestrian signals, and people standing on the corner.

• When a red light turns green, check to see if traffic has stopped on the intersecting street. Look left, then right, then scan left before you proceed. You invite disaster if you don't check for oncoming vehicles, pedestrians and cyclists.

• Turning right on a red light is allowed only when it is legal, your vehicle has come to a complete stop, traffic is clear, and pedestrians are clear of the crosswalk. Always take the few extra moments to look for a no-turnon-red sign.

• When you encounter a yellow light, always stop if it is safe to do so. The purpose of a yellow light is to allow you time to clear an intersection you have already entered, not one you are approaching.

• A lack of consideration can cause trouble. Demanding the right-of-way can lead to a confrontation that benefits no one.

#### **Roadside Distractions**

• Keep your eyes moving, looking for potential problems such as children playing, cyclists, pets, and cars backing from driveways. Look into your rearview mirror often.

• Establish a high visual horizon. You should be able to see one block ahead of you.

• Blind spots are everywhere. If you can't see beyond an object, slow down or change lanes to improve your vision.

• Don't tailgate. Maintain a three second following distance.

• When waiting to make a left turn, point your front wheels straight ahead. If you are hit from behind and your wheels are turned to the left, you will be pushed into traffic.

• Whenever possible, avoid getting boxed in. Speed up or slow down as required.

• Don't fiddle with the radio or other non-essential equipment in heavy traffic.

• If a left turn is risky because of heavy traffic or poor vision, make a right turn and use an alternate route.

#### **Backing Up**

• Always check behind your car. Pedestrians and small children can be hidden from your view.

• Use your outside mirrors to help your vision.

• Do not back into busy streets, highways and pedestrian crosswalks.

• Keep your foot firmly on the brake before shifting into reverse.

• Back slowly. Glance over each shoulder out the windows.



BOB VAN ELSBERG Managing Editor Photos by SrA Kevin A. Porter

he compact white car sitting on the shoulder of the northbound lanes of Interstate 25 got my attention immediately. Something about it just didn't "look right." The passenger door was open, but no one was standing next to the vehicle. I could see the driver seated behind the steering wheel — something that always gets my attention. I had once seen a couple having an argument in their vehicle while parked on the shoulder. They suddenly pulled onto the highway, began fighting for the wheel, then spun out of control in front of me.

As we got nearer to the white car, I saw a woman struggling to escape out the passenger door. The driver grabbed her and wrestled her towards the driver's front seat. Almost immediately, the car began to move into the righthand lane, right in front of me.

I slowed down and moved to the left-hand lane to avoid a collision. It was clear the driver was more interested in fighting with the passenger than he was in driving. I was very concerned at what I was seeing. A year or so ago, a number of women had been kidnapped, sexually assaulted and murdered in this area. In my mind I could see the news broadcasts doing an instant replay.

I slowed down, watching the car in my rearview mirror. I could see the driver - a heftylooking man in his mid-30s. He had his right arm around the head and neck of the woman, pulling her towards the driver's seat. She looked desperate and I could see blood on her face from where he had hit her. Checking the lane behind me for traffic, I slowed down in order to get behind him to get his license number.

He saw me and also began slowing down but I had made up my mind. Whatever it took, I was not going to leave the woman at the mercy of this man. As we fell behind him, my wife wrote down the license number and vehicle description.

For the first time I des-

perately wished I owned a cell phone. The 60-mile stretch of I-25 to the next small town was largely deserted. The chances of finding a phone were limited, and I was afraid he might pull off before I could call for help.

We had driven for a couple of minutes when I saw something that gave me hope. Off to the right side of the road I saw a Border Patrol station. Although I didn't see anyone standing outside of the building, I saw several Border Patrol vehicles in the adjacent parking lot. It was a few minutes after 6:00 p.m. on a Sunday and I wasn't sure anyone would be inside the building. Still, someone might be and it would be a long time before I got another opportunity to get to a phone. I had to make a decision.

Checking the rearview mirror to make sure no one was right behind me, I slowed and pulled onto the shoulder. I stopped just past where the onramp came out of the station and fed into the northbound lanes. I started to get out of my car when my wife said, "There goes a sheriff's car!"

Sure enough, the sheriff's car was moving quickly up the left-hand lane. I jumped back into our car, checked for traffic behind me, then got back onto the Interstate. Although I don't like to speed, this was critical, so I sped-up to overtake the sheriff's car. I didn't know whether or not he was in pursuit of the white car or just making a routine patrol. If it were the latter, I wanted to let him know about the problem.

It took perhaps a couple of minutes to catch up with the sheriff's car. To my relief, I saw he was paralleling the white car and motioning to the driver to pull over. Both vehicles pulled onto the right-hand shoulder and stopped. I was relieved. Because of what I had seen, I felt it was important to provide a witness statement to the deputy. I pulled off the road, turned on my four-way flashers and sat inside my car until the deputy saw me. When he did, I waved to him to let him know I was on his side in this situation. Obviously, he didn't know who I was, and I didn't want to add to his concerns.

After arresting the driver, the deputy came and took my statement for his report. I looked at the woman, still bleeding from where she had been struck in the face, and was glad she was now safe. The deputy then gave me a Voluntary Statement form to fill out and his card so I could mail it to him.

As we got back into our car for the two-hour drive home, I thought a lot about what had happened. Fortunately, an attendant at a gas station in the previous town had called the sheriff's office after seeing the man hit the woman then drive off with her in the car. I was grateful the attendant had chosen to get involved. As we drove, I thought about what my options would have been had it been up to me to get help for the woman. It was uncomfortable to realize just how unprepared I was to respond to this situation.

Because it is better to know what to do than to try and improvise at the last minute, I contacted the Ohio State Patrol. They've been helpful in providing traffic safety information for past **"Road & Rec"** magazine articles. Sgt. Gary Lewis, of the Patrol's Public Affairs Unit, provided the following tips.

• Should you witness an attack or other crime on the road, Sgt. Lewis advises that you "not get involved in any type of verbal or nonverbal confrontation. If a violation is observed, contact authorities immediately and try to obtain as much information as possible, such as the direction of travel and the vehicle's description."

• Trying to directly intervene could escalate the problem and possibly put you in great danger. Should you become the target of highway violence, Sgt. Lewis suggested that you "try to avoid contact and exit to a nearby location to get help." He added, "Cell phones are a great tool and resource for getting information to, and assistance from, local law enforcement."

◆ Also, your witness statement can provide law enforcement officials with valuable information about the crime. The best way to provide a statement, according to Ohio State Patrol Public Information Officer Mike Perona, is to get to a phone and call the nearest law enforcement agency. Officer Perona explained that they will provide you with a form you can fill out and turn in. He added, however, that if you have information you feel the law enforcement officer needs immediately, you should pull onto the shoulder at least a hundred yards beyond where the police and suspect vehicles are parked, move as far to the right as possible and wait in your car. This will allow the officer to keep both you and the suspect in sight.

"What you don't want to do is to divide the officer's attention," Officer Perona said. "The officer is focused on the subject, trying to see if he or she is hiding anything such as a weapon. If the officer's attention gets divided, that could be dangerous. Once the situation is under control, the officer — or other law enforcement personnel at the scene — will drive up and get your statement."



**TSGT ROBERT J. COULTER** 11 WG/SEG Bolling AFB D.C.

Editor's Note: I probably read 50 to 60 ground mishap reports each week. Ultimately, the report tries to identify at least one cause that led to the mishap. However, sometimes there are facts that don't get into the reports, "contributing" causes that play a bigger role than they officially get credit for. Sergeant Coulter's article takes apart a fatal mishap to look at ALL of the causes. Some may be a bit unsettling.

bout 5 1/2 years ago, the Air Force lost a member to a needless, preventable tragedy. For the purpose of this story, I'll refer to him as "Al." When the Air Force loses a member, like Al, a thorough investigation is conducted to reveal the underlying causes of the mishap. These causes are then made public in hope of preventing similar mishaps from occurring.

#### Conflicting Testinonies

Having been appointed the investigating officer for the safety portion of the inquiry, I scheduled a series of interviews to try and get some answers. During those interviews two things became obvious. First, Al's closest friends wouldn't offer any information or insights that supported the indisputable facts of the crash — that Al had crashed his car at high-speed while having a BAC twice the legal limit, and that he wasn't wearing his seat belt. Secondly, the rest of the interviewees — neither close friends nor enemies of Al's — had "different" recollections of Al than those offered by his close friends. Recollections that, in some cases, directly contradicted his friends' assertions.

In most cases, it's normal for the victim's friends to defend him or her and portray them in a favorable light. This probably stems from their desire to protect their friend in some way. What Al's friends didn't realize is that he had already been punished to the maximum extent possible — he'd lost his life. Nothing was gained by hiding the facts. Or was it, perhaps, that his friends refused to admit their own involvement or that they also do the same things?

#### Jst Te Fats

The facts about Al have a familiar ring. A junior NCO in his early 30s, he was geographically separated from his children and his estranged wife due to a PCS. Living alone, he pursued professional and social activities with his peers. The relatively small nearby town offered enough social life to keep Al occupied but not fulfilled. Internally, he struggled with personal issues. During the interviews, I tried to find out how much Al was distracted by his problems and how



significant they might have been in his untimely death.

#### Some Probing Questions

When I asked people, "What kind of a worker was Al?" Inevitably I got the same answer. They said he was tireless and knowledgeable and that he was "constantly busy" with the Red Cross or working on cars. Also, they said Al was very opinionated — sometimes so narrowly focused in discussions at work that he was unable to consider any alternative than his own. As a result, he was of no help in group problem-solving.

When I asked, "Did Al drink alcohol?" the answers suggested that he was a moderate-to-heavy drinker. However, no one would say they could remember him

slurring his speech, being physically sick, or acting obnoxious. The common opinions were that Al "could handle several drinks," "stay in control," or that when he drank he just became "more haid back"

laid back."

When I asked if Al had personal problems that could be bothering him, almost everyone knew of his marital troubles. He talked "regularly" with his wife, who was 1,000 miles away. They were trying to work things out. He rarely brought up the subject, and when it did come up, he didn't dwell on it. He wished he get a decision one way or the other so that he could get on with his life.

Most of the people I talked to knew what kind of a

car he drove. Since it was a rare model and parts were hard to come by, he had to do the work himself. In some cases he made temporary "fixes" to make up for the lack of parts or funds. He confided to one friend that his tires were very bald and that he needed a new set. An automotive expert who took part in the investigation stated Al's car was in "fair" condition.

Depending on who I spoke to, Al was either a good driver who always wore his seat belt and never mixed alcohol with driving, or he had a "lead foot" and liked to showoff in his sports car. The *facts* at the accident scene tended to support the latter. Al's seat belts were tucked under the seat and fresh beer tops were found in the car and scattered on the road at the accident scene.

According to some witnesses, Al was not in a hurry that night as he headed to an off-base bar. However, the local police department had a different opinion, considering the damage to the car, barriers, road, and Al himself. From the widespread debris and the distance from the initial impact to the car's final resting place, the police concluded Al had lost control at a high rate of speed.

During the investigation, a card published and widely distributed by Al's MAJCOM safety office was found in Al's wallet. The card stressed the importance of making sound decisions and how a person's actions affect themselves and others. Did Al put the card in his wallet and forget to read it? Was he planning to use the information as he taught his Red Cross swimming classes? However he felt about the card, he carried it to the end.

#### Some Final Outstions

What causes people like Al to make bad decisions? Hurry? Personal disregard? Complacency?

On a Safety Day barely two weeks before the accident, Al and all of the other base personnel watched a video I produced highlighting the dangers of the stretch of road where Al died. Another airman had crashed a couple of months earlier, doing the same things Al had done. He, too, was on a late-night, high-speed drunken run to a bar. Only in this case, the airman had friends in his car and the trio had worn their seat belts — something Al hadn't done.

Could I or anyone else have done anything more to prevent this tragedy? What responsibilities do we have when it comes to the safety and well-being of our peers?

The bottom line is being accountable for a friend. We have to reach out to those who have the "it can't happen to me" attitude and show them that, in time, it probably will. If we don't, we are, in effect, condoning and encouraging what they're doing. And yes, they may not get the message the first time. But, if their friends tell them often enough, maybe the seed will take root. And if that happens, maybe there will be one less "Al" to be the subject of a mishap report in the future.



### DON'T BE & FLAKE! Ski & Snowboard Safely

ownhill skiing and snowboarding can be an exhilerating experience, but as with any sport, safety should come first. Excess speed and loss of control are the primary factors associated with snow skiing fatalities, according to a study reported in **The Physician and Sportsmedicine**,

February 1989. The study also states that more than threefourths of ski-related deaths occurred after collisions with stationary objects, such as trees and lift towers. Head injuries were cited most often as the cause of the fatalities. The National Safety Council strongly advises novice and experienced skiers and snowboarders to learn or reacquaint themselves with the proper skills and safety techniques.

#### Shaping Up for the Season

Poor physical condition can be a contributing factor in skiing and snowboarding injuries. Being in good condition before attempting a strenuous sport will increase your enjoyment, reduce fatigue and help avoid injury.

Getting in shape does not mean a "crash course" of exercising one week before a trip. A regular routine of exercise to strengthen muscles that will be used more than usual is recommended. You should start exercising well before the season starts. For exercises best suited to help you get in shape, consult a fitness expert or personal trainer.

#### **Hitting the Slopes**

A beginning skier or snowboarder should get proper instruction from a certified instructor before hitting the slopes. Among other basic skills, it is necessary to know how to fall down and get back up. At the start of the season, even an experienced skier or snowboarder should take a refresher course — just to be safe.

Even after you have mastered the basic skiing and/or





snowboarding skills, the learning process is not complete. Knowing snow conditions and the time of day you're planning to ski are just as important. Check with the local ski patrol for conditions and study a map of the area where you will be skiing or snowboarding. Keep in mind that, late in the day, sunlight may obscure details of the terrain and make obstacles hard to see. One of the most important safety rules is to **NEVER** ski or snowboard alone!

#### **Rules of the Slopes**

The following is a list of rules that all skiers and snow boarders should know and obey:

- When skiing or snowboarding downhill, give moving skiers and snowboarders below you the right of way. You should be able to see them — they might not be able to see you.
- Stop on the side of the run, well out of the way and in view of other skiers and snowboarders.
- Look both ways and uphill before crossing a trail, merging or starting down the hill.
- \* Use a safety device to prevent runaway equipment.
- Never ski or snowboard alone.
- Follow all posted signs and rules. Avoid closed trails and out-of-bounds areas.

#### **Selecting and Caring for Equipment**

Always select and use quality equipment. Improperly fitted or mis-adjusted equipment can cause the best skier or snowboarder to suffer an injury. When buying equipment, ask for expert advice. A trained sales associate at a reputable ski and/or snowboard shop should be able to best assist you when purchasing equipment. If you own skis or snowboarding equipment, have them checked for proper fit and adjustment periodically throughout the season.

Boots and bindings are the most important part of a ski or snowboard outfit. Boots should be snug and comfortable. Proper bindings are critical and should be checked by a professional regularly to make sure they are working properly. When purchasing skis or a snowboard, be sure to select the length and style right for your height and skill level.

Proper clothing is also an important part of your equipment. Choose comfortable, warm attire and dress in layers. Bright colors are the best because they can be seen at a great distance. Outer wear should be of a fabric which will reduce sliding after a fall and be water repellent.

(Permission to reprint granted by the *National Safety Council*, a membership organization dedicated to protecting life and promoting health.)



# Smoke Gets in Your E

BOB VAN ELSBERG Managing Editor

h — it was winter again — the third in our first home. Always anxious to entertain, my wife had invited friends over that evening for a Christmas party. As I thought about the evening, it occurred to me what better way to set the mood than to have a nice cozy fire in our fireplace?

I grabbed a load of wood from our back yard and carefully stacked the pieces on the grate inside our fireplace. Carefully aligning the pieces so the fire would burn evenly, I slid a fire starter brick beneath the grate. Remembering how I'd smoked us out of the house last year when I forgot to open the flue, I checked and made sure it was open.

Looking at the clock, I saw our guests were due in 45 minutes. By that time, I figured, I'd have the fire going nicely. I lit the fire starter and watched as the well-seasoned oak caught nicely. All was perfect — for about two minutes. Suddenly, my eyes began watering and I began choking. Also, the ceiling of my front room began to take on the appearance of the LA skyline on a smoggy August afternoon.

Concerned I might have been mistaken about the position of the flue or somehow accidentally closed it, I went to the fireplace and checked it again. Hmmm ... the flue was open, so what could be the problem?

By now my wife had opened all of the front room and dining room windows. All three smoke detectors were raising an earsplitting clatter, sending the family cats into hiding and making me wish I had earplugs. The longer the fire burned, the worse the smoke got. There was nothing left to do but get a bucket of water and douse the flames. I opened our front and back doors and set a large fan in the back door in hopes of drawing out the smoke and silencing the detectors before our guests arrived. No such luck. They stepped in, took one

No such luck. They stepped in, took one whiff, and decided we needed to reschedule our party. Our evening plans had literally gone up in smoke.

As it turned out, the culprit was our chimney. Two years of winter fires —some fueled with less-than-well-seasoned wood — had built up enough creosote to seriously block the chimney. I turned to "C" in the Yellow Pages and found out there really were such things as "Chimney Sweeps." Somehow I'd thought they were just interesting little wood figures with top hats and black coats that we put on our fireplace mantle. We made a phone call and the chimney sweep arrived at the appointed time. He didn't have a top hat or a black coat, but he did have a machine resembling a Roto-Rooter on steroids. He ran the clean-

ing brush up our chimney and we were amazed to see how much soot came out. As we handed him a \$50 check, he smiled and explained *why* you can still find "chimney sweeps" in the phone book. Yes, even in this modern day and age, chimneys still need cleaning.

Eyes.

still need cleaning. Whether you simply enjoy the occasional fire, or use your fireplace to heat your home, here are a few useful tips.

■ Have your chimney inspected by a certified chimney sweep at the start of each heating season. If you typically use the fireplace more than four times per week or use soft or green woods, have your chimney inspected more often.

Keep animals out and sparks in with a chimney screen.

Don't use flammable liquids to light or stoke a fire.

To reduce creosote formation, use wellseasoned hardwoods.

 Never burn paper or pine boughs because burning particles can float out of the chimney and onto the roof.
 Keep flammable items such as papers,

Keep flammable items such as papers, blankets or pillows at least three feet from the fireplace.

Ashes should be removed only in a metal container.

Read the instructions before lighting an artificial log. Used incorrectly, these logs can burn unevenly and release abnormal levels of carbon monoxide.

Don't overload your fireplace. A roaring fireplace can overheat your walls or roof and lead to a roaring inferno.
 Never leave a fire unattended. Make sure

Never leave a fire unattended. Make sure the fire is out before you go to bed or leave the house.

■ To avoid having sparks fly out of the fireplace, use a sturdy screen made of metal or tempered glass.

 Clip branches of overhanging trees back at least 10 feet from the top of the chimney.
 Keep a fire extinguisher handy and know how to use it.

Note: Information for this article provided courtesy of Safety Times.

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BOB VAN ELSBERG Managing Editor

hen I was a kid, my great grandfather's garage Was a place of both wonder and fear. After retiring, he had taken up woodworking in his spare time and rare was the occasion that I could come by without hearing the sound of whirring saws. It was always fun to see the end result: I'll always remember his little windmill-driven woodcutter figure who sawed through a make-believe log. I'll also always remember his table saw. Having a vivid imagination, it didn't take much for me to envision what that whirling blade could do to a finger.

Unfortunately, not all of our Air Force folks have been so fortunate and some can now do fractions on their fingers. Here's one of our more interesting recent examples.

#### A Stidy Situation

Remember the old saying, "The right tool for the right job"? One innovative individual decided to try and cut a two-inch wide roll of heavy-duty masking tape into two one-inch wide rolls by using, as the mishap report said, "equipment primarily set up for woodwork." After trying a band saw, which promptly broke trying to chew its way through the tough, resistant tape, our "creative cutter" hit on a new idea — why not use the table saw? Surely it could make short work of this tenacious tape. We now cut (pardon the pun) to the text of the mishap report.

"WO1 (Worker One — our imaginative blademeister) quickly moved to a nearby table saw and immediately began cutting the roll of tape while OB1 (Not Obi-Wan Kenobi but rather "Observer One" - the person who needed the tape cut) looked on from approximately three feet away. The worker attempted to cut the roll of tape by making a fist with his left hand and using the heel of his left hand to hold the tape in place against the table saw's rip fence. Due to insufficient blade height to cut across the tape's six-inch diameter, the worker used his right hand to reach across the rip fence and roll the tape as it was cut. As he guided the tape over the table saw blade, the blade caught and kicked the tape straight back. The roll of tape kicked back with such speed that momentum caused the worker's left hand to continue movement toward the running saw blade. His hand made brief contact with the table saw's blade (that's gotta hurt!) before he could pull his hand away, causing injury to his left index and middle finger."

This little "slice of hand" left the worker, who had 20 years' experience with power saws, with a severely lacerated middle digit and minus the tip of his index finger. A painful way to be reminded of that old saying, "The right tool for the right job."

Here are some tips designed to keep you from becoming "digitally deficient."

#### Boper Reparation

Tool

• Take the time to read all of the instructions on the proper and safe use of your power tools. If you don't use a tool frequently, review the safety instructions before each use. Follow the maintenance schedule suggested by the manufacturer.

• Plan your power tool projects and think through the moves your hands will make before you make them.

• Select the proper tool for the job and only use accessories made for that tool.

• Do not force a small tool or attachment to do the job of a heavy-duty tool. Makeshift tools can cause accidents.

• Keep all safety guards in place and in proper work-

ing condition.

•Allow ample space in the workshop so that you can work safely.

• Keep your workshop free from clutter.

• Keep your workshop well-lighted.

• Keep children and onlookers out of your work area (granddad hadn't read this one).

• Wear proper protective equipment, including goggles or safety glasses with side shields. Never wear loose clothing or jewelry around power equipment. Use gloves that are job-rated for the kind of work you are doing.

• Clean your hands before using tools so that you can maintain a firm grip.

• Never work when you are tired, distracted or angry.

• If your hands are sore, arthritic or injured, don't use power tools.

• Don't use any tool that is worn or broken.

• Keep your workshop well-ventilated.

• Keep idle tools stored and out of the reach of children.

#### Intre Het of Action

• Don't allow overconfidence or repetitive motions to lull you into being careless. Periodically pause and refocus.

•Maintain good balance and footing. Don't reach over or behind a moving saw blade.

◆ Don't force tools — let them do the work.

• When pushing wood toward a blade, use sticks or blocks to keep your hands away from danger.

• Use clamps or vises to secure the object you are working on.

• Don't touch a blade or drill bit after cutting or drilling. They can be very hot.

• Don't try to catch falling objects. The sudden movement can disrupt your balance.

• Never leave a machine with the motor "coasting."

• Never hurry a job.

• Promptly sweep up all sawdust.

• Don't smoke when working around power tools. Also, avoid drinking alcohol before or during the time you will be working with power tools.

#### Respect the Pover

• Always use a ground fault circuit interrupter (GFCI).

• Ground all of your power tools unless they are clearly marked "double insulated."

• Don't use power tools in wet or damp places. Rubber-soled shoes and heavy rubber mats are good precautions for preventing electric shocks.

• Don't use tools with damaged cords or fitted with improper extension cords.

• Never carry a power tool by its cord or yank the plug from the receptacle.

• Be sure the switch is in the "OFF" position before plugging-in a tool. Keep your finger away from the switch when carrying a plugged-in tool.

◆ Unplug tools when they are not in use or when you are adjusting them or installing accessories. ■

## When Earth Freezes Over an

Courtesy **Ashore** Winter 1999

uring 1997, winter storms dumped more than two feet of "powder" — light, wind-blown snow — on top of the frozen crust of an earlier snow, increasing the risk of avalanches in Oregon's Cascade Mountains. While powder is great for skiing, it also tends to slide across a frozen base. After these storms, forecasters warned skiers, snowboarders and snowmobilers to stay out of backcountry areas. The warnings followed a series of avalanches that killed 12 people in Canada, Montana and Idaho — one of the highest three-day avalanche death tolls in ever in the Northwest.

Right after this warning was issued, two young people died at Sun Valley, Idaho. They started out as a trio — two brothers and a close friend. One of the brothers was on skis and the other two were walking with their snowboards on an old road-cut at the top of the summit. The slope they planned to descend was more than 30 degrees, and the slope above the road cut angled up to a very steep 50 degrees. Five days before this incident, the Sun Valley area had received a foot of new snow, swept by winds of up to 70 mph which increased the chances of an avalanche.

The two people who were killed were walking side by side — rather than one behind the other — when their weight triggered a hard-slab avalanche. (In a hard-slab avalanche the snow slides in one piece rather than starting from a trickle and building.) The slide swept them downhill toward some rocks and trees. It wasn't a big avalanche — just 250 feet long by 250 feet wide — but small avalanches are common and very dangerous. The survivor was on skis and out of the way.

Neither victim was wearing an avalanche transceiver — a device that emits and receives locating signals should the wearer be buried — nor did either have a shovel. Immediate rescue was impossible. The survivor hadn't seen where the avalanche had taken his partners. He went for help to a parking lot at the base of a nearby slope. A passing motorist with a cellular phone stopped and called the authorities. They relayed the message to a ski patrol and a ski-guide service that had a helicopter.

In the meantime, the skier and motorist had driven to a cross-country ski resort at the base of the summit. A group of searchers was hastily formed and rushed to the avalanche site. By then, more than 30 minutes had passed since the victims had been buried.

An hour and 20 minutes after the slide, searchers found the bodies under less than three feet of snow. The two men had asphyxiated. If the trio had invested \$250 apiece in avalanche transceivers and shovels, the two victims might have survived their ordeal.

Mark Moore, director of the U.S. Forest Service's Northwest Weather and Avalanche Center in Washington state, recommends that people who pursue winter sports get avalanche training, carry shovels for digging snow pits to determine avalanche risk, and carry transceivers.

Moore explained that snowmobilers often run the greatest risk of encountering — and causing — avalanches. Because their machines

# and the Bottom Drops Out!

pack, often causing it to give way. Moreover, snowmobilers travel rapidly over large areas that may vary greatly in snow stability, and many snowmobilers don't dig snow pits to examine the snow.

Wind plays a key role in adding danger to certain slopes. High winds load slopes with added surface snow, setting the conditions for the most deadly type of avalanche — the slab avalanche. Unlike a point release avalanche which starts as a trickle, a slab avalanche breaks loose a large, wide section of snot totte leaves the skier twice about descending an open slope after a windy night. The fresh-

Even though most people think of avalanches as starting above the tree line, they can start below it. Just because you're below the tree line, don't let down your guard. Avalanches can happen within clearcuts and barrel into snowmobilers, skiers or snowboarders who are

- crossing roads that wind through heavily-logged areas. Here are some tips to live by (and we mean "live" literally): 1. Never travel in the backcountry alone. 2. Always carry an avalanche transceiver and a shovel. 3. Practice searching for each other's transceiver so that you can feel

  - confident about locating it within in few minutes.
  - Never travel in the backcountry after a storm. Always allow the snow pack to settle for at least 24 hours. This will significantly reduce the avalanche hazard.
    Don't feel obliged to descend a steep, loaded or exposed slope if
  - you aren't sure about its stability.
  - 6. Take a class on snow characteristics.

  - 7. Learn how to dig a snow pit and identify unstable layers.8. Because the first five minutes are the most crucial ones in finding and saving an avalanche victim, the general rule is to never leave the site. If you must go for help, be sure to mentally note or physically mark where you last saw the people in your party. You need to realize that if you do go for help, you will most likely return to recover a body.

Staying alive in the backcountry is an acquired skill, and it takes years to learn the details of avalanche activity. Every time you're out, take the opportunity to learn important details such as: When does the snow fall from the trees? Where do the westerly winds deposit the snow? Where do you most often see avalanche debris?

Many skiers, snowboarders and snowmobilers think the important thing is riding the steepest pitch or getting the freshest line. However, even more important is surviving so that they can do it again and brag to their friends what a rush it was.

Editor's Note: While this article was reprinted from a Navy safety magazine, Air Force personnel have also died in avalanches during recent years. One, an enlisted member stationed in Alaska who was snowmobiling with friends, died when he and his snowmobile were caught in an avalanche. While his friends all escaped the avalanche, it was three days before his body was found. For more information on avalanche safety, visit the National Snow and Ice Data Center's website at: http://nsidc.org/NSIDC/EDUCATIONAL/AVALANCHE/#5

## My FIRST (and I Assu

Courtesy, **ASHORE,** Summer 1999

thought I'd be able to drive home. I convinced myself it wasn't that late; it wasn't far to my house, and I certainly wasn't that drunk. I'd be OK.

I believed this alcohol-induced fairy tale right until a huge blue light filled my rearview mirror. I pulled over to the shoulder and started to open the door when the cruisers' public-announcement system announced in God-like tones, "Stay in the car."

The officer walked up to my car and, standing slightly behind the door, asked for my license and registration. He inspected the documents, shined his flashlight in my face, and asked me to get out of the car. He told me to close my eyes and touch my nose, walk 10 steps heel-to-toe, turn around and come back, and then to recite the alphabet.

I had been relatively calm, but now I started to get nervous. The officer read me my rights, cuffed me and unceremoniously parked me in the back of his cruiser.

I half-sat, half-lay on the cold plastic seat for about a half hour, thinking how I could really use a bathroom right about then. After a tow truck showed up, my car went one way and the officer and I went another.

He took me to a police station where another officer gave me two breath tests for alcohol. The news wasn't good either time. According to the machine, I was drunk. The police photographed and fingerprinted me and confiscated all my personal belongings. What really humiliated me was taking away my shoelaces.

I was put in a holding cell with drug addicts, alcoholics and other assorted petty criminals — enough scary people to last me a lifetime.

Several hours later, I was standing in front of a judge, who asked, "Do you know why you're here?" I responded, "For driving drunk," which, by the way, turned out to be the winning answer. (One of my cellmates told the judge that he had no idea why he was there. He stayed in jail.) The police gave my stuff back to me, plus a citation that said in a month, I'd be losing my license for four months, I had a court date in two weeks, and I would be issued a temporary license so I could drive for 30 days. I also got a receipt for my car. Then they let me go.

It was 0530 on Tuesday, the first day of my DUI. My troubles were just starting.

I was late getting to work that morning and used the excuse that I had car trouble. I figured I would get my car from the impound lot during lunch, but it took more than two hours and cost me \$187. My boss was really mad at me for taking such a long lunch. I told him I was sorry and sensed that from now on, I would be saying that a lot.

I spent all day Saturday at the DMV, applying for a restricted license. It cost \$100 and required proof of insurance. Since the proof had to be a letter from my insurance company, there was no avoiding telling them about my DUI. My premiums immediately jumped from \$1,400 a year to \$4,100.

My restricted license allowed me to drive to and from work and to my DUI classes. (An aside: If you are caught driving anywhere else, they immediately take your car.) The DUI classes lasted 15 weeks and cost \$550. The classes consisted of group and individual counseling and culminated with several personal interviews with the people running the program to see if I had gotten the message. If I hadn't, I would have even more counseling.

Then there was the trial — a criminal trial. This was my first DUI offense, and coupled with my guilty plea, it cost me \$480 in fines, plus another \$816 as a special assessment for the county court system. I was sentenced to 48 hours in jail, which was waived by the judge when I agreed to spend two Saturdays picking up trash along the highway. For the privilege of picking up trash, I had to pay

## sure You, ONLY) DUI!

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#### \$22 a day.

I had to pay the court \$156 for booking me, \$100 for a slush fund for victims of drunk drivers, \$50 for an alcohol-abuse education fund, a dollar fee to support the night court, and another \$20 for two nights of listening to the families of DUI drivers.

Since I didn't have the money to pay the entire fee, I arranged to pay in installments. That cost me another \$35.

Just when I thought I was through with the DMV, I got their bill for \$10 to update my file. They also served me notice that my DUI had cost me two points on my driving records (points that would stay there for seven years), and oh, by the way, I was on probation for three years.

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After all this, my boss told me he thought I should start looking for other career opportunities. I wanted to argue with him, but there wasn't much point to it.

How much did my DUI cost me? My job and fees, fines and assessments that added up to \$5,249, not including the cost of my lawyer. Mine couldn't do much, but she still charged me two thousand bucks. ■



National Highway Traffic Safety Administration Consumer Advisory

he National Highway Traffic Safety Administration (NHTSA) is recommending that owners of vehicles with certain models and sizes of Firestone tires **not already being recalled** by Firestone take a number of actions to assure their safety, based on NHTSA's analysis of Firestone's data.

#### **The Current Recall**

On May 2, 2000, NHTSA opened a defect investigation into approximately 47 million ATX, ATXII, and Wilderness tires manufactured by Bridgestone/Firestone, Inc. (Firestone). On August 9, Firestone announced that it was recalling 14.4 million of the tires under investigation. These included all Firestone ATX and ATXII tires of the P235/75R15 size manufactured since 1991 and all Wilderness AT tires of that same size manufactured at Firestone's Decatur, Ill., plant. Firestone has estimated that about 6.5 million of these tires were still in service as of that date.

#### **Other Tires Failing**

NHTSA has continued its investigation into the remaining tires. As part of that investigation, NHTSA has reviewed data provided by Firestone on property damage claims, personal injury claims, and lawsuits regarding the tires under investigation. Although its investigation is not complete, that review indicated the rate of tread separations for certain other tire models and sizes exceeded those of the recalled tires, sometimes by a large margin. Therefore, NHTSA is concerned about the possible safety risk associated with those tires.

#### **Faulty Tires Not Recalled**

On August 30, 2000, NHTSA staff met with Firestone representatives in Washington and recommended that Firestone expand the recall to include these tire models.

On August 31, Firestone advised NHTSA that it would not voluntarily expand the recall to include these tire models. NHTSA is continuing its investigation, which may result in an order directing Firestone to recall these tires and any other defective tires. However, in view of the potential safety risk, NHTSA believes that it is important to alert the public of its concerns now.

The tire models with the high tread separation rates are set out in the attached chart. A total of approximately 1.4 million of these tires were produced. However, since many of them were manufactured many years ago, it is likely that far fewer are currently on the road. Most of them were sold as replacement equipment and were not installed as original tires on new cars.

Since Firestone has chosen not to expand the recall at this time, you may not be able to obtain free replacement tires from Firestone. However, in the light of these concerns, NHTSA recommends that you consider replacing the tires in question and that you retain all documentation.

#### **Suggested Safety Tips**

If you have one of these tires on your vehicle, you should take the following steps:

- Check your tires to be sure there are no visible signs of a problem.
- Be sure your tires are properly inflated.
- Do not drive at a high rate of speed, particularly in hot weather. If possible, choose roads with relatively slow speed limits.
- Make sure your vehicle is not overloaded.
- Wear your seat belt.

Please be aware that while these precautions are good general guidelines to tire safety, they may not prevent a tire failure.

NHTSA will be moving to rapidly complete its defect investigation into these particular tires as well as the remaining Firestone tires under investigation. If the agency concludes that other tires should be recalled, it will act promptly to assure that the public is protected.

### Thes included in the September 1, 2000 Consumer Advisory

Tire Line	52	Plant Code	Original Installation**
XTX	P209/75R15	٧D	1991 Cherry Blazer
ATX	P225/75R15	HY	
ATX	36-9.50915LT	VD	
XTX	31x10.50R15LT	YD	1991-94 Nisson Pickup
ATX	32±11.50R15LT	VD	
XTX	31x10,50R16,5LT	٧D	
ATX	33x12.50R16.5LT	VD	
Firehawik ATX	27±8.50814LT	VD	
Finitumic ATX	235/75815*	YD	
Firebank ATX	30-9.50R15LT	VD	
Finihanik ATX	31x10,50R15LT	٧D	
Finhanik ATX	32x11.50R15LT	VD	
Firehawik ATX	39/12.50R15LT	VD	
Finishing ATX	263/75R16LT	YD	
Firehenik ATX	255/85R16LT	VD	
Finihands ATX	31x10.50R16_5LT	٧D	
Finhasis ATX	33x12.50R16.5LT	VD	
ATX 23 Degree	31x10.50R15LT	VD	
ATX 23 Degree	33x12.50R16.5LT	YD	
Webstrack Radial Baja	7225/75815	HY	
Widetrack Radial Baja A/S	32x11,50R15LT	٧D	
Wildercom AT	2235/70R16	W2	1996-98 Ford F-150
Wildemsee AT	39-12.50R16.5LT	VD	
Wildemann HT	P255/70R15	٧D	

\* Firestone lists this model as a LPT235/75R15.

**\*\*** Only some of the listed models had these tires installed as original equipment.

The majority of the tires listed above were sold as replacements in the aftermarket mostly for light trucks and SUVs. In the right column are vehicles upon which the tires were originally installed by the vehicle manufacturer when new.

#### **Identify Your Tires**

**A.** First you need to read the model name off the sidewall of your tire and verify that it's one on the above list. Once you establish that you have one of the models listed above, you need to check the tire size and verify it's on the list. The tire size is located on both sides of the tire in raised letters. The tire size should be one of the sizes listed above.

**B.** Next, you need to locate the DOT code to determine where your tire was built (which plant). The DOT num-

ber is located on the blackwall side of the tire under the "F" in Firestone and is 10 characters long and starts with the letters "DOT." Since this code is on the blackwall side of the tire, you may need to crawl underneath your vehicle with a flashlight to find the code. There may be spaces between some of the numbers, but be sure to count all 10 characters to ensure you have found the proper code. Examples include:

#### DOT VDHL1PM046 DOT W2HL1M0470 DOT VDHLA16089

The first two letters are the DOT plant code (see third column from the left in the chart). If the first two letters of the DOT code are VD, HY, or W2 and you have the tire model and size shown in the chart, then your tires are on the consumer advisory list. ■

Note: If you would like additional information, you can visit the NHTSA website at www.nhtsa.dot.gov.

### FY2000 Ground Mishap Wrap-Up

was not a record-setting year in the Air Force as far as ground safety mishaps. During fiscal year 2000, we lost 56 airmen and one civilian

worker to tragic accidents. Each year we tally our losses and publish them, just as we have done for the past 53 years. And while you may initially feel that we failed this year because we didn't reduce the number of mishaps compared to last year, I don't see it that way. I believe our efforts to help people have safe and healthy working environments by managing risks and acting responsibly have been highly effective.

How effective have we been? Looking at the big picture, we've come a *long way* from the more than 800 fatalities we had each year during the 1950s to the 57 fatalities we had this year. You can see the trend by looking at our fatality numbers for the past two years; 51 fatalities during 1999 and 50 during 1998. The bar chart

### Active Duty & Civilian Employee Ground Mishap Fatalities



above shows a comparison, by decades, of the number of fatalities we've had.

1950s — 7,793 1960s — 5,335 1970s — 3,302 1980s — 2,059 1990s — 799

During the past five decades, the Air Force military and civilian population has shrunk 46 percent. Taking that into account and comparing the actual mishap rates, you can see that Air Force personnel were up to *five times* more likely to die from accidents during the decades preceding the 1990s.

Regardless of the past, today we live in a world of congested highways and are presented with greater opportunities to engage in sports and recreational activities. Also, we've been influenced by the media's "just do it" example. Nonetheless, today's risks have been studied and are clearly defined. No one should be able to say they didn't know about the risks of a given activity or the precautions they should use.

Now that we've seen where we've come from and how we're now faced with different types and levels of hazards, let's look at how our 57 people lost their lives this year.

Although we had only six onduty fatalities, even one is too many. Our first fatality was an officer who was traveling to a TDY location in a rental vehicle. He was speeding and rear-ended a tractortrailer. Our second fatality was a female airman who was following another government vehicle too closely. When she encountered a minor road hazard she reacted inappropriately, locking the brakes and rolling the vehicle. Our third fatality was a seasoned security forces member. While directing traffic, he was struck by an impatient civilian driver who decided to pass stopped traffic by using the center turn lane. Our fourth on-duty loss was a civilian employee who lost his grip and his balance while exiting a C-5 and fell onto the ramp.

Our fifth fatality was an airman who lost control of the tow truck he was driving when it blew a tire and rolled over. The final on-duty fatality was a senior NCO who was dismantling an old wooden building. During the process, the building became unstable and collapsed upon him.

Taking a look at the off-duty mishaps, we had 51 fatalities this year. Of those, 36 involved vehicle operations and 15 were recreationrelated.

continued on next page



Of the 26 four-wheel deaths, 11 of the victims weren't wearing their seat belts. One of the victims was home on leave when he died in a crash on Christmas Day, another died while driving home in heavy traffic after work. Another airman who'd been drinking heavily died when he tried to hurry back and beat the curfew at his technical school. Other fatalities included a driver who lost control on an icy road, another who sped over a railroad crossing, another who ran into a bulldozer at a roadway work site, and an airman who fell out of the back of a pickup truck. While these aren't all of our vehicle fatalities, they do demonstrate that whether you are going home after work or on leave 2,000 miles from home, driving demands your COM-PLETE attention!

As always, the single most frequent cause of death for Air Force people is motor vehicle operations. Those who believe that driving offensively is the key to survival on our highways need to understand that their aggressiveness **causes** accidents. By contrast, defensive drivers help prevent accidents by choosing to back off and avoid creating volatile situations.

We had a number of motorcycle mishaps, eight of which resulted in fatalities. These fatalities were caused when riders sped, other vehicle drivers failed to yield right of way, and when riders exceeded their motorcycle's ability to handle road conditions.

We jumped from three sports and recreational fatalities during fiscal year 1999 to 15 this year. Included in this rise were nine drownings and three parachuting fatalities. Our drownings included victims who were canoeing, snorkeling, swimming, wading, and scuba diving. One victim was swimming too close to the top of a waterfall while another drowned while scuba diving in an abandoned mine. One airman died while simply wading across a section of water to get to a better area for rock climbing.

Our other recreation-related fatalities included a novice bull rider in an amateur rodeo, an airman who was accidentally shot while hunting, and another hunter who lost control of his three-wheel ATV.

One of the greatest concerns within the Air Force safety community is the possibility of a "leveling-off" in the prevention of off-duty fatal mishaps. The lower the numbers and fiscal years 1998 through 2000 have been our three lowest in history — the more aggressive and direct we must be with our mishap prevention programs. The only way we will ever have a year without a fatal mishap is if every Air Force member actively supports the safety program. For example, when you see someone not wearing a seat belt, take the time to express your concern to that person. Or, if you notice one of your workers has a "lead foot," counsel them on the risks of speeding and use real examples to drive home the message. If you hear a coworker is going on a fishing trip, take the time to talk to your shop about controlling the risks in off-duty activities. By caring about one another, airmen can make off-duty safety more than just the responsibility of unit and shop safety personnel.

To reduce mishaps on and off-duty, safety must be a process you buy into within your office or shop. If you see educating people about safety and following the safety regulations as something you're **forced** to do, you're already at increased risk.

Sometimes smaller is better. Discussing safety within a small group has a greater impact than addressing a larger, sometimes indifferent, audience.

We can have a "zero fatality" year if we all choose to apply ORM. We can make the choice to automatically assess the risks, apply reasonable controls, and act to protect ourselves and those around us. ■



Do you really need more proof that drinking impairs your judgement?



Do you really need more proof that drinking impairs your judgement?

Mothers Against Drunk Driving