

### Your Choice, Their Life

Five Fundamental Questions About Vehicle Accidents

Empowered Airmen, Courageous Leadership Create Safety Success

Back Health: You Can Make a Difference



The United States Air Force Journal of Aviation, Ground, Space and Weapons Safety

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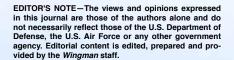
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Wingman 🗑 Ground Safety Special Edition 2012



This Special Edition of *Wingman* is all about you! We are launching the "Quest for Zero" preventable on-duty fatalities.

The following thought-provoking articles are intended to generate discussion amongst your leaders and fellow Airmen. I've personally spoken to thousands of Airmen who understand the magnitude of conducting safe operations. The Air Force has placed a tremendous amount of responsibility and trust in us and it's our duty to ensure we execute the mission safely.

If we are to succeed in our "Quest for Zero" preventable on-duty fatalities, we must identify those risky behaviors that cripple

### "The Quest for Zero"

MAJ. GEN. GREG FEEST Air Force Chief of Safety and Commander, Air Force Safety Center Kirtland AFB, N.M.

our mission and unfortunately lead to the loss of life. Overconfidence, complacency, distractions and lack of planning are a few examples of risky behaviors that affect our Airmen both on and off duty. Take the time to identify risky behaviors within your organization and develop ways to mitigate the threat.

The bottom line — safety is everyone's responsibility, regardless if we're on or off duty. All Airmen have control and authority over their decisions and actions. If something doesn't seem right or safe, it probably isn't. I urge you to be ever vigilant and a good wingman.

Be a wingman, make the right decisions and help our "Quest for Zero" preventable on-duty fatalities. We are counting on you and, as always — Safety is NO Accident! ★★



### "Habits formed off duty eventually impact performance on duty."

SAFET

BILL PARSONS Air Force Chief of Ground Safety Air Force Safety Center Kirtland AFB, N.M.

Welcome to the *Wingman* Ground Safety Special Edition 2012.

The focus of this special edition is zero on-duty preventable fatalities — the "Quest for Zero." In truth, we always have a Quest for Zero mission. It is, and always should be, our pursuit. Even if we suffer an always-tragic fatality, we strive to prevent another from happening. One life lost is one life too many.

It's especially tough and tragic if it was preventable ... and most are preventable.

With the special focus on on-duty preventable fatalities, we also need to look at off-duty behaviors. This is important because habits formed off duty eventually impact performance on duty. None of us lives in a bubble, so it's unreasonable to think we can be complacent off duty and then be hyper-vigilant on duty. Human beings deserve more respect than that and so does safety.

We at the Safety Center are always here to actively

S. Air Force graphic by Dan Harman

support and educate safety professionals and all Airmen to accomplish the mission and preserve combat capability. That's our mission — get the job done and preserve our health. Always has been, always will be.

We thank the overwhelming majority who vigilantly keep safety in the forefront while completing the mission. Mission accomplishment and safety go hand in hand. There's always a smarter way to get the mission done with better awareness and risk management.

I personally thank Sharon Rogers, Brian Raphael and the staff of the Media Outreach Branch for their hard work and dedication to educating our Airmen, civilian and contractor employees by producing this edition of *Wingman*.

I hope you enjoy this special edition. We take great care and pride in sharing the stories in this issue from members across the Air Force and the Quest for Zero vision.

Remember, what you think is important to us. Please provide your input to <u>afsc.seg3@kirtland.af.mil</u>. Have a safe spring and remember: Safety is NO Accident!

## Your Choice, Their Life

#### SENIOR AIRMAN CALEB ZODY

366th Aircraft Maintenance Squadron Mountain Home AFB, Idaho

I was driving one of my best friends to pick up her twin sister in Boise, Idaho. Because my friend worked mids and I worked swings, I volunteered to drive so she wouldn't have to drive when she was already tired.

We got there with no problem and picked up her sister. On our way back, I was preoccupied with my phone and wasn't paying attention to the road. At about a mile past the first exit to Mountain Home AFB, I was so caught up in texting that my car started to drift from the left lane of the interstate onto the median. My friend noticed and tried to regain control of the car from the passenger's seat. By the time I realized what was happening, it was too late. My car shot back across both lanes and onto the right shoulder where it rolled three times.

My friend's sister wasn't wearing her seat belt and was ejected from the car. I had a major concussion and don't remember many details. What I do remember is screaming and sobbing and trying to apologize to my friend and her telling me that it was OK and that everything would be fine.

I had to be cut out of my car. I was told later that on-scene I had been given a 15 percent chance to live. My friend's sister and I were transported to Boise via helicopter. I had four inches of muscle stitched together and stuffed back into my left arm, and I had stitches and staples in multiple locations in my head. I was

U.S. Air Force photos by Keith Wright Photo illustration by Dan Harman

stabilized by the time we reached the hospital, but my friend's sister was taken off of life support the next day and died. My friend had minor injuries and was transported to Mountain Home.

After the wreck, I suffered from major depression and struggled with the consequences of my actions. It was then that I got a small taste of the importance of faith. If it wasn't for my faith, I wouldn't even be able to function. I also had very close friends who were there for me every step of the way. One of the biggest reasons I couldn't give up and quit was because I knew my friend's family had gone through much more than I had, and they hadn't given up. It left me no excuse.

The wreck happened on Sept. 16, 2009, and I was charged in early December with misdemeanor vehicular manslaughter. My friend wrote in the accident report that she tried to correct the car, so a plea bargain was formed for reckless driving. Her family signed off on the plea, and I served five days in county jail. I got 165 days of suspended sentence and 18 months of unsupervised probation. I also had to complete 150 hours of community service, which was to be completed through giving speeches about my wreck, within the first 12 months.

If I had only paid attention to driving, my friend would still be in the Air Force and her sister would still be alive. I made a dumb choice and put my own interests ahead of my job. When we get behind the wheel, we automatically take responsibility for the safety of our passengers to the very best of our ability. If we choose



to put ourselves before others, we fail. There is no excuse for treating life so casually.

I hope everyone who reads this will take my story to heart. We'll get phone calls and messages while we're driving; it's a fact of life. We then have the choice to make the right decision or the wrong one. I don't want anyone else to have to go through what I've gone through. More importantly, I don't want anyone to go through what that family went through.

Photo courtesy of Mountain Home News staff

Through my shortsightedness, I took away a daughter, a friend, a sister, an amazing young woman who had so much life left to live. Please don't make the same mistakes I made. If you read this and ignore the message — don't text while driving — you may as well spit on her grave.

Through all this, my faith has been the one constant. Without faith, I wouldn't have survived. I hope everyone can learn from my mistakes.



U.S. Air Force photo by Keith Wright



VINCE DOTSON Air Force Research Lab Wright Patterson AFB, Ohio

ommanders, what do you and your supervisors do on a daily basis to prevent a mishap? Prior to any mishap occurring, how have you identified risks and intervened in the lives of your Airmen to reduce necessary risk and eliminate unnecessary risks on and off duty?

Safety is not something the Air Force only does, it's what we are. Whether your unit's mission is to fly or train combat-ready Airmen, safety is no less important than proficiency in accomplishing your mission and meeting the commander's intent. In fact, safety is arguably more important because it enables us to *Fly*, *Fight, and Win* effectively, as part of the joint team. Air Force Chief of Staff Gen. Norton Schwartz stated, "Peerless precision and reliability are our non-negotiable commitments." Safety is also non-negotiable and as much a part of our Air Force culture.

Safety is a commander's program. A brief review of safety Air Force instructions makes this abundantly clear. The AFIs make clear that functional managers and supervisors are also responsible and accountable for a unit's mishap prevention program. This is an extraordinary task, and the role is sometimes misunderstood. So what makes a good safety program? Consider your safety program consisting of two general areas: **compliance** and **culture**, both designed for the prevention of mishaps and are co-dependent.

Compliance is the management and programmatic element of each of your unit's mishap prevention plans. This is the part of safety that we do. It comprises the programs, hazard abatement, training, self-inspections, rules and regulations that govern safety and requires compliance. In short, it's your books. This is where your unit safety representative acts as your principal assistant on safety issues. USRs are trained and knowledgeable in applicable Department of Defense, Air Force and other federal standards as they relate to your unit's disciplines. Your USR should ensure you color all the necessary areas and make sure you remain within the lines.

While the USR is generally considered an additional duty, bear in mind he or she acts on your behalf to ensure the commander's mishap prevention and safety program meets all requirements. So, you think, "I'm in compliance with all requirements and my books look good. My safety program and mishap prevention plan must be good, too." Only in part — too often commanders erroneously rely entirely on the USR for their safety program. It's your program; compliance and your USR only lay the foundation for where you really make a difference in mishap prevention.

Culture, however, is who we are. Unit safety culture is apparent through your practices, attitude toward compliance, identification and reduction of risk, to name a few. Remember, safety is the commander's program and applies both on and off duty. The commander establishes this culture. Your functional managers and supervisors are also accountable for unity of effort in establishing and maintaining your unit's safety culture. Admittedly, defining and recognizing a robust unit safety culture is challenging, but it's easily recognized when a unit doesn't have one. Commanders and supervisors often don't act until it's too late.

It's inconceivable in some squadrons to think you can know every detail about each and every task all the time. But you're responsible for knowing, especially when it comes to the assumption and reduction of risk. This is where supervisors and functional managers must be charged to act on your behalf to maintain and enforce your established culture of safety — gain, through practices, an attitude toward compliance and identification and reduction of risk. You and your supervisors must identify and eliminate all unnecessary risk. You must identify and reduce necessary risk, where and when able, commensurate with accomplishing your mission.

You must also assume accountability for those risks (all of them) accepted to meet mission requirements. This is the foundation for your safety culture; this will define who you are and what's acceptable with regard to safety. One of the first tasks a commander performs is to identify the unit's mission and implement intent. Establishing your safety culture should be an integral part of your unit's mission and intent. If you haven't done so, ask your supervisors to tell you who they are as it relates to your culture of safety. Tell your supervisors about who you are as it relates to your culture of safety. After you have established your safety culture, you and your supervisors must set the example and be held accountable (on and off duty) for conduct, practices, attitude toward compliance, identification and risk reduction in conjunction with your established safety culture.

Be deliberate and identify those activities and Airmen at risk and why. Now, ask yourself, "Which risks am I willing to assume responsibility and accountability for?" The easy kills are activities that pose unnecessary risk. Eliminate them! How to reduce necessary risk is a little more challenging. That's where compliance with safety programs helps guide you, the commander. Even more challenging is the risk Airmen present to your culture of safety.

# COMMANDERS

Your supervisors should be familiar with Airmen displaying high-risk behaviors, attitudes and lifestyles. You and your supervisors should intervene on the spot where and when appropriate. It's your program. With unity of effort from your supervisors, you can certainly shape the future of those under your command. Start by understanding your Airmen and their activities on and off duty. It's a 24/7 re-enforcement of practices, attitudes and expectations derived from your culture of safety. It's attitude as much as action. In short, it's you and your supervisors knowing your people. Mishap indicators are typically always there, in one form or another. Sometimes putting the subtle pieces together is the biggest challenge.

Communicate with your supervisors, exchange notes, thoughts and recommendations. It's your program. Remember, with your safety culture, it's the preventable mishaps, the behavior, the unnecessary risks and the mishap chain of events that you're trying to identify, predict and shape! Remember, this is your command, your safety program and these are your risks you're trying to mitigate. You must be proactive and directive. You and your supervisors generally know what's most appropriate.

Obviously, risk doesn't only apply to on-duty tasks conducted to meet the mission. Think of risks in broader terms. Everything we do requires an actor and an act. For you, the actors are your Airmen, and the act can be any on- or off-duty actions. So think of your risks as Airmen and activities. At the core of nearly every Air Force mishap, an Airman is involved to one degree or another, and an activity was being, or not being, conducted. It also goes without saying, every job well done, every save, every success, every mission accomplished, has your Airmen at its core.

I began this call by asking, "What do you and your supervisors do on a daily basis to prevent a mishap?" It's a simple question, but imagine an Airman in your unit died in a mishap. As the commander, you most likely will get asked these same questions by the commander of your major command during a fatality brief. Can you answer without question that you've complied with all your program requirements and have a 24/7 unit safety culture in terms of practices, attitude toward compliance, identification, mentorship and reduction of risk prior to the mishap? Safety and risk management within a unit is nothing more than a reflection of how its leadership views them. Are you viewing safety and risk management as top priorities in your unit? If not, it may be time for a culture and compliance adjustment.



Safety offices at all levels of command continue to find innovative and effective approaches to meet the Air Force safety mission. Below, previous ground safety award winners share their success stories and highlights that describe how they used new ideas, processes or programs, or revised existing ones, to decrease ground safety mishap rates.

#### **Category I: Large Operations/Industrial Organization**

For the fourth straight year, the Air Force Flight Test Center had zero Class A ground fatalities or property damage and decreased its Class B ground mishaps by 100 percent. In fiscal 2010, officials aggressively collaborated with unit ground safety representatives, ensuring safety inspections and briefs were 100 percent completed. Additionally, they implemented the Occupational Safety and Health Administration's 10-hour course on hazard recognition and mitigation. (Read more about the AFFTC's safety program on page 21.)

#### **Category II: Large/Composite Wing Organization**

A reduction in off-duty fatalities from nine during the previous two years to zero in 2010 garnered an award for the 1st Special Operations Wing, Hurlburt Field, Fla. The wing's world-class safety education programs trained more than 2,500 base people in myriad supervisory, motorcycle and traffic safety subjects. In addition, safety personnel supported safety programs and investigations in five countries, including the only U.S. military ground safety involvement during humanitarian relief operations in the earthquake-damaged country of Haiti. (Read more about the 1 SOW's safety program on page 18.)

#### **Category III: Small Wing Organization**

The 65th Air Base Wing, Lajes Field, Portugal, was recognized for tenacious adherence to safety standards and vigorous education efforts resulting in a 34 percent decrease in ground mishap rates from Oct. 1, 2009, to Sept. 30, 2010. The wing's intense focus on driving safety resulted in zero vehicle mishaps for the second year in a row. Additionally, by conducting multiple motorcycle rider safety courses and annual local conditions motorcycle refresher training courses, the wing reduced motorcycle mishaps by 100 percent. The wing also revamped a failing confined-spaces program through the identification, inspection and certification of more than 1,100 undocumented locations in record time.

#### Category IV: Associate/Tenant Organization, FOA or DRU

A proactive safety program initiated by the 388th Fighter Wing, Hill Air Force Base, Utah, resulted in a 38 percent decrease in lost-time military mishaps in fiscal 2009. The ground safety staff overhauled the wing's safety program to match its diverse mission. Results of the ground safety efforts included: 50 percent reduction in off-duty reportable mishaps, 59 percent decrease in sports and recreation injuries and 20 percent decrease in private motor vehicle incidents. Officials managed a high-impact Critical Days of Summer campaign, resulting in a 66 percent decrease in summer-linked mishaps. The wing required all motorcycle rider information to be entered in the Motorcycle Unit Safety Tracking Tool for exceptional program management and placed high emphasis on motorcycle safety classes that resulted in a 66 percent decrease in reportable motorcycle mishaps.



#### **Category V: Geographically Separated Unit Organization**

The 724th Air Mobility Squadron, Aviano Air Base, Italy, provided unparalleled safety program management as it loaded more than 27,800 passengers and 5,200 tons of cargo on 642 aircraft with zero reportable mishaps. Additionally, the squadron garnered an "Excellent" rating during its annual wing fire, weapons and ground safety inspection and was benchmarked for its fire extinguisher tracking system. Lastly, the squadron displayed keen operational risk management during its major relocation and operated in and around an industrial area incident free.

#### The Safety Career Professional of the Year Award

#### **Clifford D. Tebbe**

Clifford D. Tebbe coordinated all facets of the U.S. Air Force Academy's ground safety program. He was the architect of the "Fatal Five" traffic safety information and awareness campaign. The campaign outlined the five common causes of motor vehicle deaths and was named a "Best Practice" by the Air Force Safety Center. This resulted in zero Academy fatalities in fiscal 2010. Tebbe was a critical member of the Chief of Staff of the Air Force-directed Risk Management Working Group and authored a Headquarters Air Force-level checklist. Additionally, he was a key contributor in developing the Air Force Real-Time Risk Management Process, the first application of risk management to off-duty decisions. Finally, he collaborated with the El Paso County Department of Health and Environment to create a motorcycle safety media campaign that resulted in a \$37,000 grant from the Colorado Department of Transportation. Tebbe's superior accomplishments resulted in increased safety awareness. (Read more about the "Fatal Five" on page 16.)

#### Col. Will L. Tubbs Memorial Award for Ground Safety

#### **Category I**

Fiscal 2010 was the safest year in Air Education and Training Command in five decades. The command suffered no fatalities during the Critical Days of Summer and, for the fifth consecutive year, the command had a fatality-free winter holiday season with more than 7,000 technical training students on leave during the period. (Read more about AETC's safety program on page 20.)

#### **Category II**

The U.S. Air Force Academy's aggressive safety program focused on mission success and mishap prevention. These efforts resulted in zero Class A or B mishaps for four consecutive summers. The Academy experienced zero reportable injuries on 492 Air Expeditionary Force deployments; these included 477 personnel who supported U.S. Central Command, plus 100 cadets to Qatar, United Arab Emirates and Kuwait. In addition, the Academy's overhaul of the mishap review panel reduced open recommendations by 92 percent from 72 in fiscal 2009 to six in fiscal 2010.

# **Rental Car Safety Tips**

#### ANONYMOUS

When we go on vacation or TDY we often want a rental car that's different from what we normally drive. But, do we think about the dangers of driving a strange car, such as blind spots, handling capabilities and even our driving skills? Many of us



normally drive an SUV, mini-van or four-door sedan and want to rent a sports car or an exciting vehicle to see how it drives.

When we get to the rental car, we usually check it over for dings, scratches or imperfections, then hop in, and off we go. Do you adjust the mirrors and check blind spots? Are the seats and the pedals adjusted properly? What about the height lever for the seat belt? How about the brakes? Do you check how the brake sensitivity for stopping compares to your car? Your car may have an anti-lock braking system and the rental vehicle doesn't, or vice versa. Will you be able to brake in time to stop safely?

The horsepower of the rental car is also important. Is it equal to what you normally drive, or is it a step up, and can you handle it? When we step on the gas, do





we have that extra get up and go? If so, gauge the pressure needed on the gas pedal before you enter traffic. Don't forget about the steering. Some cars don't require much movement in the steering wheel to change lanes.

How many of us have gotten into our rental car and had to multi-task? In addition to driving, we monitor a navigation system. This is just as dangerous as driving and using a cell phone or other distractions. How many times have we gone to the gas station to fill up and forgotten to check where the gas cap is? (You can usually find it by looking at the arrow next to the gas gauge on the dashboard.)

I'm sure many of us have had near misses with a rental car that made us think twice afterward. It only takes a second to become a mishap statistic. When you rent your next car, take the same amount of time it takes for the walk-around inspection to ensure everything is checked and marked off. If you apply this same level of diligence, you'll likely enjoy your rental car more and live to tell about your vacation or TDY.

U.S. Air Force photos by Dennis Spotts Photo Illustration by Dennis Spotts and Dan Harman

### Lack of Consequences Can Lead to Unacceptable Patterns

#### **ROBBIE B. BOGARD** Headquarters Air Education and Training Command Randolph AFB, Texas

During work-related mishap investigations, investigators sometimes uncover a poor safety culture. This poor safety culture allows for shortcuts to occur, safety rules to be violated and complacency toward safe work behaviors to set in. No organization starts with a poor safety culture, so how does it happen? The following true-life scenario, although off duty, might help us understand how poor safety cultures are created at work.

As I drove home from work one night, I was behind a Chevy Suburban that was weaving all over the road. I pulled up behind the Suburban at a red light and noticed the reflection of the driver's

face in her mirror. What I saw was a young lady looking down into her lap, apparently either reading or sending a text or email on her smart phone. As the traffic took off, the reflection in the mirror indicated her gaze remained focused in her lap with an occasional glance up into the traffic environment.

We then stopped for another red light where she continued texting. When the car in the lane beside her started to move after the light changed to green, she quickly took off and nearly rear-ended the car in front of her. She slammed on her brakes, just barely stopping before rear-ending the car in front. The weaving returned as she started moving again. Apparently, her close call at the red light was merely a momentary distraction to her texting.

We can only imagine the very first time she texted while driving. She probably thought it was a bad idea, but she got away with it and, since there were no negative consequences, it turned the experience into positive feedback. This probably reinforced in her mind that it's OK to text. She may have even thought that she was making the best use of her time by multitasking while driving.

Most people, on and off duty, are aware of safety policies, rules and instructions, but — due to time constraints, pressure, laziness and lackadaisical attitudes — decide to deviate from established policies and guidelines. Just as the young lady mentioned above got away with her risky behavior, sometimes

our workers do, too. When they get away with the risky behaviors, it becomes an accepted behavior without negative consequences. These consequences result in positive feedback that the negative behavior seems acceptable.

Regardless of our position in the Air Force, we all need to stress the dangers of accepting risk. Just because you get away with a safety violation even once, it's still unacceptable behavior in our Air Force's safety culture, on or off duty. We need to strive to make our on-duty safety culture the best that it can be.



# Situational Awareness

# NOT JUST ON DUTY

#### MASTER SGT. DAVID HOLZER

31st Test and Evaluation Squadron Edwards AFB, Calif.

When you hear the phrase "situational awareness," it might create a vision of a pilot maneuvering an aircraft through a series of twists and turns to gain an advantage on the enemy. The pilot's ultimate goal is to be fully aware of the environment while monitoring any aspect that might place him or his crew in jeopardy or compromise mission safety. I recently reaffirmed that situational awareness applies not only to a pilot but is part of our everyday survival and is a crucial element of our overall safety. This is a story about how maintaining situational awareness helped alter the outcome of an automobile accident.

It was just another mid-summer afternoon in Southern California. The weather was almost perfect, mid-90s, in the middle of the Mojave Desert. An associate and I were driving into town after washing my car and changing the oil. While traveling down a four-lane road, approximately two miles from my home, we approached a stop sign where a fairly large truck was stopped in front of me. While we were slowing to a stop, I glanced in the rearview mirror and saw a car coming from behind. I checked the front again to ensure that I had enough stopping distance and then glanced in the rear view mirror once again to discover that the approaching car was NOT SLOWING DOWN! I immediately looked at the lane to the left and noticed it was empty. At that time, I decided I had no other option but to step on the accelerator and turn hard left to avoid being struck from behind by the approaching vehicle and being pinned against the truck in front.

The car approaching from behind struck the right rear end of my car as I was moving my vehicle into the left lane. The impact was enough to push

I checked the front again to ensure that I had enough stopping distance and then glanced in the rearview mirror once again to discover that the approaching car was NOT SLOWING DOWN! TS ARE CLOSER THAN THEY APPEAR

U.S Air Force photos Photo illustration by Dan Harman

my passenger and me hard against the backs of our seats. When my car came to a stop, the front was positioned approximately halfway past the truck that was stopped in front of us. My passenger and I got out of the car to check the occupants of the vehicle that just hit us. Luckily, the young lady driving the car and her two children were not injured.

The police arrived on the scene and collected information for the accident report. I reflected on what had just occurred and concluded the outcome could've been much worse had we not taken evasive action to avoid the collision.

I try to maintain a high level of situational awareness when I'm driving. Like a pilot, I keep eyes open and stay vigilant for things that might jeopardize my crew's safety. Having this situational awareness was instrumental in my ability to execute the evasive maneuver which prevented a major accident and multiple injuries. I was able to recognize an escape route and avoid the full impact of the car approaching from behind by understanding my environment and using situational Having this situational awareness was instrumental in my ability to execute the evasive maneuver which prevented a major accident and multiple injuries.

awareness. Fortunately we all walked away with only minor injuries. Without situational awareness, I would've remained in the right lane and the impact would have pushed my car into and under the truck in front, resulting in severe injuries or even death.

Even before my accident, I always tried to ensure I was aware of my surroundings. I still try to predict the actions of those who share the road with me and make escape plans based on my perception of what they might do next. I never really thought these actions would prevent a major accident with multiple injuries, but it did on this day.

# FIVE FUNDAMENTAL VEHICLE ACCIDENTS

**CLIFF TEBBE** U.S. Air Force Academy Colorado Springs, Colo.

reventing motor vehicle accidents comes down to one thing — YOU! Take a few minutes to think about the amazing advances in vehicle and highway safety over the last three to four decades: safety glass, crumple zones, seat belts, anti-lock

brakes, traction control, side impact air bags, and the list goes on. Highway safety engineers have brought us safer travel routes, properly contoured barriers, breakaway road signs, better surfaces, etc. We've reaped amazing benefits from government and industry safety standards, crash testing, causation studies and an understanding of human factors. I'll focus on the last subject — the person behind the wheel.

Did you know that motor vehicle mishaps are the No. 1 killer of our Airmen? So who's at risk? You are! The numbers don't lie. Our Air Force lost 656 Airmen in fatal mishaps in the last 10 years. Of those, 536 (82 percent) were the result of motor vehicle mishaps.

> Don't stop reading if you're outside that broad group because

Q: What is the primary cause of motor vehicle crashes? A: An interaction of factors.

- Q: What is a good driver/rider?
- A: One who reduces the factors he contributes.

**Q: What is the primary challenge in safe, responsible driving/** riding?

A: Controlling personal behaviors to operate within personal and situational limits.

# QUESTIONS ABOUT



no one is immune. We pretty much know the who, what, when, where and how of the statistics. The specifics regarding why are more elusive but, broadly stated, they are based on poor judgment. This gives us a roughlydefined target on which to focus our efforts.

So what are our countermeasures to protect you? What is your Air Force doing about it?

Traditional models follow something like the 3-E model of engineering, education and enforcement. Springboarding off such models, the Air Force established several countermeasures: policy, education, training, and information and awareness campaigns. The goal of these efforts is to impart knowledge, skills and values and to make it personal and focus on individual responsibility.

It should be no surprise that I'm coming full circle back to YOU! All the engineering, safety devices, education,

training and briefings will be for naught without the critical ingredient of YOU. You must put them to use. You must identify, analyze and control the risk.

To help you put this into something fairly concise, I pose five fundamental questions below.

No doubt you will identify the central theme of the questions below — they all revolve around YOU. It's up to you to make the right choices on and off duty. We simply can't succeed without you.

Q: How do good drivers/riders reduce risk? A: They acquire and implement a driving strategy that uses knowledge gained from personal experience and formal traffic safety courses such as the Motorcycle Safety Foundation's Scan, Evaluate, Execute or the National Safety Council's Recognize the Hazard, Understand the Defense, Act Correctly in Time.

Q: How long does it take to reduce risk? A: It's a decision away.



**KEVIN L. ENNIS** 1st Special Operations Wing Hurlburt Field, Fla.

Easy answers often escape us when it comes to keeping Airmen safe. Each loss is usually a preventable tragedy. This is particularly true when we consider the time involved, energy spent and programs in place to prevent mishaps and save lives. How is it that, despite our best efforts, mishaps continue to occur? What undermines our best efforts? What's the key to a successful safety program? The answers consist of two items: empowered Airmen and courageous leadership. As the U.S. Air Force continues to reduce in size, each and every Airman becomes exponentially more valuable. No longer can airmen first class or second lieutenants think that they're the new guy and that their thoughts and observations aren't critically valued.

The 1st Special Operations Wing at Hurlburt Field, Fla., owns, operates and maintains 10 distinctly different aircraft. The wing is constantly engaged in highrisk combat operations, conducting around-the-clock operations. At any given time, approximately 25 percent of our force is deployed to more than 30 countries while remaining capable of responding anywhere in the world with very little notice. Even with this tempo, the wing's on-duty ground mishap record is commendable.



Mishap prevention begins with understanding the mission. The 1 SOW offers every Airman the opportunity to attend the Introduction to Special Operations course. This course educates our Airmen about the importance of our mission. Whether you work in the medical group, maintenance, support or operations group, every Airman is critically important. This education is often the first step to creating self-motivated, individual thinkers who gain an understanding of the importance of their well-being.

The different programs, documents, standards, rules and equipment aimed at promoting mishap prevention and keeping Airmen safe are all for naught if supervisors don't train employees, or leaders fail to demand safety performance. From the wing commander down, the 1 SOW is explicit in its safety expectations. Past safety success was largely the result of each individual striving to do the right thing.

Many young Airmen, enlisted and officer, may feel uncomfortable notifying their superiors, peers or subordinates about safety violations. However, every Airman is a leader; to take responsibility and not let safety deviations slide is no easy task. It takes courage to speak up, and it's essential for mishap prevention.

Safety leadership never ends. Despite the difficulties, leaders never stop trying; persistence can have a positive impact and prevent a future tragedy. The expectation is that every Airman will stay engaged, lead the way and stop the next mishap. Leaders also demonstrate safety through example and by taking corrective measures when an opportunity presents itself. Again, a leader acts on unsafe situations or other indicators. A leader is more than a safety enforcer. A leader takes the time to find out why the rules weren't followed and gets people the tools they need to work safely to get the job done.

The planning for the 1 SOW rapid response to the relief efforts in Haiti, safely hosting the Miami Heat National Basketball Association training camp and the nationwide media blitz that followed are two examples.

However, it's not only the high-profile events that require attention. Sometimes it's the mundane things like a workplace supervisor sitting down with a subordinate to talk over high-risk activities. Not only does this strengthen the chain of command, but time engaged with people can be more effective than hours of Advanced Distributed Learning Service or other mandatory safety training. This communication can also give people the confidence to address concerns.

Think of the young three-level just learning his or her trade from a senior airman or staff sergeant five- or seven-level. When the trainee sees the instructor deviate from technical guidance or published procedures, it takes moral courage to correct the instructor. However, this simple interaction could prevent a future mishap. A solid safety program builds on this type of interaction, and the 1 SOW relies on empowered Airmen leading at every level to accomplish our mission safely.

## **First Command Makes History**

COL. CREIG A. RICE Director of Safety Headquarters Air Education and Training Command Randolph AFB, Texas

Air Education and Training Command made history in fiscal 2010 with only one mishap-related ground fatality for the year -a big difference from its high of 68 deaths in fiscal 1966.

THEOUCATION & TRAINING COMMA As the command enjoyed its safest year in five decades of recorded history, it also reached other important milestones. For the first time, the command suffered no fatalities during the Critical Days of Summer, Memorial Day to Labor Day. For the fifth consecutive year, the command had a fatality-free winter holiday season even though there were more than 7,000 technical training students on leave during this period. And, no motorcycle deaths or on-duty deaths were incurred for the entire year.

Considering that the First Command trains more than 340,000 students per year, has 12 bases and more than 70,600 active duty members, reservists, guardsmen, Department of Defense civilians and contractors, its safety numbers for fiscal 2010 become all the more remarkable. These low mishap rates, combined with the command's innovative approaches to mishap prevention, led to AETC safety receiving an outstanding rating on its Air Force Safety Center evaluation and earning the Col. Will L. Tubbs Memorial Award for the Air Force's best overall ground safety program.

"There is always an element of luck when you achieve a statistically great safety year, but luck truly does favor the prepared," said Robbie Bogard, AETC

ground safety division occupational safety manager. "And AETC has never been better prepared than it is right now to reduce mishaps and save lives and property."

As an example, the command earned a "Best Practice" from the Air Force Safety Center for the in-depth risk assessments it did on 1,660 technical training courses. It even added an operational risk management appendix to all training plans.

AETC has also received multiple accolades for its diverse targeted marketing program, which includes a quarterly magazine, an annual safety calendar, posters, a Facebook page, Flickr site, and news and photo releases. The safety center staff assistance team leader credited the AETC safety staff with cracking the code to reach the highest risk group of Airmen – those ages 17 to 25. In fiscal 2010, the command's safety marketing efforts were recognized with 28 DOD, national and international media and marketing awards. These safety products, which are as entertaining as they are informative, reach recruits, basic trainees and cadets and all the training schools.

> "We get Airmen in the infancy of their careers, so we have a unique opportunity to foster a safety culture with them from the get-go," Bogard said. "We can't do that with just the headquarters safety staff or even the three or four safety pros who man the wing safety shops. Perhaps our greatest achievement is the partnerships we have formed with commanders, chiefs, supervisors and other leaders in the command to help us spread the word and build a strong safety culture. We are proactive in giving them the tools, and they are taking the ball and running with it."

> > U.S. Air Force photo by Rich McFadden

### Reduction in Mishap Rates Leads VINCE DUNY Air Force Flight Test Center Edwards AFB, Calif.

The Air Force Flight Test Center was honored to receive the fiscal 2010 Air Force Chief of Safety Outstanding Achievement Award for Ground Safety. It's truly a base award.

"Ensuring the safety and well-being of more than 12,000 personnel and overseeing flight and ground safety of 14 flying squadrons is an enormous task," said the AFFTC commander, Brig. Gen. Robert C. Nolan II. "Nevertheless, your personnel are to be applauded for the mishap rate reduction in the past year, as well as your numerous community outreach safety programs that make Edwards a safer place to live and work," he added.

During this time, the staff successfully reduced our Class B mishaps by 100 percent, Class C mishaps by 23 percent and Class D mishaps by 3 percent. We implemented the Occupational Safety and Health Administration 10-hour course, brought our near-miss program online and aggressively collaborated with the unit ground safety representatives, ensuring safety The near-miss form is easy to complete, and the system forwards a form to our workflow e-mail box. Through a close relationship with our civil engineer squadron, we've reviewed more than 100 safety hazards, and our CES has been able to correct and/or abate the issue prior to an injury or property damage. The near-miss program was designed and developed to simplify and accelerate hazard recognition reporting, thereby reducing mishaps.

The eight assigned ground safety specialists spent numerous hours working closely with the squadron unit ground safety representatives through one-on-one communication and cross-feed safety information, as well as providing a centrally based repository of safety essential tools on our local safety website. The safety staff also provided safety education awareness training and inspections throughout the year and provided a proactive safety approach during the Critical Days of Summer safety campaign, which runs from Memorial Day through Labor Day. The commander of Air Force

inspections and briefs were 100 percent relevant and complete.

The OSHA 10-hour course addressed specific topics and educated supervisors on hazard recognition and mitigation, allowing the supervisor to be proactive toward the safety of his people.

Our online nearmiss program has been a huge success!

Photo courtesy of author



Materiel Command, Gen. Donald Hoffman, said, "Conducting 1,200 safety spot inspections demonstrates dedicated work and is reflected in the Class B, C, and D mishap rate reductions of 100, 23 and 3 percent, respectively."

"The Test Center is fortunate to have individuals as skilled and dedicated as you and your team," Nolan said. Congratulations on a job well done!"



LARRY JAMES, Contractor Air Force Safety Center Kirtland AFB, N.M.

**"OUCH!** Why did I try to lift that much weight on my own?"

Did you ever ponder those words after you hoisted something heavy or lifted from an awkward position? These incidents are well-known causes of back strain, but you might not have considered other underlying factors that lead to back injury. Several conditions influence your back health.

The cause of most back problems is poor posture, loss of flexibility, stressful living/working habits and, above all, a general decline in physical fitness.

Fixed positions and inactivity can also cause back problems. Staying in a fixed position for too long can lead to muscle spasms. We feel it as stiffness but, by the time discomfort from static muscle contractions is experienced, low-level tissue damage has begun. Poor body mechanics and bad lifting habits usually trigger a back injury and are more likely to do so if overall physical condition is poor. Remember these techniques to help escape injury:

**1. Get as close to the load as possible.** The farther the load is from the center line of your body, the greater the strain imposed on your back. If need be, squat to lift the load and pull it between your legs. This gets the load closer to the center of your body and helps prevent the need to bend at the waist. Leg muscles are the largest muscles and also the biggest energy consumers. For repeated lifting, other strategies must be used.

2. Avoid picking up heavy objects placed below your knees. Try to see that heavy objects are placed and stored above knee level and below shoulder level. If you suspect the load is too heavy to be lifted comfortably, don't chance it. Use a mechanical aid, break the load into its component parts or get help. The most common cause of back injury is overloading. **3. Keep your back straight.** Don't bend at the waist when reaching to lift an object. Keep the natural arch in your lower back, which distributes the load evenly over the surface of spinal disks, and is less stressful than if a disk is pinched between vertebrae. Bend from the hips rather than from the waist.

**4. Glue your hand to your thigh.** If you carry a load such as a tool box in one hand, place your free hand on the outside of your thigh and mentally glue it into

U.S. Air Force photo by Tech. Sgt. Jeromy K. Cross



position. This will help you maintain correct back alignment rather than lifting and tilting to one side. When carrying a heavy load, side bending can be just as stressful to the spine as bending forward.

**5. Tighten your stomach muscles.** This technique helps prevent your spine from twisting. If you lift a load and need to place it off to one side, turn by moving your feet.

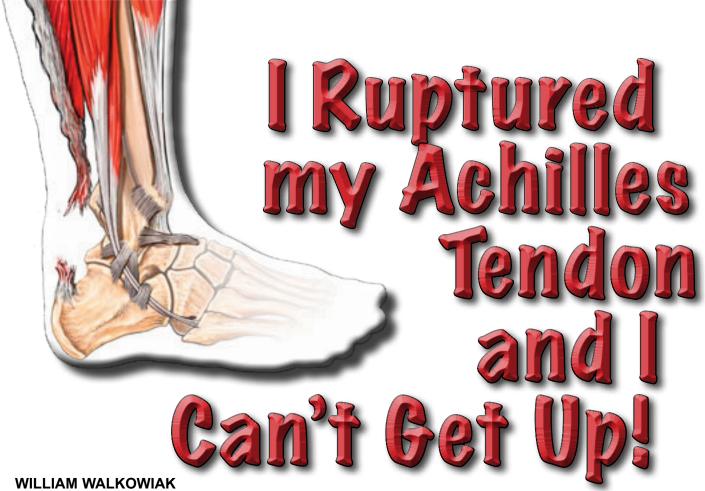
6. Stay in good physical condition. A protruding stomach is an extra load carried away from the center line of the body and prevents you from keeping a lifted object close. Due to the leverage principle, when you bend at the waist to lift, the load is up to 10 times heavier than its actual weight. A pot belly puts extra, stressful weight on the spine.

#### 7. Stretch and loosen up before work.

Research has shown that trunk flexibility and mobility is significantly lower in the morning than later in the day. A few minutes of stretching can warm up cold stiff muscles and tendons and help you avoid an injury.

Improper lifting isn't the only thing that causes back injuries. People who don't stay in good physical and mental condition are at high risk for back problems.

It's up to you to take good care of your body and save your back!



WILLIAM WALKOWIAK Air Force Safety Center Kirtland AFB, N.M.

Illustration courtesy of author

"Hey!" I turned my head to see who had just bumped me in the back of the leg. I had just pulled down the rebound and as I looked, there's nobody near me. As I was falling to the ground, unable to stand, I thought, "Uh oh, I must be hurt."

An Achilles tendon rupture is an injury that, when you hear about it, elicits a universal reply, "Ewww! That must hurt." This injury is usually associated with recreational sports and men between the ages of 30 and 40.

I was one month short of my 40th birthday and, on an unusually warm January Oklahoma day, saw a group of lieutenants heading outside to play basketball. I hadn't played basketball in 15 years, and I was much older than the other guys playing, but a chance to get outside and enjoy the warm afternoon sounded great.

One minute I was going full speed in preparation for a unit deployment, and the next I was lying on the couch and waiting for the swelling to go down so I could have surgery.

The tendon was surgically repaired a week later. The recovery was both difficult and frustrating. Every two

weeks, the cast was removed and my foot painfully stretched toward my knee. Then they wrapped a new cast on it to hold the new position. This was repeated for about seven weeks until I could hold my foot at a 90-degree angle. Then I got a walking boot and began physical therapy. After three months, I was allowed to join my unit at Operation Enduring Freedom, but the recovery would take more than a year before I could run and jump as well as before.

How can you avoid this terrible fate? The most obvious prevention is to avoid abruptly starting a sport and going full speed. You should take the time to get in shape and work into it slowly. While exercise can keep your muscles fit and strong, your connective tissues begin to get a little less supple as you age, and you'll have an increased chance of hurting yourself unless you warm up carefully and stretch.

Basketball is the most common sport where this injury happens, but you can rupture the Achilles in volleyball, softball or even tennis. Any sudden stop and start or jumping increases the risk.

Another aspect of aging is that your body begins to slow

down a bit before your brain understands this. We don't like to think of having limitations. We feel like we're 25 years old, and we imagine sprinting and jumping like we always have. Once you get past your mid-30s, it's wise to do a realistic self-assessment of your fitness and activities.

As I look back, almost 10 years later, that injury has produced many unexpected results, some of them are certainly undesired. Being a former athlete with an active lifestyle, I had to contend with a big drop in self-esteem and confidence. This drop in confidence was initially due to the weight gain and recovery time. Injuries like this also create other physical limitations, psychological issues and a general reduction in abilities that have a ripple effect without a logical end.

If my story helps you think a little more about your health and risk management, it won't have been in vain. "Knowing then what I know now" only sounds cool — trust me! A little preparation is well worth it to prevent injuries and keep you fit to fight! 😪

#### Six Steps to Avoid Achilles Tendon Injuries:

#### Step 1

Lose weight if you're overweight and maintain a healthy weight to avoid undue chronic strain on the Achilles tendon during the course of regular daily activities.

#### Step 2

Wear supportive shoes that fit well. Avoid high heels and shoes with no heel support, such as flip-flops and sandals.

#### Step 3

Build up your exercise routines gradually. Vary your exercises occasionally to avoid ongoing repetitive motion involving the Achilles tendons.

#### Step 4

Pay attention to pain in and around your Achilles tendon. Don't ignore it, as the problem is likely to worsen and result in an injury to a tendon.

#### Step 5

Consult a doctor about orthotic shoe inserts if you have flat arches.

#### Step 6

After a light warm up, stretch your Achilles tendons, calves and other leg muscles properly before exercising.

In addition, stretch after being on your feet for a prolonged period or taking part in an activity that places exceptional demands on your lower legs, such as a full day of walking.

(Adopted from: <u>http://www.livestrong.com/</u> article/347182-how-to-prevent-achilles-tendon-injuries/)



Photo and illustration courtesy of author

### Quest for Zero

#### **CAPT. BRIAN RAPHAEL** 150th Fighter Wing Kirtland AFB, N.M.

The "Quest for Zero" on-the-job fatality rate was a major topic of discussion during the 2011 Ground Safety Corporate Committee meeting at the Air Force Safety Center and for good reason. All the on-the-job fatalities, non-medically related, were preventable!

Even though all Airmen are doing a wonderful job of preventing on-the-job fatalities, one fatality is too many. It's certainly true that all variables and factors in life can't be controlled, but we're talking about preventable safety fatalities. Simply put, Airmen and their wingmen involved in these fatalities had control over preventing them. This fact alone signifies our duty to pursue the goal of Quest for Zero and the real possibility of achieving it. How do we do this?

The first key is to simply get out and see what people are doing beyond the safety office. Know who your people are and how they're accomplishing the mission. Are they following the technical instructions, manuals and policies or are they taking shortcuts? If they're taking shortcuts, why are they doing so? Is it due to pressure to save time and money, or is it due to complacency which points to bigger issues in the unit, e.g., discipline and compliance?



Another key is to educate everyone about the importance of having a plan or strategy. No carpenter acquires the necessary materials to construct a house without first knowing how to build the house. It's the same with any task, project or job. Do your people know how to perform an assigned operation following technical guidance? And more importantly, is the culture of the organization healthy and conducive for employees to adhere to prescribed procedures? As the saying goes, "It is better to measure 10 times and cut once than to measure once and cut 10 times."



A third key is proper risk management. Does your organization have and implement appropriate risk management procedures in the workplace? Are employees encouraged to exercise effective risk management which may include delaying the completion of a project to gain approval of risk acceptance from the appropriate authority? Are employees supported if they say "time out" when an operation exceeds their competency or confidence? If risky behaviors are consistently accepted or unknown, negative outcomes will naturally follow. The ability to reduce risk is only a decision away.

Self Awareness

The last key dramatically negates most potential hazards. It is situational awareness and self-awareness. Naturally, most people develop some level of complacency when performing similar duties day after day. It's like taking the same route to work every day. After some time, you don't even remember how you got to work — it seems like the vehicle drove itself! In our Air Force, this can be catastrophic.

When engaged in a task, it's vital that employees remain aware of all aspects of the operation and environment with regard to their safety. An important question arises for supervisors. Are you inadvertently charging your subordinates with duties beyond their current abilities? Are Airmen adequately rested before working on a specific task? Are your people's heads in the game, so to speak? We also need to be aware of how a fast-paced society, high-operational tempo, nutrient-lacking diets and energy-zapping energy drinks can affect our Airmen. Even if Airmen aren't making the best possible choices, supervisors and commanders are still responsible for their safety.

When combined and consistently implemented, all of the keys mentioned can be a powerful hazard-mitigation strategy. Every Airman's life is valuable beyond measure. Regardless of the constraints we face today, there's only one thing that's irrecoverable — a life! We need to constantly enhance our awareness of the threedimensional world we live in and exercise better care in executing our duties and conducting ourselves.

So, where do we go from here? How can we successfully meet the Quest for Zero? The answer can be quite simple: Safety starts with each of us. Let's consciously prevent safety-related on-duty fatalities by remaining vigilant, incorporating sound work strategies and watching out for one another. In the words of Gandhi, "We must become the change we wish to see in the world."

Remember: Safety is NO Accident! 🖌

Situational Awareness

### 20th Annual Safety Professional Development Conference

The 20th Annual Safety Professional Development Conference will be held March 12-16, at the Hampton Convention Center in Hampton, Va. With more than 1,000 safety professionals expected, the PDC brings together Air Force, Army, Navy, Marine, Army Corps of Engineers and Coast Guard members from installations around the world. Benefits include meeting wing and mission training needs, leveraging limited resources across all services, concentrating training in a cost-controlled environment and networking.

Sessions will be offered in four- to 12-hour blocks throughout the week. A sampling of the 70 seminar topics include: Mishap Investigation Techniques, Job Safety Analysis, Occupational Safety and Health Administration 10-hour General Industry, OSHA 10-hour Construction, Certification Prep – Math Review for the Occupational Safety and Health Technologist/Associate Safety Professional/Certified Safety Professional Exam, American Society of Safety Engineers – Reducing Loss from Occupational Risk and Environmental Exposures, Life Safety and ASP Exam Prep Workshop.

Contact afsc.sem@kirtland.af.mil for additional information.



Photo illustration by Dennis Spotts

Mission First, Safety Always

Hampton Convention Center 1610 Coliseum Drive Hampton, Va. 23666 (757) 827-8200 March 12-16, 2012