ARMY GROUND RISK-MANAGEMENT INFORMATION

Countermeasure

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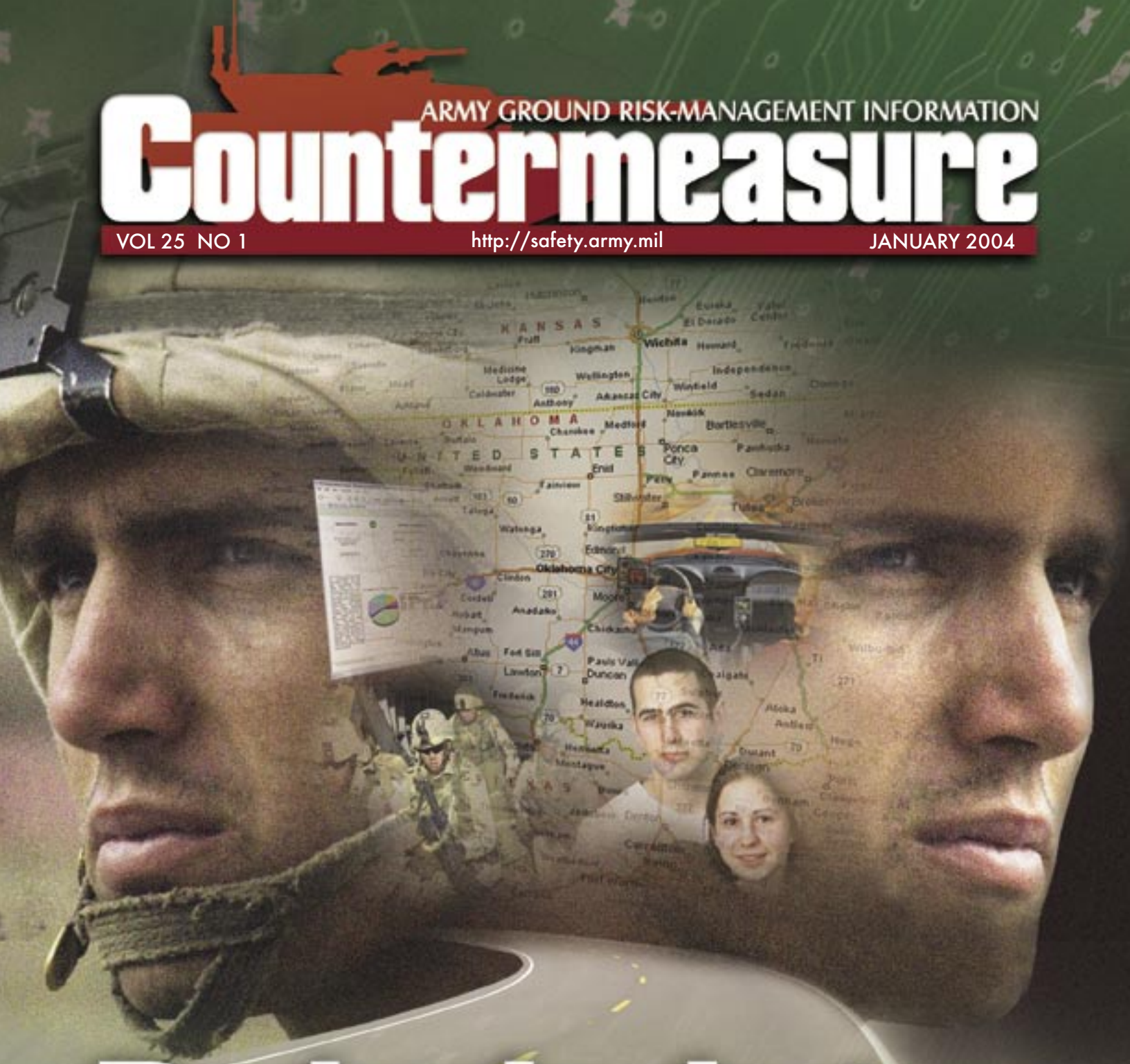

Redeploying Home

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CONTENTS

features

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DASAF'S CORNER
From the Director of Army Safety

ASMIS: Enhancing Safety Through Applied Knowledge

The end of the fiscal year brought some sobering safety statistics for the Army— 261 Soldiers died last year in Army air, ground, and POV mishaps. That number is up 29 percent (59 more Soldiers) from 2002, and up 55 percent (93 more Soldiers) from 2001. We are going in the wrong direction and getting there fast.

From my experience in Afghanistan and Iraq, I know commanders are doing everything in their power to mitigate mission hazards. There is no doubt the Global War on Terrorism has heightened our Soldiers' exposure to risk. However, as I study our year-end fatality statistics, one thing hits me in the face. Our Soldiers are rarely dying while conducting complex missions or training exercises. As in each of the last 10 years, our Soldiers are dying while doing their most basic, everyday activity: driving their privately owned vehicles (POVs). If we could have eliminated POV fatalities, we would have saved 313 Soldier's, lives during the past 3 years—109 in FY03 alone.

At the Safety Center we are committed to giving you the tools to risk mitigate, both on and off duty. Specifically, we are going to use technology to inspire a greater level of communication between our Soldiers and first-line leadership. The POV module of the Army Safety Management Information System (ASMIS) is out in beta version and is accessible from the Army Knowledge Online (AKO) homepage. ASMIS is a centralized risk management tool that uses Army historical data to predict the risk level in a Soldier's travel plans. Furthermore, ASMIS suggests proven control measures for the supervisor to lessen their Soldiers' risks.

During the first week after ASMIS hit the AKO homepage, it had 2,400 registered users and produced over 5,000 travel plan assessments. The early feedback is that it is enlightening and useful. The Marines and Navy already have expressed interest in adopting it within their services. However, ASMIS is not a finished product. We have embedded tools such as Mapquest and The Weather Channel links within the assessments, and more tools are being developed to expand ASMIS into Europe and Korea. ASMIS is a beta version and will have shortcomings. We need you to use it and suggest improvements.

The ground module of ASMIS will be on the Web early this year. We look forward to providing our junior leaders with Army-level safety knowledge on ground operations. However, knowledge is power only when it is applied effectively. It is still up to the first-line leadership to make the difference by enforcing the established control measures. Your Soldiers won't always like it, but at the same time they are counting on you to do it. More importantly, your Soldiers' families have entrusted you to do it and ensure their loved ones arrive home safely.

Keep your leader lights on!

Joe Smith

BG Joseph A. Smith

GEN Schoomaker Sends

Protecting Our Combat Readiness

GEN PETER J. SCHOOMAKER
Chief of Staff, Army

We are an Army at war. The challenge of the Global War on Terrorism demands the highest level of leadership and soldier proficiency. We cannot be risk-averse; however, our Soldiers are our most valuable combat assets. Therefore, reducing preventable losses throughout our formations is fundamental to protecting our combat readiness.

Last year the Army experienced the highest accident rate in the last 10 years. The current trend, if not abated, will exceed last year's losses. Leaders must understand the impact of inexperience on their formations and where it will require education, training, direct leadership, and enforcement of standards to overcome. I hold myself and leaders at all levels accountable for meeting this challenge.

Since World War II over half of our combat losses were caused by accidents. Risk management integration has proven to be effective in reducing accidental losses. In Operation Iraqi Freedom (OIF) our accident rate has remained at 38 percent, a tribute to the performance of combat leaders' effective use of risk management. However, in order to win the Global War on Terrorism and protect the force, we must aggressively attack adverse trends in three key areas.

I expect senior leaders to focus aviation training on potential operational environments and aircrew coordination. Brownouts caused 75 percent of aviation Class A accidents in OIF. Aircrew coordination was a factor in half.

Almost half of ground combat losses occurred during rollovers. The primary cause was speed, aggravated by the failure to wear seatbelts. In addition, far too many of our Soldiers have been killed in theater by negligent discharges. I challenge our noncommissioned officer corps to train Soldiers to standard, enforce those standards, and supervise.

During the last 10 years, over half of our accidental fatalities happened in POVs. This year is no exception. Our programs are not effective. In order to make an impact we must change our culture. Risk management is a 24-hour leader responsibility, and Soldiers must be held accountable for their actions. I have provided you with tools, accessible through the Army Knowledge Online Web site, to drive our culture change and reduce risk. We will win the Global War on Terrorism, but we must not accept any unnecessary risks that place our Soldiers in jeopardy.

Adapted from CSA's message dated 11 December 2003

Declaring the War on Accidents

BOB VAN ELSBERG
Managing Editor

Life may be unfair but death isn't—a fatal accident is an "equal-opportunity" killer. It doesn't care whether you're behind the wheel of a HMMWV or a Honda; it will take you wherever it can.

I know. I have seen death many times during my 33 years in and around the military. Back in 1974 I waved goodbye on a Friday afternoon to a couple of friends as they left to go canoeing in Washington state. Within 24 hours they were both dead—victims of alcohol and the "I-am-bulletproof" syndrome that led both of them to shun life jackets.

The year before, I saw a pretty young woman dying on the road next to her car. There was nothing I could do to help her. There's an old saying that goes, "Die young and leave a handsome corpse." As I looked through a bus window at the accident, there was nothing attractive about watching her turn blue in death.

Early in 2002 I interviewed the widow of an Air Force sergeant who'd gotten on the road drunk and hit a concrete barrier at 79 mph. Unbelted, he'd gone into the windshield and was declared brain dead the following day. He had a lot of bravado in his attitude about life. As I interviewed his widow, I sat there helplessly as she broke down in tears. They'd gotten married and bought a house barely 2 months before he died. When he ignored years of warnings against drinking and driving, he never thought about what it would do to the person who loved him most.

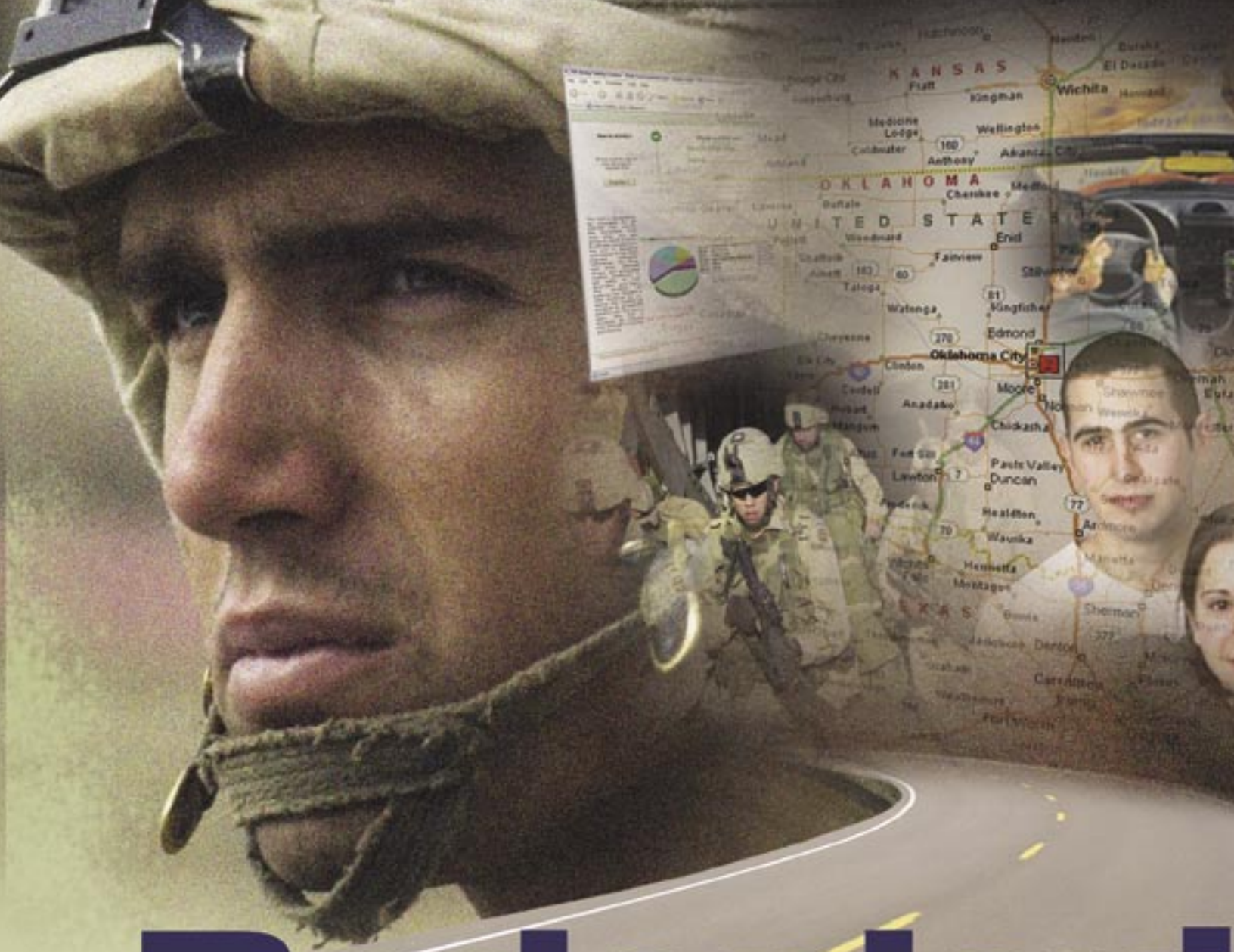
The problem with accidental death is that there's no 20-20 hindsight for those involved. There's no going back and doing things differently because of lessons learned. There is only one destination—and death gives no paroles.

That's why declaring war on accidents is important, even as we fight this War on Terrorism. It hurts just as much to bury a loved one who died in an accident as one who died on the battlefield. Maybe, in reality, it hurts more. Death in combat is at least for a purpose. Death from an accident does little except to provide a sad example.

Boston, Baltimore, Baghdad—it doesn't matter where you are, you're on the front lines of this war. Your best piece of protective "armor" is risk management. Taking the time to identify risks, assess their severity, develop a plan to protect yourself, and then follow that plan can make you a victor in this war. Ignoring the risks and hoping in luck to get you through can quickly make you a victim.

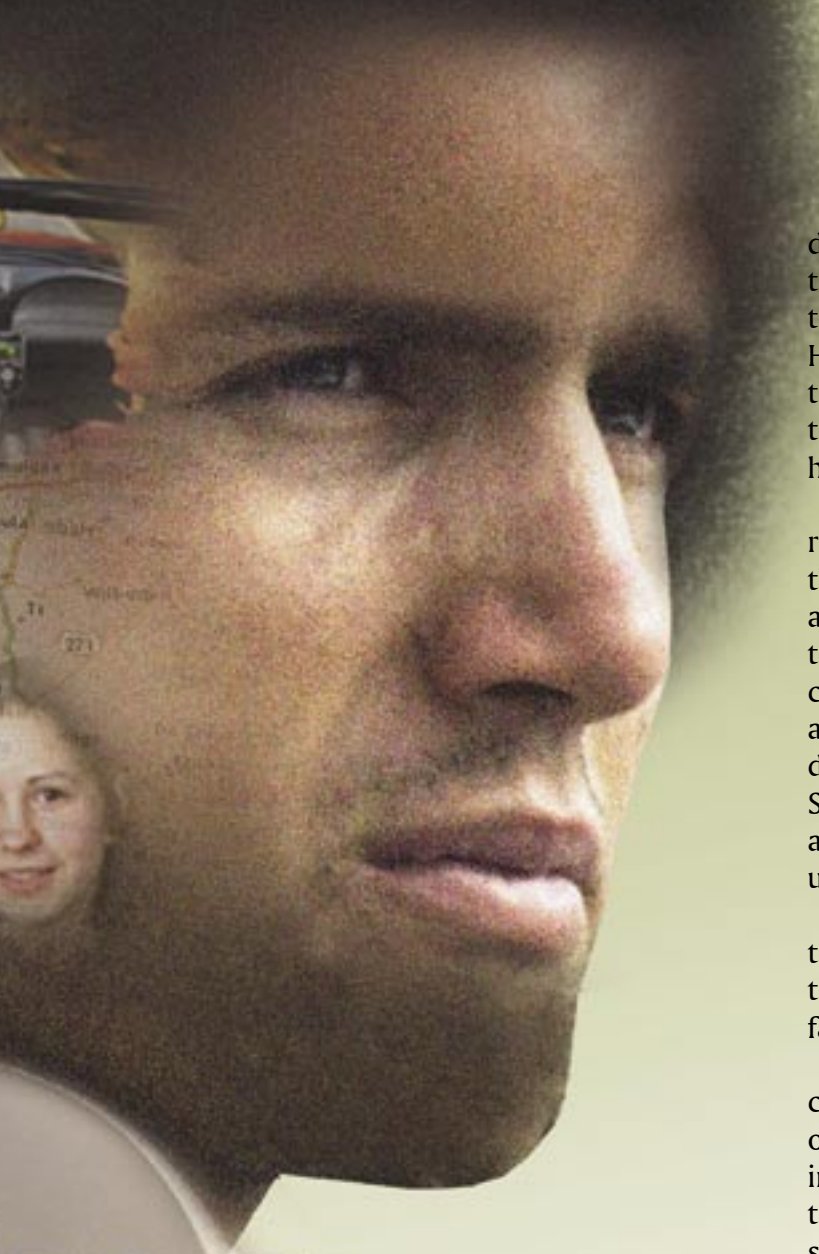
Victor or victim—it's your choice.

Contact the author at (334) 255-2688, DSN 558-2688, or e-mail robert.vanelsberg@safetycenter.army.mil



Redeployi Ho

Units plan and prepare extensively for the return of their personnel and equipment to home station. However, leaders must also prepare their Soldiers for the dangers they will face after they've returned.



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LTC CHARLIE CLAYTON
CJTF 180, Afghanistan

Most of our ground forces can expect to be deployed to Iraq or Afghanistan at some time in the future. Leaders are responsible for protecting their soldiers in those unfamiliar environments. However, that responsibility doesn't end when those soldiers leave the theater—it also extends to when they go on leave or pass after redeploying home.

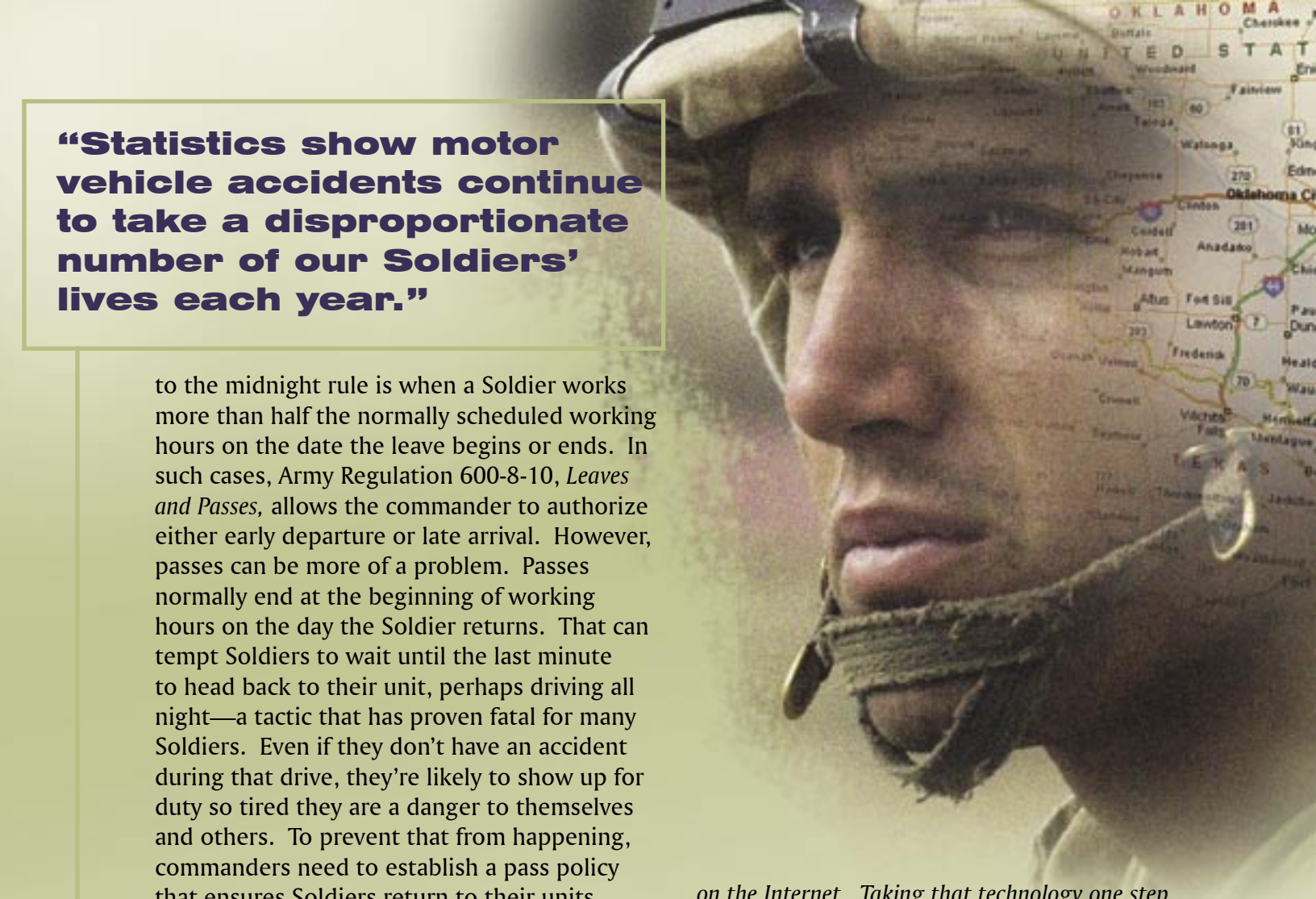
In the old days, a Soldier returning from a remote tour of duty could expect a safety briefing that consisted of "don't drink and drive" and "use a condom." But such a warning is insufficient today. Soldiers returning home from an extended combat zone deployment will go on leave or pass and do as Soldiers have always done: have fun, deflate, and get wild. Leaders need to give their Soldiers every opportunity to return alive, healthy, and fit for duty. To do that, Soldiers must be set up for success, not failure.

Commanders at every level should take time to review plans for passes and leave and ask themselves, "What are the safety concerns?" In fact, there are several.

Statistics show motor vehicle accidents continue to take a disproportionate number of our Soldiers' lives each year. A significant factor in these accidents is fatigue. Soldiers have been taught to plan for convoy operations, including scheduled rest and meal breaks. Why not require Soldiers to do the same thing when planning their leave or pass? Internet road map tools allow Soldiers to plan their travel in far more detail than ever before. They can even arrange for meals and lodging before their departure. Squad leaders and first-line supervisors, while unable to oversee their personnel on leave or pass, should still review their Soldiers' travel plans.

The most dangerous phase of leave or pass is the return trip because Soldiers often wait until the last minute to head back. (See the related story, "Been There, Done That...Lucky to be Alive!" on pages 10-11.) Leaves normally begin and end at midnight, which allows a Soldier time to sleep before first formation the next day. The exception

"Statistics show motor vehicle accidents continue to take a disproportionate number of our Soldiers' lives each year."



to the midnight rule is when a Soldier works more than half the normally scheduled working hours on the date the leave begins or ends. In such cases, Army Regulation 600-8-10, *Leaves and Passes,* allows the commander to authorize either early departure or late arrival. However, passes can be more of a problem. Passes normally end at the beginning of working hours on the day the Soldier returns. That can tempt Soldiers to wait until the last minute to head back to their unit, perhaps driving all night—a tactic that has proven fatal for many Soldiers. Even if they don't have an accident during that drive, they're likely to show up for duty so tired they are a danger to themselves and others. To prevent that from happening, commanders need to establish a pass policy that ensures Soldiers return to their units in time to get plenty of sleep before first formation. NCOs can provide accountability by having their Soldiers call them when they return from pass.

Commanders realize their Soldiers are their unit's most valuable asset. The accidental death of a Soldier is something for which a commander can never be fully prepared. However, by establishing a safety-oriented pass policy, commanders can help protect their Soldiers from fatigue-related accidents.

Route planning and scheduled rests to relieve fatigue and exhaustion are essential to a safe movement operation. Don't allow your Soldiers' return from deployment to be their last successful operation. Set them up for a successful leave or pass AND a safe return to post and duty.

Editor's Note: In the article above, LTC Clayton touches on some important points concerning the value of using trip-planning technology available on the Internet. Taking that technology one step further, the Army Safety Center recently developed a new POV risk assessment tool targeted specifically to Soldiers as part of the Army Safety Management Information System (ASMIS-1). ASMIS-1 uses Army historical accident data to predict the risk level of a specific travel plan and to suggest proven controls to reduce the risks, including links to Internet mapping and weather sites. The POV module is out in beta version and is accessible from the Army Knowledge Online (AKO) homepage (www.us.army.mil). All commanders and Soldiers are encouraged to register and use this valuable new tool.

LTC Clayton is the Safety Officer for Combined/Joint Task Force 180 in Afghanistan and is a member of the Army Safety Augmentee Detachment at U.S. Army Forces Command, Fort McPherson, GA. He may be contacted via e-mail at charlie.clayton@us.army.mil.

HERE'S JOEY!

The Soldier of safety, the "roo" of risk management, the fleet-footed purveyor of precaution, Joey leaned forward until his nose touched the computer screen. There he saw a message from Korea.

"I saw you on the back cover of November's *Countermeasure* and noticed you were wearing your helmet, which might be a bit painful for a kangaroo—long ears and all. But personal protective equipment (PPE) such as helmets and seatbelts is worth wearing, even when it seems annoying. Let me give you a case in point.

"We recently had an M998 rollover accident here in Korea. The driver and truck commander (TC) had been driving their HMMWV uphill on a dirt road. It was nighttime and they were wearing their night vision goggles. As they looked ahead, the blackout drive lights showed the road was washed out. Since they couldn't turn around, the TC decided to 'advance to the rear' and told the driver to back down the hill. Doing a little quick risk management—like sizing up the hazards, making a decision, and going with it—the driver relinquished the steering wheel to the TC. He was licensed on the HMMWV and a more experienced driver. The driver climbed out and went to the bottom of the hill to ground-guide. Watching the driver, the TC began backing the HMMWV down the dirt road.

"This might have been a simple operation except—and it's the 'excepts' that always get you—this 'road less traveled' suddenly collapsed! Now, HMMWVs are known for their ability to traverse rough terrain. That assumes, of course, there is some terra firma beneath the tires! With none of that beneath the vehicle's passenger side, the HMMWV teetered at 45 degrees until gravity took a firm grip on the situation. The TC made a final (may we assume, 'excited'?) radio call while the vehicle turned turtle. As the HMMWV came to rest, the radio aerial assumed the 'flattened' position beneath the roof, somewhat limiting transmission range.

"Realizing he'd accomplished all he could behind the wheel, the TC released his seatbelt and scrambled out of the HMMWV to join the driver. The TC then pulled out his cell phone and called for help, which arrived in about 20 minutes.

"Now at first blush, this might sound like a bad-news story, but there is a silver lining to this cloud. The TC had taken the time to buckle his seatbelt and was wearing his Kevlar. You probably won't see a 'cammy-covered Kevlar' on the nugget of a NASCAR driver at the Daytona 500. But during a dark night in Korea, the Kevlar—and the HMMWV's seatbelts—did the trick. The TC walked away from the crash uninjured.

And the lesson learned? It is possible to 'pull victory from the jaws of defeat' if you use your PPE and risk management when driving a tactical vehicle."

(P.S. Wanna see the pictures of this accident? Turn to the back cover!)

Editor's Note: This Joey letter was inspired by an e-mail received from MAJ Kevin Hicks, 6-37 FA, Korea. Have you got a good news story to share, a question to ask, or an observation on how Soldiers can do things safer? Send Joey an e-mail at joey@safetycenter.army.mil and share your ideas in this magazine.

I had just gotten back to Seattle from a 70-day patrol in Alaska and everyone was given 4 days off—5 if you could pay someone to stand your duty on the fifth day. I was anxious to see my girlfriend, who lived in San Diego, CA. I whipped out my road map and using the tried and true "string measuring system," figured it would be a 1,250-mile drive. I calculated that I could make it in 24 hours. No big deal. I'd stood 24-hour duty before, so driving a car should be a snap.

I hit the road at 1 minute past midnight. To my credit, I covered about 900 miles before my energy level dropped through the floorboards. I pulled over for a brief rest and then drove the remaining 350 miles.

As you can imagine, having driven so far I wanted to cram as much as I could into those 3 days, so I cut corners on my sleep schedule. But hey, I was young and bulletproof. I could handle it.

Finally, I had to head back. I pulled out from my parents' house at "zero-dark-early," glad that I would at least miss the Los Angeles morning rush hour traffic. Except for gas I didn't stop until I hit the northern California town of Dunsmuir, where I stopped for a bowl of chili. I figured that would keep me going for awhile longer.

It was nightfall and I was now well into Oregon. As I looked ahead, I thought I saw people walking across the freeway. I slammed onto the brakes and slowed to a crawl. But when I rubbed my eyes and looked around, nobody was there. "Wow," I thought, "was that what is called 'highway hypnosis' ?"

I poured myself a cup of coffee from the thermos, determined not to fall prey to another illusion. An hour or so later I saw what I thought were the taillights of a tractor-trailer stopped in front of me. I hit the brakes and swerved into the left lane—but there was no tractor-trailer. The "taillights" were just some stars low on the horizon.

This was getting serious, so I took the next exit and pulled off the road to get some sleep. I figured I could get in an hour-long nap and still make morning formation. I wasn't asleep for long before a policeman shone his flashlight through the window and asked me what I was doing. Tired or not, I was going to have to get back on the road.

Once more I headed north on the highway. I rolled down the window, hoping the cold air would keep me awake. When that didn't work I tried slapping my face and punching my right leg, figuring the pain would keep me awake. It wasn't pretty, but at least my eyes were staying open.

The sun had been up for an hour or so when I passed the Seattle city limit sign. I breathed a sigh of relief. I'd made it, or so I thought. But I was wrong. Without any warning, I fell asleep going 55 mph on the freeway. Suddenly, I awoke to a blaring horn. I'd drifted to the right and was about to sideswipe a Corvette.

I swerved to the left, scared stiff at what had just happened. I realized I was no longer in control of myself—fatigue had taken over. I could fall asleep again at any moment, and I was only minutes away from my unit.

I was lucky—I made it back all right and shaved and dressed for formation. My E-6 took one look at me and ordered me to bed. He later told me I could have been brought up on charges for being unfit for duty, but this time he was going to give me a warning. I realized later that he cared enough to stop me from doing something stupid like this again. (Yes, NCOs, you CAN make a difference in your Soldiers' off-duty safety.)

I was lucky three times on that trip—which was more luck than I deserved. I let being young and "bulletproof" almost make me dead. And dead is a lousy way to end a leave.

Lucky t

Some tips to get you through the long haul:

• Get 7 to 8 hours of sleep before you leave. Long-distance driving is hard work. Also, don't begin your trip late in the day.

• Plan to drive with a friend. A passenger can help you with the driving, and conversation can increase alertness.

• Avoid long drives at night. The glare of lights, both from your dash and outside your vehicle, increases the danger of highway hypnosis.

• Don't use cruise control. Keep your body involved with driving.

• Stop for a rest break every 100 miles or 2 hours. Get out and walk around, or even jog or do some calisthenics. Exercise fights fatigue.

• Avoid alcohol and over-the-counter and prescribed medications that cause drowsiness.

• Caffeine can provide short-term alertness, but be aware it takes about a half hour for caffeine to take effect.

• If you can't stay awake, stop and get some sleep. Find a safe, guarded rest area, truck stop, or service station. Even a short nap—15 to 45 minutes—can help energize you enough to get to a hotel or motel.

(Note: The author describes how suddenly sleep can overcome the most vigilant driver. While caffeine and other stimulants are effective up to a point, eventually the sleep debt must be paid. Drivers must ensure they plan for and satisfy the body's requirement for sleep. Sleep is a creditor that will not be put off indefinitely!—LTC Joseph McKeon, U.S. Army Safety Center Surgeon.)

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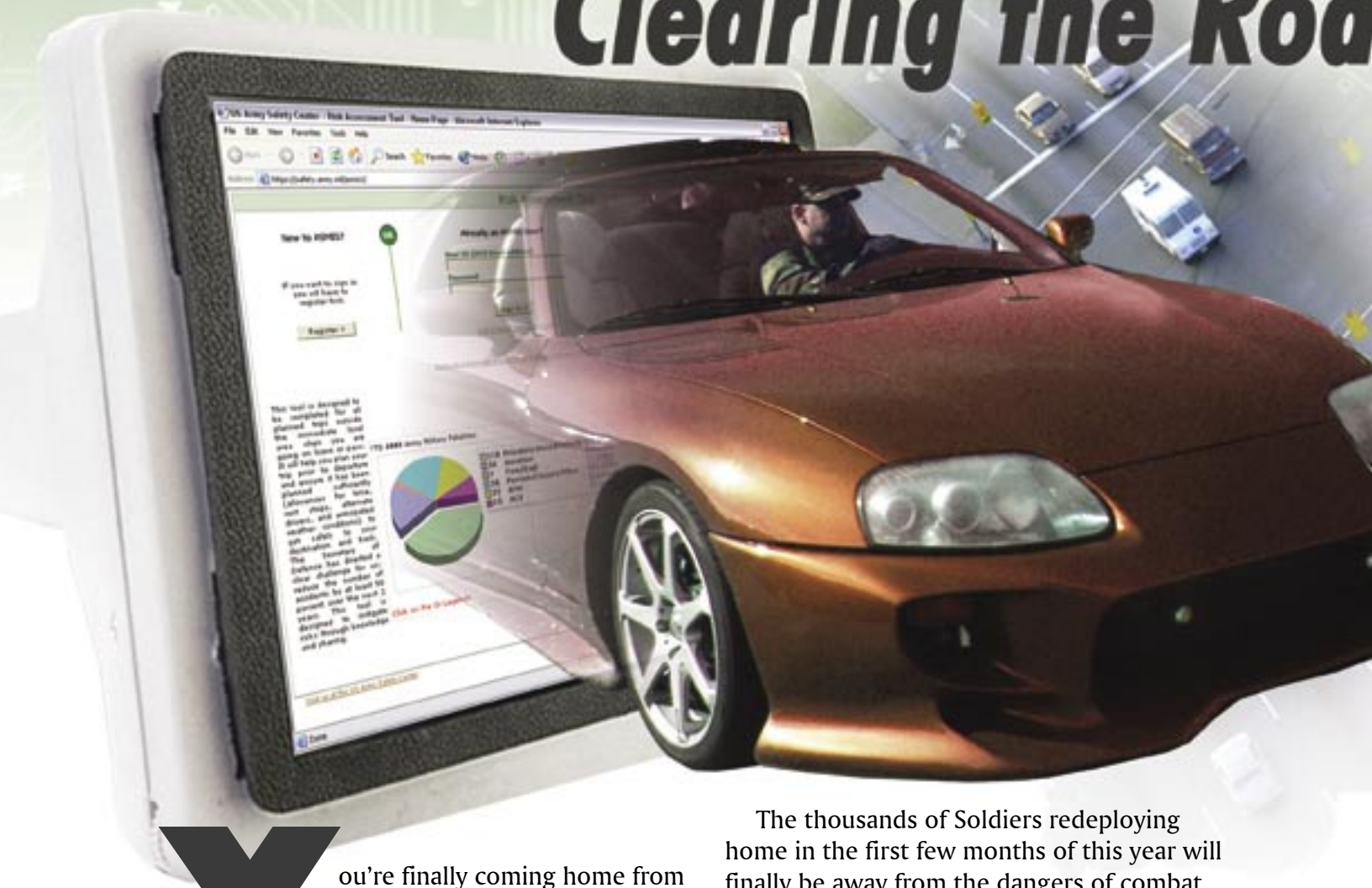
Been There, Done That...
to be Alive!

BOB VAN ELSBERG
Managing Editor

ASMIS

Clearing the Roa



You're finally coming home from that long deployment in the "sandbox." Family and friends are anxiously awaiting your return, and you can't wait to get back home and celebrate. Once you return stateside, you begin thinking about the quickest way home. Should you fly, or maybe drive? After all, your car has been in storage all these months and these are *real roads*. Why not take the scenic route home and enjoy the view?

The thousands of Soldiers redeploying home in the first few months of this year will finally be away from the dangers of combat. However, these Soldiers might not think about the risks on American roadways. Privately owned vehicle (POV) accidents are the leading cause of accidental death in the Army: In Fiscal Year (FY) 2003 alone, 109 Soldiers died in POV accidents.

In response to this and other emerging trends, the U.S. Army Safety Center (USASC) has developed a tool to mitigate on- and off-duty risks. The Army Safety Management

-1 d Ahead

JULIE SHELLEY
Staff Editor

Information System-1, or ASMIS-1, is an automated, centralized tool that features a question-and-answer session designed to assess the potential risks of a Soldier's planned activities. The system features three modules—POV, ground, and aviation. The POV module is currently available in a beta version, and the aviation module is scheduled to be released early this year.

The POV module is designed to be completed by all Soldiers on leave or pass (including those returning from deployment) for all planned trips outside the immediate local area. The tool helps the individual Soldier plan every aspect of the trip *before* departure. Questions about travel and factors such as the type of vehicle, seatbelt use, sleep, rest stops, and time of departure are asked in drop-down, multiple-choice fashion. When a Soldier completes the questionnaire, the system builds a profile based on the information collected and displays actual accident cases found in the USASC database that match the profile. The Soldier then gets to see real accidents involving other Soldiers just like them. From there, the Soldier is routed to a "Hazard Assessment" page, where a score of 1 (lowest risk) to 10 (highest risk) is assigned based on the Soldier's responses. Also featured on the page are a risk management matrix card and links to Mapquest and The Weather Channel. This assessment will then be forwarded to the Soldier's supervisor for his review, mitigation of risk, and approval.

A new feature in the POV module is a page that lists check-the-box controls in response to the personal and travel factors selected in the questionnaire. The information includes statistics on seatbelt use and drunk driving, along with other dangers such as fatigue. Here the Soldier can lower his or her risk by checking the appropriate control measures. The system then navigates the user to the final hazard assessment page, where the final score and risk level are figured based on combined responses from the questionnaire and controls pages. The Soldier should print the last page of the assessment to keep for personal use.

Soldiers and their supervisors should work hand-in-hand when using this system. When completed, the supervisor listed in the Soldier's profile will receive an e-mail listing the results of the assessment. It's important to note the results are confidential and non-retributional; ASMIS-1 was developed to help, not punish. The use of this tool by the Soldier and his supervisor allows for the exchange of information regarding the Soldier's travel plans and the associated risks. The hardest thing for young Soldiers to understand is that they don't know *that they don't know.* This tool will show Soldiers what has gone wrong for other Soldiers with similar travel plans and what the consequences were.

Begin the planning process by going to **https://safety.army.mil/asmis1**. First-time users should click the "Register" button and create an account. (Leaders have a separate login link just above the FY03 fatality chart.) Once login is complete, step-by-step directions will follow on every page. The entire process is complete in just a few easy steps and takes only a few minutes to finish. Take the extra time and try it out. You were victorious in Iraq. Now help us win the War on Accidents!

Contact the author at (334) 255-1218, DSN 558-1218, or e-mail shelleyj@safetycenter. army.mil

What's in

CW4 MICHAEL LICHOLAT
E/160th SOAR
Korea

In the spirit of accident prevention, sometimes we have to step up to the plate and take one for the team. Here's my humbling story, shared with a bit of humor.

There I was, 5 minutes away from delivering a briefing for a complicated air assault mission in support of Operation Enduring Freedom. I had only one chance to make a good first impression in front of our coalition brethren, so I was determined to put my best foot forward. I rehearsed the mission briefing twice and spent considerable effort ensuring the briefing area was set up to my exacting specifications. I aligned all the benches, marked and posted all the charts and maps, and placed the manual pointer within arm's reach in case the laser pointer failed. With my notes at hand and the backup butcher posters and imagery, I was confident I could ace this brief even if the Proxima projector failed.

The projector had been warming up for a few minutes when I noticed there was some dust on the lens. Well, I wasn't going to stand for having a few specks casting shadows on my briefing! So, I went to the supply locker that our company S-4 dutifully kept stocked with administration supplies and got a can of compressed air to shoo away the offending motes. We'd bought cases of the stuff before we deployed to blow the dirt and dust out of the cooling fans and circuit boards of our mission planning computers. We'd gone through our canned air like wildfire and were out of the "good stuff" we'd purchased back in the "Yoo Ess of Ay." However, our resourceful S-4 had replaced those with some canned air he'd bought in theater. I think it was from Italy, or somewhere else in Europe. Not

that Can O' Air?

being a multi-lingual man, I wasn't able to read the label.

I wasn't going to be bothered by that. I took the little plastic tube that came with the can and stuck it into the spray nozzle. I was thinking pleasant thoughts about how clear my presentation was going to be as I pointed the tube at the projector's lens. Those were my last pleasant thoughts.

I pushed down on the spray nozzle when suddenly there was a low-pitched boom. I was instantly engulfed in a ball of flame that one eyewitness conservatively estimated to be a good 6 feet in diameter. All the hair on my right arm was burned off, and the hair on my face was singed. Stunned, I dropped the can. The valve popped shut and the fire went out as quickly as it appeared.

After performing a quick assessment of my injuries, I left the briefing area for the tent where I slept, seeking a mirror so I could look for any additional damage. As I made my way out of the briefing tent amidst the arriving briefing attendants, the prominent comment was, "What is that smell?" At my tent, my worst fears were confirmed—my moustache was now much shorter (but in direct compliance with AR 670-1!), my eyelashes were almost gone, and my eyebrow hairs were all curled up. Luckily, I'm what you'd call a "folically challenged" individual, so I didn't have anything on top to worry about.

A quick time hack revealed less than 5 minutes until briefing kick-off. I quickly washed up, used a pair of scissors to trim the burnt ends off my moustache and eyebrows, and then returned to the podium with a couple of minutes to spare. Now I don't recommend this to anyone, but if you want to be calm when delivering a mission briefing, seek the feeling of euphoria that comes with no longer being a human torch. Usually the mission briefing is the least hazardous element of the mission and the execution phase is fraught with peril. Sadly, I had just proved otherwise!

So, how can you avoid having this happen to you? Most, if not all, of the canned air sold in America is non-flammable and has warning labels to keep you from misusing the product. However, since we'd used up the "good stuff" we'd brought with us, the S-4—who is habitually browbeaten to keep the cupboards from becoming bare—replaced it with whatever was closest at hand. You know, the "You want canned air? I'll get you canned air!" approach. Unfortunately, the S-4 couldn't read the label either. That's something to bear in mind if you're buying commercial off-the-shelf (COTS) items in countries that lack the consumer protection guidelines we have in America.

In the end, the fault lay squarely on my shoulders. I took an aerosol can of unknown origin and sprayed it onto a projector containing a very hot light bulb, which provided a source of ignition. Furthermore, despite the fact that the can had a picture of a cat and a dog on it (I still don't know what *that's* all about), the back of the label had the word "Peligroso!" printed on it. I'm pretty sure that means danger.

In the end, I got lucky and avoided a serious burn by the hair of my chinny, chin …uh oh … those chin hairs are gone now. In the spirit of brotherhood, my comrades later hung a sign over my desk extolling my new nickname: "Flash! Do you mind if I smoke?"

Editor's Note: Can you help us out with the meaning of the word "peligroso" and what the picture of the cat and dog might mean? It would be interesting to find out just what was in the can. If you have the answer, please e-mail me at countermeasure @safetycenter.army.mil. I'll share your answer in the Mail Call column in Countermeasure. *By the way, if you've had an interesting experience with a COTS item—especially one you bought overseas—please take a few minutes and send me an e-mail describing it. You might have the makings of a good article or an interesting note for the Mail Call column.*

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To Live or Die on the Range

SFC JOHN TEMPLE
Ground Accident Investigator
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Will you be ready when the range goes 'hot'?

It was getting dark and the unit had completed its range fire and was preparing to go home. Their M2 HB (heavy barrel) .50 caliber machine guns needed to be brought off the firing line and loaded onto a vehicle. The officer in charge (OIC) told SGT Duvall (not his real name) to load the weapons into a HMMWV. SGT Duvall went to firing point one and, with assistance from SGT McReady (not his real name), loaded the first weapon. They continued down the firing line to firing point three, where they picked up that M2 and carried it to the HMMWV. There were other weapons in the HMMWV, so SGT Duvall told SGT McReady to lift the back of the M2 up so he could push from the muzzle end and slide it in. As SGT Duvall began sliding the M2 into the HMMWV, the machine gun's butterfly trigger caught the pintle of another weapon and caused the M2 to fire. SGT McReady heard the weapon fire, felt the blast, and jumped out of the way. When he turned around, he saw SGT Duvall lying on the ground with a gunshot wound to the chest.

That night a horrible accident took place, one that claimed the life of a Soldier. But it wasn't an isolated event. During FY03 we lost 12 soldiers to range accidents—and that figure only represents the tip of the iceberg. The modern Army causation model states that for every major accident there are 59 minor incidents and 600 close calls. That means the problem is much larger than suggested by the number of fatalities.

Again, this wasn't an example of an isolated problem. Here are some more examples of Army range accidents.

Confusion on the Range

A unit was conducting M16A2 qualification, including a night fire, for an upcoming Expert Infantry Badge (EIB) test when a Soldier was accidentally shot and killed.

The Soldier who fired from the zero firing line arrived on the range after the evening's safety brief had been given and, therefore, had not been briefed. The range OIC had changed the firing scenario after the first firing order, but didn't ensure all personnel were briefed on the new procedures.

Neither the OIC nor the range safety officer (RSO) had positive control over all the Soldiers on the range. The Soldiers were issued ammunition behind the tower, rodded onto

the range as they waited below the tower, and then walked as far as 200 meters to their firing points. The OIC was giving commands to the third firing order at the 25-meter line as the fourth firing order was moving to the daytime qualification points, which was now the ready line. The firers in the fourth firing order heard the commands being given to the Soldiers on the 25-meter line and thought they were for them. As a result, they rushed to their positions and prepared to fire. Four Soldiers loaded their weapons and two actually opened fire from the ready line. One of the Soldiers hit and killed another Soldier on the 25-meter line. As it turned out, the OIC and RSO were not certified in accordance with 1CD 350-1.

Not-So-Friendly Fire

It was a dark and bitterly cold night. The young paratrooper stepped from the line of departure (LD) and began to navigate the live-fire lane. A private first class was serving as the A team leader (a responsibility normally reserved for an NCO), and was motivated and aggressive. Little did he know that each step he took brought him one step closer to an accident. As the assault team attacked the objective, the young paratrooper accidentally shot the B-team leader.

How could this have happened? There were leadership changes within the squad before the operation. As a result, the young paratrooper oriented to the wrong sector, and there was some confusion among the safeties on the range. Fortunately, this time the Soldier survived the gunshot wound.

A Live Fire Gone Bad

A basic training unit was conducting a night infiltration course on a range when a drill sergeant was accidentally shot and killed.

The RSO was responsible for making sure all weapons were test fired and properly mounted before any of the basic trainees got onto the course. On this particular range, once a weapon was placed in the M142 mount it was not to be removed. However, when the M60 in the mount repeatedly malfunctioned, the Soldier operating it replaced it with another M60. The Soldier did not properly secure the weapon on the mount, nor was the M60 properly test fired before the training resumed. When the M60 was fired, the barrel depressed enough for a round to hit a drill sergeant as he walked on the range behind the crawling Soldiers.

Where There's Fire, There's Smoke

A unit was firing on an indoor range when sparks from their rounds hitting a metal bullet trap ignited a canvas sheet covering the trap's front. The fire quickly spread, igniting the soundproof material on the walls and ceiling. The Soldiers evacuated the building and, once outside, conducted a head count and found one Soldier was missing. The company commander donned a protective mask and entered the building. He found the Soldier lying on the floor unconscious. Despite attempts to save the Soldier's life, he died of smoke inhalation.

The dead Soldier had arrived at the range late and didn't receive a conduct of the range or safety briefing. When the fire started he was in the waiting area, unaware there was

"For every fatality there are a number of near misses."

an exit approximately 7 feet away. He was found in a hallway that led to the door he had used to enter the building. Investigators believe he was attempting to walk 150 feet to the only exit he knew of—the entrance he'd used to enter the building. Knowing the location of exits is one reason that everyone receives a conduct of the range and safety briefing.

Recurring Issues

When looked at, there were some common threads to these accidents. There are pieces of the problem that need to be understood so more Soldiers aren't needlessly killed. Let's look at the key common issues:

- Range safety officers and OICs not understanding their responsibilities as outlined in Army Regulation 385-63 and Department of the Army Pamphlet 385-63.
- Range safety officers being diverted away from their duties. Many times when a range accident is investigated we find the RSO was performing other duties, such as issuing ammunition or posting guards. In some cases, the RSO was not clearly identified. One of the RSO's jobs is to verify that all weapons are clear before leaving the firing line. When an RSO has not been identified, Soldiers have been known to leave the firing line with loaded weapons.
- Range and safety briefings not conducted prior to a Soldier firing. **Every** Soldier entering the range late needs to be identified and given the full briefing before firing. The range briefing needs to address how the range will be run, starting from the time the Soldier enters the range until he or she exits.
- Range safety officers and lane safeties unfamiliar with the clearing procedures for the weapons being fired, or not in a position to ensure the range is running safely.
- Officers in charge being appointed the night prior to the range fire, thus limiting their preparation time.
- Ammunition being issued without control measures and accountability.
- Risk management not adequately conducted.

How Can We Prevent These Accidents?

Commanders need to establish a program to train RSOs and OICs on their duties and responsibilities. Range control does have a range certification. However, that shouldn't be confused with the responsibility commanders have to train and certify OICs and RSOs properly. Range control is focused on local polices and range procedures for the installation, not certifying RSOs and OICs on the weapon systems units will be firing.

Commanders need to identify RSOs and OICs early enough so proper preparation and coordination can be completed. Commanders also need to ensure risk management is conducted for every range they will be using.

Officers in charge need to have a plan for everything from the time they receive

the mission to run the range until they turn in the score cards. That includes doing a reconnaissance of the range and including the RSOs—normally experienced NCOs—in the planning.

Officers in charge should know where each person is on the range and what their weapon status is at all times. They also need to ensure the only Soldiers who have ammunition are the ones who are ready to fire. Each person who has a responsibility on the range needs to back-brief the OIC. Remember, the OIC is responsible for everything that happens on the range.

Range safety officers need to plan with OICs to ensure sure they are not diverted from their RSO duties. Those duties include ensuring all lane safeties are competent and qualified on the weapon system being used, and verifying all weapons are clear before being removed from the firing line. Range safety officers must also ensure each Soldier is briefed on how the range will be run and provide Soldiers a thorough safety briefing. When Soldiers arrive late, RSOs are responsible for making sure those Soldiers get a proper safety briefing before going onto the range.

These are just a few steps you can take to ensure you have a safe and successful range fire. Range accidents are tragedies that can be prevented!

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It's Not Clear Until I Say "It's Clear!"

SFC JOHN TEMPLE
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The range had been hot for 3 days. I was the master gunner on the range and I'd had very little sleep. We'd been running Bradleys downrange quickly and efficiently that night until 0430, when the crew of B31 reported a malfunction with their 25mm cannon. I instructed them to move to the clearing pit and clear the weapon.

Forty-five minutes had passed and B31 was still in the clearing pit. The next vehicle had completed firing and was ready to move to the clearing pit. I tried to get B31 on the radio but wasn't successful, so I called range safety and asked for a situation report. I was told the crew was still working on the problem. I still had two vehicles that needed to fire, so I decided to go down and clear the weapon myself. I left the tower and took the walkway to the clearing pit. As I walked up to the Bradley, the Bradley commander and range safety officer (RSO) said the weapon was clear, but that they couldn't get it apart.

Without verifying the weapon was clear, I climbed onto the front of the vehicle to help remove the barrel. As I straddled the barrel, I heard a loud explosion. Talk about a concussion—it felt like a mule had kicked me in the butt and the back of the head! The weapon had fired and sent a 25mm round between my legs. I was lucky not to be hit!

That night I made several errors that could have cost me my life. I assumed the weapon was clear because the RSO said it was. However, the fact the weapon was still together should have been a red flag, and I should've never walked to the front of the vehicle. However, I was tired and anxious to get the Bradleys firing again. That's no excuse, but it's something that happens all the time on ranges.

Lessons learned: Never take shortcuts on the range, even if you are running behind schedule. Never assume a weapon is clear just because someone tells you it is. Always take the time to make sure for yourself!

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When the Leaders Weren't Looking

PEGGY ADAMS
and
JAVIER RUIZ
U.S. Army Safety Center

After being deployed for several months away from home station, two young Soldiers volunteered to go to the National Training Center (NTC) to provide maintenance assistance during vehicle railhead operations while the rest of their unit returned to home station. The two Soldiers were accompanied by their team chief. After completing the mission at NTC, the team chief sent the two Soldiers back to their unit while he remained to tie up some loose ends.

The Soldiers arrived at their unit around 1600 and were scheduled to go on leave the following day. The unit was on a scheduled block leave and would deploy to NTC later that month. None of the Soldiers' leaders were present to greet them upon their return.

Once the Soldiers arrived at their barracks, they changed clothes and began drinking. After running out of beer a little before midnight, the two Soldiers drove to the nearby shoppette to buy more beer. After purchasing the beer, they drove back toward the barracks. The driver rapidly accelerated and within 1/3-mile was going between 60 and 70 mph. The driver entered a left-hand S-curve and lost control of the vehicle, which slid off the roadway and into a gravel area on the right side of the road. The vehicle spun 90 degrees counterclockwise and then stopped when then the passenger side door struck a utility pole. The passenger suffered massive head and abdominal injuries, as well as a fractured femur. Unfortunately, his head injuries were fatal. The driver suffered multiple facial fractures and a severe head injury. It is unknown at the time of this writing if the driver will recover fully. This tragic accident took the life of one very young Soldier and will scar the other for the rest of his life.

While it is true that every Soldier has a personal responsibility to stay safe, leaders must be proactive and intervene if they are going to reduce the number of POV accidents plaguing our Army today. Leaders can't just give the standard "buckle-up" and "don't drink and drive" safety briefings. Yes, these are important and leaders need to continue providing these messages to Soldiers. However, keeping Soldiers safe in their POVs requires something more—leaders taking positive control of their Soldiers.

A leader should have been there when these two Soldiers arrived back at their unit. The leader should have talked with these Soldiers, found out what their plans were, and counseled them. Leaders must identify the Soldiers who fit the "high risk" profile and implement controls to mitigate the risks. Soldiers who fit the "high risk" profile:

- Are between the ages of 18 and 24;
- Are in grades E-1 through E-4;
- Are operating or riding in a vehicle between the hours of 2300 and 0400;
- Have a history of disciplinary, drug, or alcohol problems;
- Are taking medications that affect their motor skills or induce fatigue;
- Are just returning from a prolonged deployment;
- Are going on a mid-tour leave;
- Are attached to or are from another unit (including mobilized Soldiers).

When Soldiers know their leaders are genuinely concerned about them, they will listen. It's true some Soldiers will do whatever they want regardless of what they're told. However, there are just as many or more who will listen. Are you willing to take a chance and say nothing?

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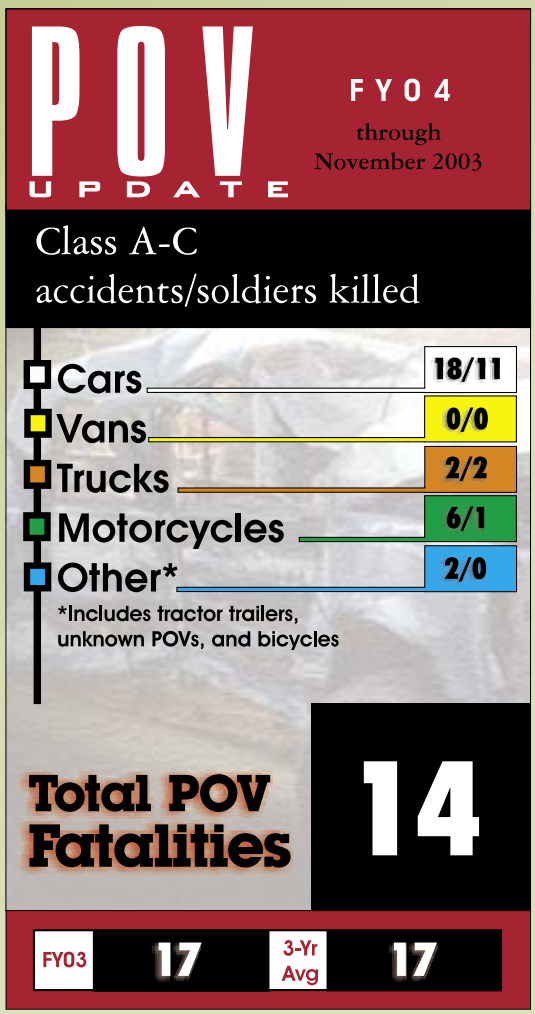

CamelBaks Need Care Too!

JULIE SHELLEY
Staff Editor

Your deployment orders have come through and you're packing for a tour in Iraq or Afghanistan. You begin checking off those essential items when, suddenly, you realize your CamelBak has been in the closet for more than a year now. Even worse, there's still a little water left from the last time you used it! What can you do now?

Every Soldier deploying to Southwest Asia, or even gearing up for an exercise at the National Training Center or Joint Readiness Training Center, hears "hydration" over and over again. From basic training on up, Soldiers are reminded constantly of the importance of staying hydrated. Many Soldiers have adopted the CamelBak system in addition to the standard canteen because of its easy portability and use. However, like any other system, the CamelBak requires maintenance to keep it safe.

First and foremost, the CamelBak must be kept clean to prohibit the growth of mold and bacteria. Wash the system daily with warm, soapy water. (Before storing the CamelBak, be sure the system is completely dry.) When the system hasn't been used for awhile, fill the reservoir with water, add 2 teaspoons of household bleach, and let it sit overnight. Thoroughly rinse the system the next morning with warm water. Also, because the CamelBak is a closed system, sports drinks and other beverages containing sugar accelerate the growth of mold and other contaminants inside the reservoir. Always rinse the system thoroughly with warm water after each use with sports drinks.

The fluctuating temperatures in the desert won't make much of a difference to your CamelBak. Cleaning is the same in both hot and cold environments. However, the water inside the CamelBak will reach the ambient, or outside, temperature in just a few hours. To delay freezing, keep the system close to your body under insulated layers. When the temperature gets hot, store the full reservoir overnight in a refrigerator to keep the water cool and inhibit bacterial growth.

CamelBak systems are designed to last and should see you through your deployment, even if it lasts a year or longer. With proper cleaning and storage, the reservoir will last many years. Bite valves typically wear out in 3 to 4 years, depending on how frequently you use them. And, when you do make it home, be sure to store your CamelBak in a dark, cool place for your next adventure.

Author's note: The CamelBak system is not safe for use in a nuclear, biological, chemical (NBC) environment. In an NBC threat, the standard 1- and 2-quart canteens should be used.

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ACV

Class A

■ Soldier died from electrical shock after grabbing some low-hanging power lines. The Soldier's BFV crossed under the power lines just prior to the accident.

Class B (Damage)

■ BFV suffered Class B damage when its track broke, causing the vehicle to pull to the left side, cross over a guardrail, and overturn. The vehicle was traveling between 20 and 30 KPH when the track broke.

AMV

Class A

■ Soldier drowned when the HMMWV he was riding in drove into a canal and was swept away. The HMMWV's driver and another Soldier escaped from the vehicle. The Soldiers were searching an area after a mortar attack at the time of the accident.

■ Soldier died when the split ring HEMMT tire he was changing exploded. The split ring struck the Soldier in the head, causing fatal injuries. Two other Soldiers were injured in the accident.

Personnel Injury

Class A

■ Soldier died from wounds suffered during a friendly fire incident. No other details were reported.

■ Soldier drowned in a canal after he tried to rescue another Soldier whose vehicle entered the canal.

■ Soldier suffered fatal injuries after being hit by a forklift's tines during upload operations.

■ Soldier died from injuries suffered as the result of a non-combat weapons discharge. No other details were provided.

■ Soldier collapsed and died after finishing the walking portion of the APFT.

Class B

■ Soldier's finger was amputated at the knuckle while he was attempting to hook up a 600 GPM pump trailer to a HMMWV. The Soldier's finger was caught when the HMMWV's driver moved the vehicle forward, resulting in the amputation.

■ Soldier lost the tip of his middle finger when a CONEX door slammed on his hand. A gust of wind caused the door to hit the Soldier's hand.

■ Soldier's finger was amputated when his wedding ring caught on a metal shackle on an obstacle course. The Soldier was negotiating the obstacle course during unit training when he attempted to slide against a wall to the ground, causing the ring to catch.

■ Soldier's finger was amputated when he jumped from the rear of an LMTV. The Soldier's finger was caught during the jump, causing it to separate from his hand.

POV

Class A

■ Soldier died after being struck by a POV while crossing a highway. The accident occurred during the early morning hours.

■ Soldier suffered fatal injuries when his vehicle ran off the roadway. No other details were provided.

■ Soldier was killed after his motorcycle struck a sedan on a foreign highway. The sedan attempted to make a right turn in front of the Soldier, who was riding in the opposite lane. The Soldier was unable to stop his motorcycle or avoid the sedan and struck the left front of the vehicle. The Soldier, who was wearing a helmet, was thrown from the motorcycle during the accident sequence.

■ Soldier died after being struck by a pickup truck during the early morning hours. The Soldier was crossing a dimly lit, four-lane highway without a crosswalk when the pickup truck, which was speeding, hit him. The Soldier was wearing dark clothing and crossing the highway in an area just around a curve at the time of the accident.

■ Soldier suffered fatal injuries when he was hit by a pickup truck while changing a tire on his vehicle.

DRiViNG!

Sometimes you can't predict every hazard—like the road collapsing under your vehicle. But you can ALWAYS take time to buckle up and wear your helmet. This driver did and walked away from the accident uninjured.

U.S. ARMY SAFETY CENTER

Buckle Up Wear Your Helmet Be Prepared

ARMY GROUND RISK-MANAGEMENT INFORMATION

Countermeasure

VOL 25 NO 2 http://safety.army.mil FEBRUARY 2004

Severe Weather

Countermeasure
ARMY GROUND RISK-MANAGEMENT INFORMATION

CONTENTS

features

U.S. ARMY SAFETY CENTER

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DASAF'S CORNER
From the Director of Army Safety

Think Outside the Slot—Expand Our Peripheral Vision

The common perception I hear as I travel around the Army is that risk management isn't "sexy." Junior leaders—the people who really make the difference—often see risk management as a hindrance rather than a combat multiplier. To these leaders risk management exists only in the Army and is just one more layer of bureaucracy to overcome.

This misconception could not be further from the truth. Risk management is a major growth industry worldwide. As industry leaders realize the benefits a safe work environment can have on morale and productivity, people who specialize in risk mitigation have become in high demand. In fact, the Army's 5-Step Risk Management Model has been implemented by many organizations. One of those organizations is the Hanauma Bay, HI, Ocean Safety and Rescue Team.

Hanauma Bay is one of the world's most spectacular vacation locations and sits at the southern end of Oahu, 30 minutes from downtown Honolulu. The bay is a mecca for tourists and hosts thousands each day from around the globe. The snorkeling in the bay is second to none; however, for many swimmers it is their first experience with a powerful ocean tide, and that presents significant hazards. Those hazards became painfully obvious during 2002 when 12 swimmers drowned in the bay. This sparked a wave of public and political pressure for drastic changes.

DASAF'S CORNER
From the Director of Army Safety

Hanauma Bay's Ocean Safety and Rescue Team's answer was to implement the Army's risk management process.

With support from U.S. Army Pacific Command safety professionals, the team began taking a hard look at the hazards. Identifying the hazards proved easy, but the assessment process was harder. The team painstakingly researched the accidents, looking at a host of factors including age, sex, swimming experience, and medical pre-conditions. However, none of these provided any consistent trends. The drownings almost always occurred in chest-deep water, but were evenly distributed throughout the bay. The breakthrough came when the team went beyond analyzing the accidents and started looking at the near misses. As they looked at the locations where swimmers were rescued from drowning, they saw a pattern. The "slot"—a snorkeling area with a strong undertow—had the greatest number of rescues, but no fatalities. The team members had highlighted the slot as their highest risk area and were doing several things to protect swimmers there. However, because the lifeguards were so fixated on watching swimmers in the slot, they were missing distressed swimmers in other areas of the bay.

By analyzing the near-miss data, the team realized it had a model for success that could be learned from and built upon. The team presented its data on fatalities and near misses to public officials. As a result, the team gained funding for an additional guard tower to focus on the dangerous areas east of the slot. Additional control measures included a safety briefing for all swimmers on the bay's danger spots, and better communication between lifeguards and rescue crews. Lastly, a supervisor was hired to implement the controls and supervise the bay's safety team.

The changes in the Hanauma Bay safety program produced immediate results. During 2003 there were two fatalities, a huge drop from the previous year's 12. The team attributed its success to the Army's risk management program. As it turns out, risk management *is* pretty sexy when it saves lives—and not just at Hanauma Bay.

Hanauma Bay's safety team was taking

care of the slot, their area of highest risk, but not paying attention to lower risk areas. I believe many units approach risk management the same way. Let's use convoy operations as an example.

In the large convoys I saw in Operation Iraqi Freedom, risks were identified in detail and control measures were implemented according to Field Manual 55-30. There were multiple briefings and rehearsals, and leaders were always present. However, what about those four-vehicle convoys traveling short distances? What level of detail is given to identifying their risks and developing appropriate control measures? What level of leadership leads the convoy? What level of leadership approves the plan? Does the leader approve the plan in person after being back-briefed and reviewing the contingency plans, or is the plan approved over the radio because it is a "simple" mission? Do the Soldiers even receive a safety briefing?

Fortunately, we are not losing many Soldiers to accidents in large convoys. We have identified those convoys as high risk and are successfully preventing accidents. However, we are losing Soldiers in small convoys on simple missions. Great leaders pay attention to their near misses and identify all risks—not just the highest ones—and implement control measures for all missions.

As an Army, we must begin looking hard at our near misses if we are to get our arms around all risk sources. In military schools we are taught to "prepare for the next war, not the last one." Studying near misses allows us to identify and prevent accidents *before* they occur. Look closely at your formations and other units like yours for near misses. Share your near-miss stories with our readers by sending them to joey@safetycenter.army.mil so we can all learn from them. If it saves just one life, it will be some of the most valuable five minutes you ever spent.

Thank you for what you do every day to keep our Soldiers safe.

Keep your leader lights on!

Joe Smith

BG Joseph A. Smith

Zapped and Zinged

BOB VAN ELSBERG
Managing Editor

It was late afternoon and except for the other guys like me who were on 24-hour duty, the HAWK missile site was deserted. The skies had been overcast all day (no surprise for Germany), and it had rained during evening chow. I had finished dinner and was relaxing in my bunk when my buddy, SP4 Terry VanVleck, came in and grabbed me.

"Bob, you've got to see this!"

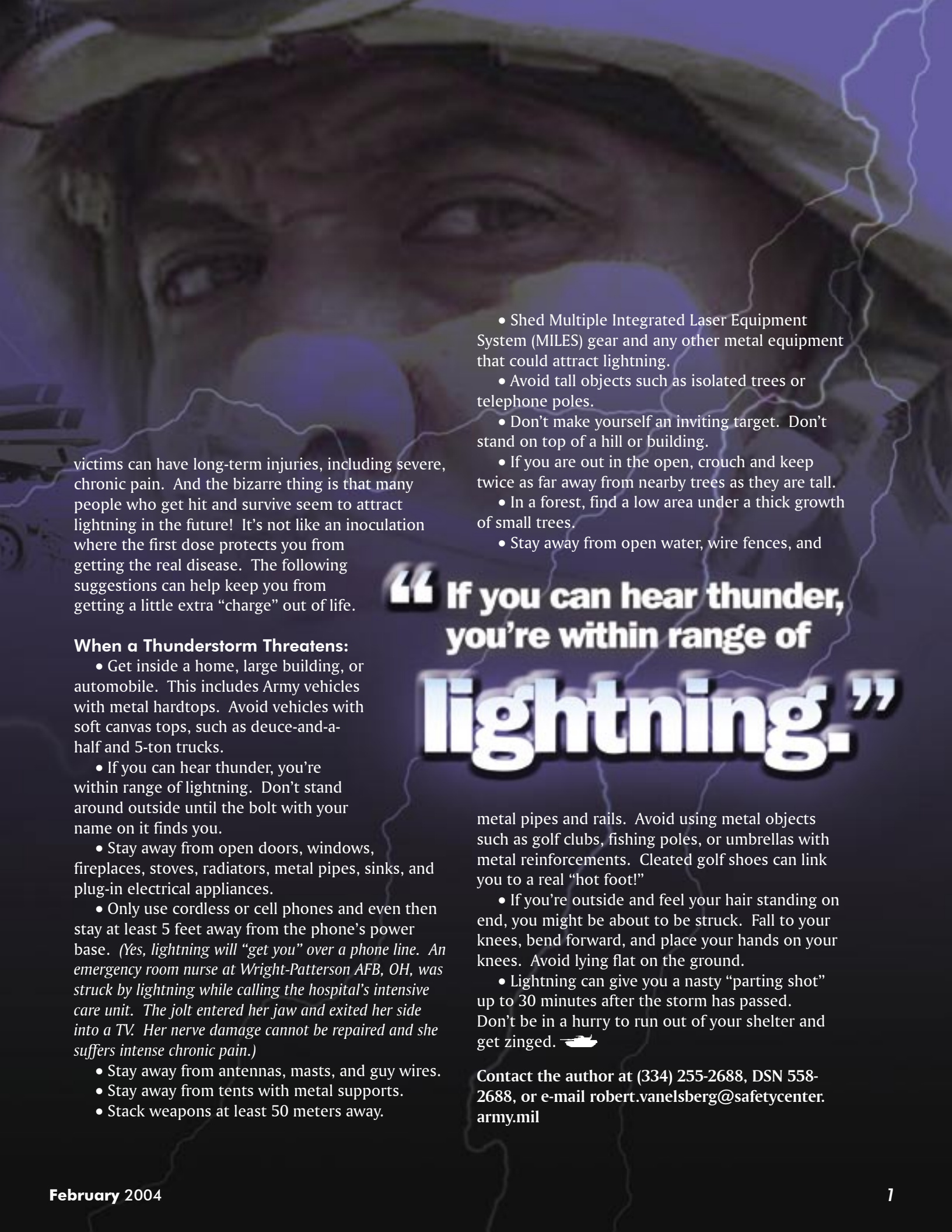
I wasn't anxious to go out into the cold, still-drizzly weather, but Terry wouldn't have bugged me unless it was something important. Reluctantly, I got my boots back on and followed him out the door. We trudged across the site and then up the berm where we had our continuous wave acquisition radar (CWAR). Terry, who was a maintainer for the system, opened an access panel on the side of the radar. I looked inside—it was toast! Shaking his head, Terry looked at me and said, "It took a lightning hit during dinner."

I thought, "Whew, I'm glad I wasn't out here doing system checks when this happened!" I also decided right then and there that I was going to pay a lot more attention to the weather when I was outside working with the radars.

Fortunately, the Army's only loss that afternoon was a radar—not a Soldier. But do Soldiers get nailed by lightning while working? You betcha! During the last two fiscal years 10 Soldiers have been struck by lightning. Let's take a brief look at their experiences:

- Lightning struck some trees near where eight Soldiers were underneath a tarp trying to get out of the rain. The lightning traveled across the ground, injuring all eight Soldiers and causing three to be hospitalized.
- Two Soldiers were returning from safety duties on a drop zone when they saw the truck assigned to pick up the deployment bags stuck in the mud. The Soldiers went to get a POV to pull the truck out of the mud. One Soldier was struck by lightning as he walked across the tarmac. He stopped breathing and his heart stopped beating. An Army civilian revived him, but the Soldier had to be hospitalized for six days.
- An operational detachment was firing as storm clouds and light rain moved into the range area. The detachment had stopped firing to set up another target scenario. The detachment's chain of command halted the training because of lightning moving into the area. The detachment requested a cold time from range control to wait out the storm, and then advised they would not be monitoring their radios during the bad weather. As they were breaking down their radios lightning struck nearby, hitting a Soldier in the head. The Soldier was dazed but coherent and recognized what had happened. He was taken to the post hospital and kept overnight.

While all of these Soldiers survived, lightning



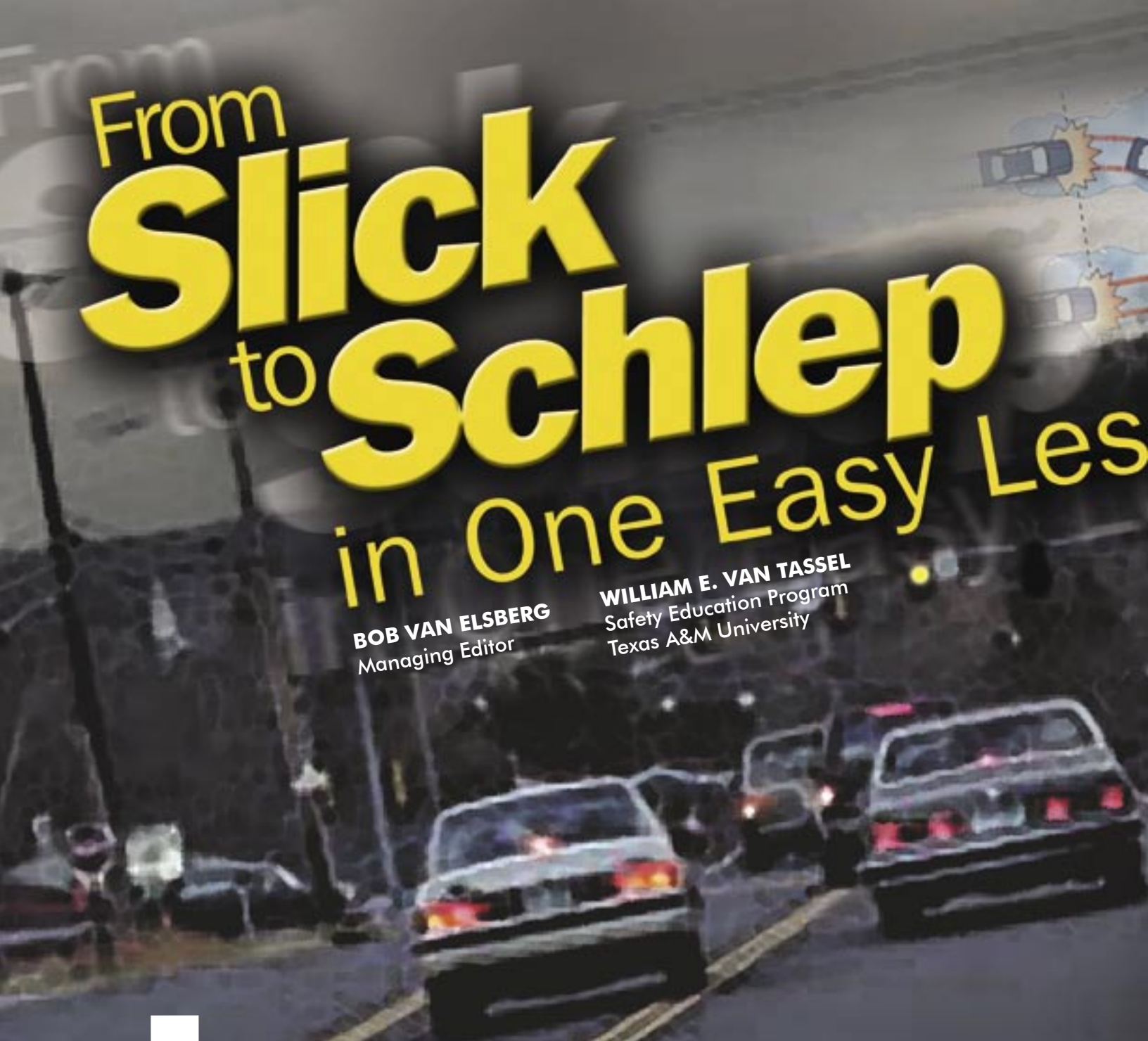
victims can have long-term injuries, including severe, chronic pain. And the bizarre thing is that many people who get hit and survive seem to attract lightning in the future! It's not like an inoculation where the first dose protects you from getting the real disease. The following suggestions can help keep you from getting a little extra "charge" out of life.

When a Thunderstorm Threatens:

- Get inside a home, large building, or automobile. This includes Army vehicles with metal hardtops. Avoid vehicles with soft canvas tops, such as deuce-and-a-half and 5-ton trucks.
- If you can hear thunder, you're within range of lightning. Don't stand around outside until the bolt with your name on it finds you.
- Stay away from open doors, windows, fireplaces, stoves, radiators, metal pipes, sinks, and plug-in electrical appliances.
- Only use cordless or cell phones and even then stay at least 5 feet away from the phone's power base. *(Yes, lightning will "get you" over a phone line. An emergency room nurse at Wright-Patterson AFB, OH, was struck by lightning while calling the hospital's intensive care unit. The jolt entered her jaw and exited her side into a TV. Her nerve damage cannot be repaired and she suffers intense chronic pain.)*
- Stay away from antennas, masts, and guy wires.
- Stay away from tents with metal supports.
- Stack weapons at least 50 meters away.
- Shed Multiple Integrated Laser Equipment System (MILES) gear and any other metal equipment that could attract lightning.
- Avoid tall objects such as isolated trees or telephone poles.
- Don't make yourself an inviting target. Don't stand on top of a hill or building.
- If you are out in the open, crouch and keep twice as far away from nearby trees as they are tall.
- In a forest, find a low area under a thick growth of small trees.
- Stay away from open water, wire fences, and metal pipes and rails. Avoid using metal objects such as golf clubs, fishing poles, or umbrellas with metal reinforcements. Cleated golf shoes can link you to a real "hot foot!"
- If you're outside and feel your hair standing on end, you might be about to be struck. Fall to your knees, bend forward, and place your hands on your knees. Avoid lying flat on the ground.
- Lightning can give you a nasty "parting shot" up to 30 minutes after the storm has passed. Don't be in a hurry to run out of your shelter and get zinged.

"If you can hear thunder, you're within range of lightning."

Contact the author at (334) 255-2688, DSN 558-2688, or e-mail robert.vanelsberg@safetycenter.army.mil



From Slick to Schlep in One Easy Les

BOB VAN ELSBERG
Managing Editor

WILLIAM E. VAN TASSEL
Safety Education Program
Texas A&M University

It was raining lightly as I headed home for lunch in my compact pickup. My truck drove like a sports car and I just knew I could handle any situation on the road. After all, I was a slick driver—an "ace of the asphalt," a "prince of the pavement," a "boy with a toy." Actually, I was about to be in deep "doo-doo."

As I drove down the road I checked out the stoplight at the intersection ahead. This was one of those "l-o-n-g" lights. You know—the kind where you can leisurely tune through the entire AM and FM bands. I did not want to be that delayed.

I was going 45 mph downhill and figured I could just make it through the intersection—maybe on a yellow—before the light turned red. I might have made it too, except a more cautious driver stopped in front of me. No sweat. That's why my truck had wide tires and power-assisted brakes.

I stomped on the brake and the truck suddenly attempted to "swap ends!" Funny how driving gains a whole new perspective when you're traveling sideways in the fast lane. I got off the brakes and steered out of the slide. Stopping a hair's breadth from the car, I wondered if the driver had watched all this in his rearview mirror or had been blissfully ignorant of my antics. I sat there with my fingers trembling on the wheel. I'd gone from slick to schlep in just one "easy" lesson. ("*Schlep*"—Yiddish for "one who moves awkwardly." I fit that description!)

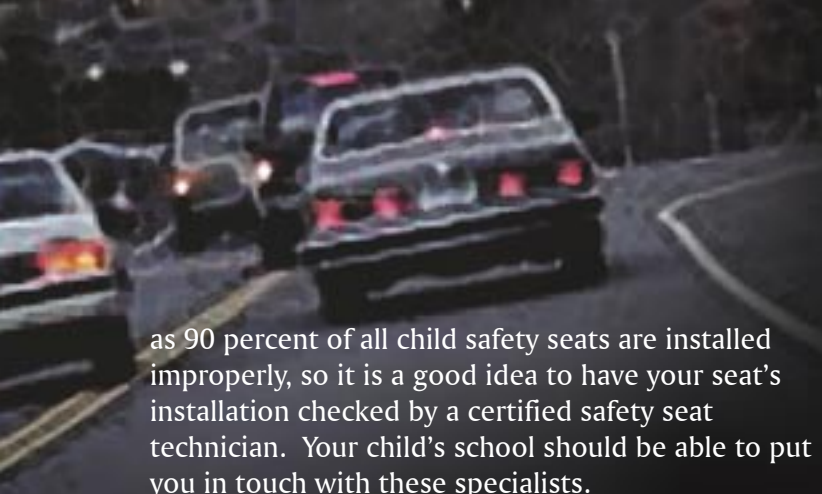
There is a lot to learning how to "navigate" a rain-slicked road safely. Mr. William E. Van Tassel, a 20-year veteran of competitive racing and a POV safety instructor for the Army Safety Center, offers the following tips:

• If your vehicle has an anti-lock brake system (ABS), test it to become familiar with how it works. This system was designed to help you steer during emergency braking conditions, but you need to understand the system's unique characteristics. For instance, the brake pedal typically pulsates and some systems also make strange noises. While these are normal, they often cause drivers to think something is wrong and let off the brakes. To use ABS properly, you should keep firm pressure on the pedal until your vehicle either stops or you steer clear of the problem.

• Before you get into an emergency situation, go out to a safe location (a large empty parking lot, for example) on a rainy day and hit the brakes *hard* until the ABS engages. Get used to the way it works and feels so you won't be caught off guard in an emergency situation. You can tell if your vehicle has ABS by watching the dash lights. All ABS-equipped vehicles have an ABS light that illuminates briefly as the vehicle is started.

• Tires are vital to your safety. Whether or not you can steer, brake, or accelerate effectively depends on your tires performing properly. First, ensure your tires have enough tread. If you stick a penny into your tread and can see Lincoln's head, you need to replace your tires. Having adequate tire tread will help divert water from under the tires in rainy conditions, and will also enhance traction in snowy and icy conditions. Next, check the air pressure of each tire to make sure it is inflated to the recommended pressure. The maximum pressure, shown on the tire's sidewall, and the vehicle manufacturer's recommended tire pressure, normally shown on a decal inside the driver's door frame, don't always match. The vehicle manufacturer's recommended pressures are based on what will provide optimum handling and comfort when driving. Checking the pressures at least monthly is one of the most important things you can do to protect your family. Easy-to-use tire pressure gauges can be purchased for as little as $1.

• Use occupant protection. The simplest and most effective method to reduce injuries during a crash is to be properly restrained, so make it a habit. For adults, this means using the vehicle's seatbelts. For children, this means using the appropriate child safety seat. As many



as 90 percent of all child safety seats are installed improperly, so it is a good idea to have your seat's installation checked by a certified safety seat technician. Your child's school should be able to put you in touch with these specialists.

• Brake early and smoothly. In slick conditions, effectively slowing a vehicle becomes more challenging. During braking, your vehicle's weight transfers toward the front, reducing the weight over the rear tires and increasing the probability of skidding. Instead of moving your entire leg when pushing on the brake pedal, lock your heel into the floor and use your ankle as the pivot point. Place the ball of your foot on the pedal and gently apply pressure on the brake as if you were squeezing the water out of a sponge. If you still go into a rear-wheel skid, take these steps:

– Keep your eyes on target! Make sure you *continue* to look in the direction you want to go. Your hands and feet will automatically do what's necessary to steer the car in that direction.

– Gently ease up on the brakes. This transfers weight back toward the rear where it is needed.

– Don't automatically hit the brakes. Many people make the mistake of "going for the brake" in every emergency. If you're skidding, braking harder will only make things worse.

– Avoid distractions. When the weather turns bad, turn your radio down or off, and turn off your cell phone's ringer. Take a deep breath, relax your hands on the steering wheel, and focus on maintaining control and avoiding more careless drivers.

Contact Mr. Van Elsberg at (334) 255-2688, DSN 558-2688, or e-mail robert.vanelsberg@safetycenter.army.mil; contact Mr. Van Tassel at (979) 845-8832, or e-mail wvantassel@hlkn.tamu.edu

A Wild Truck Ride!

CW2 TONY PANKUCH
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About five years ago, I was a motor transport operator in a medium truck company. Wearing your seatbelt wasn't an option—it was standard operating procedure. We were convoying from our home station to Fort Polk, LA, for a rotation at the Joint Readiness Training Center. It was a long drive—two days, in fact—with a lot of rest stops and slow-moving traffic. Driving 30 or more M915 semi-trucks down the interstate can be a tedious journey, one that tends to dull your senses as well as your situational awareness.

After we got off the interstate we traveled down a two-lane country road, where the vehicles spread out and got separated. Several civilian vehicles became intermixed in the convoy. I was driving the second-to-last truck, with the last truck following about 500 meters behind me. As we struggled to catch up with the convoy, I remember driving by a side street where a car was waiting to turn into our lane. It looked like the driver was going to turn in front of my truck, but decided at the last minute to wait. I passed this vehicle without any problems, but the truck behind me wasn't so lucky—the car pulled out right in front of it. The truck was running bobtail (no trailer), which made it almost impossible to stop the truck quickly. The Soldier slammed onto his brakes to avoid a collision, but lost control. The truck swerved and skidded, went into a ditch on the side of the road, and then flipped onto its roof.

It was a violent accident, but the Soldier received only a few bruises and a hurt ego. His seatbelt worked properly and kept a bad accident from possibly being a disastrous one. The truck was a total loss. However, because the Soldier took the extra few seconds to put on his seatbelt, the Army lost only a truck—something that can be replaced.

Take the time to protect yourself and your passengers when you're driving a tactical vehicle or POV by making sure everyone is buckled up. The Army can buy a replacement truck, but it can't buy a replacement "you." And your Army and your family need you!

Contact the author via e-mail at anthony-pankuch@us.army.mil

Can Concertina Wire Really Destroy a HMMWV?

Anonymous

There is nothing like being deployed to a theater of war to experience all the "normal" things war can bring: rain, cold, dust, wind, storms, and the occasional enemy troop. One thing most of us probably wouldn't think about is concertina wire—that pesky, really sharp stuff used to section off critical areas. One of the worst places to encounter it is on a narrow road where vehicles, pedestrians, flying dust, and high winds make for an already precarious situation.

On one particular mission, I was driving a HMMWV on a main road when I came to a highly congested area. The dust was blowing, there were Soldiers waiting to go to sick call at a local hospital, and several vehicles were waiting to pass a detail putting concertina wire around a perimeter. I had to wait with everyone else for my turn to pass.

Once the area was clear I drove through the bottleneck, but failed to notice a huge strand of concertina wire in my path. I knew I had driven over something, but I just kept going. After all, a HMMWV can run over *anything* and not be fazed, right?

It wasn't long before I heard a metallic sound coming from underneath the truck. I stopped to check the noise and found concertina wire wrapped around the front drive axle. "No big deal," I said to myself. "I'll get it fixed as soon as I finish the mission."

Unfortunately, I never finished the mission. The wire punctured both front tires, flattening the right front. The wire also destroyed the left and right front constant velocity (CV) boots and ruined the right-front CV joint. Although it sounded like a lot of damage, the motor pool personnel originally thought it would be a simple fix. That is, until they got the HMMWV up on jack stands. Before it was over, mechanics had to use bolt cutters to remove the concertina wire, and also replace both CV boots and the damaged CV joint.

I was foolish in thinking my HMMWV was indestructible. Sure, HMMWVs are tough, but so is concertina wire. I should have never driven over something I couldn't recognize. Luckily it wasn't something worse and I'm here to tell this story. However, those motor pool guys probably won't forget me anytime soon.

Be careful when you're in an operational environment, especially when you're deployed overseas. There are many hazards on foreign roads, and nothing is indestructible—not even a HMMWV!

A Leap Into the Twilight Z

CPT MARK FALSANI
81 FS/DOB
Spangdahlem AB

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

And so our story begins …

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

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

He was off balance when he launched. With a horrendous thud he crashed onto the snow, landing on his back. The impact knocked him senseless. When the ski patrol finally found him, they couldn't believe he wasn't dead.

The ski patrol had measured where his tracks stopped and started again and he'd flown 150 feet. Although he was still breathing, he'd broken several vertebrae. He'd also hit his head hard enough to have a mild concussion. Had he not been wearing his helmet, it could have been A LOT worse.

Kevin had to cool it for the rest of the season but, with rehabilitation, was able to get on his board again the next year. You can chalk that up to his helmet. The snow wasn't soft as he barreled down the mountain at 65 mph. If he'd crashed without his nugget cover, it would have been like dumping a bike on the autobahn without a helmet—really dumb!

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

Finally, raging down a closed run can have some very unpleasant consequences. You can get your ticket ripped, not to mention being fined or arrested. If you're in deep snow, it could be much worse—you could get buried. Also, if you crash and need immediate medical help it's going to take longer because you're not where you're supposed to be.

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

Reprinted courtesy *Road & Rec*, Winter 2003

Snowboarding Safety tips:

- The best way to become a good snowboarder is to take lessons from a qualified instructor.
- The key to successful snowboarding is control. To have it, you must be aware of your technique, the terrain, and the skiers and snowboarders around you.
- Be aware of the snow conditions and how they can change. As conditions turn firm, the snowboarding gets hard and fast. Begin a run slowly.
- Snowboarding requires a mental and physical presence.
- If you find yourself on a slope that exceeds your ability level, sit down and dig the heel side of the board into the snow to slow you as you come down the run.
- The all-important warm-up run prepares you mentally and physically for the day ahead.
- Drink plenty of water. Be careful not to become dehydrated.
- Curb alcohol consumption. Snowboarding does not mix well with alcohol or drugs.
- Know your limits. Learn to snowboard smoothly and in control. Stop before you become fatigued and, most of all, have fun.
- Follow the seven safety rules listed below:

1. Always stay in control.
2. People ahead of you have the right of way.
3. Stop in a safe place for yourself and others.
4. Whenever starting downhill or merging, look uphill and yield.
5. Use devices to help prevent runaway equipment.
6. Observe signs and warnings, and keep off closed trails.
7. Know how to use the lifts safely.

(Information provided by the National Safety Council)

HERE'S JOEY!

It was one of those days you never quite forget. You know, a "Duh! What was I thinking!" moment. But there I was, a young private first class on my way to annual training.

I guess I was moving a bit too slowly because my motor sergeant told me to get in the deuce-and-a-half and get going. Anyone who's ever done it knows driving one of these things isn't exactly easy, and towing a trailer doesn't help the situation much either. But I was youthful and optimistic, and I didn't worry too much about this particular trip.

For you to really get the picture, I have to tell you how much stuff we were hauling. There was a 10 KW generator in the deuce along with the number one common and parts load list parts. Among other items, the trailer contained the section's computer, publications, and camouflage netting. While the motor sergeant and two other NCOs hooked up the trailer, I hopped in behind the steering wheel. One of the NCOs who had just hooked up the trailer jumped in the passenger seat, and off we went.

For the first 10 miles everything *seemed* to be going fine—that is, until a civilian van drove up beside me and the driver motioned for me to pull over. As I slowed down and moved to the shoulder, the van stopped in front of me. I hit the deuce's brakes, but nothing much happened! After some furious pumping, I finally stopped the deuce just inches from the van's back bumper.

The van's driver walked up and told me I had lost my trailer about two miles back. This was certainly news to me. I never felt it go! But sure enough, when I walked to the back of the deuce, the trailer was gone! As it turned out, it had come loose and coasted across three lanes of traffic, finally stopping on the freeway's left-hand shoulder. The trailer tongue was sitting on the ground.

After thanking the man, we drove to the next exit and turned around to retrieve the trailer. When we got there, we discovered the trailer had ripped the safety chains and intervehicular cable in half, not to mention the connection for the air brakes. We backed up to the trailer and tried to lift the tongue and hook it into the pintle—NOT! We tried raising the tongue with the jack, but it wouldn't raise it high enough. Finally, we put pieces of wood under the jack so it could lift the tongue high enough to hook onto the pintle.

Fortunately, our runaway trailer didn't cause an accident—but it could have! And wouldn't you know, all this happened because no one checked the cotter pin. I really didn't have anyone to blame but myself. It's always the driver's responsibility to make sure a trailer is hooked up properly. I certainly learned my lesson!

Adapted from an e-mail sent by SSG Kathy Diaz, Tool and Parts Attendant, Minnesota Army National Guard

LESSONS LEARNED

Mr. Don Wren, a safety engineer with U.S. Army Safety Center, pointed out three lessons learned from this incident.

- ***First, as the author observed, ALWAYS make sure the pintle hook is locked and the cotter pin is in place before towing.***
- ***Second, make sure you use trailer chains strong enough to support the trailer. Check the TM for the correct set.***
- ***Finally, use glad hands for the air brake connection between the truck and the trailer. These will automatically disconnect if the trailer separates from the tow vehicle, leaving the tow vehicle's air brake system intact.***

How Close is Too Close?

PEGGY ADAMS
Ground Technical Quality Assurance
U.S. Army Safety Center

Following another vehicle too closely can have deadly consequences for yourself and others on the road. One such fatal accident occurred overseas during a cold, dark winter's evening.

A local national driver had lost control of his car, which spun, struck a guardrail, and came to rest at a 40-degree angle in the left lane. The driver and his passenger then got out of the vehicle and walked around to its front to inspect the damage.

At that time, two Soldiers and their battalion commander were traveling on the same highway in a military van going the same direction. The van was traveling about 73 mph when the driver, a specialist, noticed a truck several cars in front of him putting on its emergency flashers. The truck began moving from the left lane to the emergency lane on the far right. Seeing the flashers, the specialist slowed down. A car passed the truck then swerved back to the right, cutting off the truck. The driver ahead of the specialist immediately slammed onto his brakes and swerved to avoid the vehicles ahead of him. The specialist hit his brakes and swerved to the left, but couldn't avoid striking the rear of the car, causing it to spin clockwise 45 degrees and slide into the right lane. The van continued to the left and struck the local national (mentioned earlier) and his car, which was still stopped in the left lane. The local national was fatally injured.

It is definitely not a good idea to stand on the highway after dark. However, allowing more following space would have given the specialist a better chance of avoiding the accident.

To protect yourself, use the 3-second rule in your POV. To begin, find a stationary object on the side of the road. After the rear bumper of the vehicle in front of you passes the stationary object, begin counting "one thousand one, one thousand two, one thousand three." If you don't make it to "one thousand three," you're too close. Should an emergency happen on the road in front of you, you probably won't be able to stop in time. Don't put yourself or others in a hazardous position. Keep your distance!

Contact the author at (334) 255-2256, DSN 558-2256, or e-mail adamsp@safetycenter.army.mil

POV UPDATE

FY04 through December 2003

Class A-C accidents/soldiers killed

Cars	24/18
Vans	0/0
Trucks	7/3
Motorcycles	8/1
Other*	2/0

*Includes tractor trailers, unknown POVs, and bicycles

Total POV Fatalities 22

FY03 23 | 3-Yr Avg 23

ARAS Accident Reporting Made Easy

JULIE SHELLEY
Staff Editor

When an accident happens the last thing anyone wants to think about is paperwork—you know, those pages-long accident reports that seem to go on and on. But that paperwork is vital in the fight to prevent future accidents in our Army. To answer that need, the U.S. Army Safety Center (USASC) is in the process of developing an automated, user-friendly reporting system available at the touch of a button—the Accident Reporting Automation System, or ARAS.

The first of several ARAS phases to be released over the next 2 years was deployed in early January 2004 and provides a much-needed alternative to the cumbersome paper reports used in the past. Through ARAS, the Abbreviated Ground Accident Report (AGAR) and Abbreviated Aviation Accident Report (AAAR) can now be completed online through the USASC's Web site. These forms are available anytime you need them, and they also come with built-in help! A few features include:

- Built-in logic making the forms intuitive, which will help guide you through the accident reporting process—NO MORE CODE BOOKS! The drop-down menus found throughout the system allow you to select *needed* information, reducing the amount of time spent filling out unnecessary sections.
- An error-checking code to help you input accident data and reduce erroneous or incomplete data submissions. The electronic forms help with dates, times, and cost information, thereby saving time from being spent on needless corrections.
- A complete Help menu system for technical and accident reporting questions and concerns.
- An overview tutorial to assist you in navigating the appropriate Web pages.
- Army Knowledge Online (AKO) authentication, which means you won't have to remember another user name and password. After initial registration, the system remembers your name and even what page you worked on last in a particular report. Also, each of your active reports is displayed every time you log on, making file management of multiple reports much easier.
- Total electronic staffing of accident reports, so there's no need to print, fax, or mail paper copies. Once you submit the completed report, your supervisor will be notified via e-mail and asked to review the information.

Since this is a first-phase version, the system currently is available only for Class C and D on-duty ground accidents, and Class D, E, and F on-duty aviation accidents. However, forms for all accident classifications should be released in the near future. The ARAS forms can be accessed directly at **http://safety.army.mil/aras_public/intro_aras.html** or from the USASC home page, **http://safety.army.mil/home.html**.

Remember that ARAS is an official Department of Defense automated system developed to capture legitimate Army accident data. Practice sessions are not permitted—all data submitted on the site should involve actual Army accident cases. A developmental test site is available, however, to allow you the opportunity to become familiar with the automated forms and test the approval process. The test site can be found at **http://safety.army.mil/araswebforms/index.asp**.

The USASC team is excited to bring you this new technology. It's now easier than ever to report this vital data. Get on the test site and try ARAS out. We think you'll like it!

Contact the author at (334) 255-1218, DSN 558-1218, or e-mail julie.shelley@safetycenter.army.mil

The "Write" Stuff

Want to be a famous writer? The following tips will help you become the next best thing: a contributor to *Countermeasure*!

Perhaps you've never written an article before. Don't let that scare you! It can be surprisingly easy, and the results are rewarding. By sharing your knowledge, you can make a valuable contribution to your fellow Soldiers. Whether your story is a long feature or a simple tip, it just might save someone's life or an expensive piece of equipment.

Countermeasure is the Army's only ground safety risk management publication. It provides vital information on all areas of Army operations, including tracked and wheeled vehicles, tactical parachuting, range operations, and POV and motorcycle safety. A popular feature is the "Dear Joey" column, where Soldiers share their stories of lessons learned or questions.

Getting Started

The first thing you need to do is decide what you want to say, and then just let it flow as if you are talking to a friend. Here are some tips:

- Write about your personal experiences. After all, you were there! Who knows better than you what it was like!
- Keep it simple, direct, and easy to understand. Avoid terms that might be unfamiliar to your readers and explain ALL acronyms.
- Write in Microsoft Word and double-space your articles. Most stories run one to two pages (about 500 and 1,000 words). Four pages is the longest we will print.
- Remember that each issue of *Countermeasure* is planned three months in advance. So, make sure your article will still be relevant and interesting several months down the road.
- We love photos, so "if you've got 'em, send 'em." They'll make your story more effective.

Graphics

Good images help the reader understand what happened. It's important that photographs be clear and sharp. Photographs in JPEG or TIF files need to be at least 300 dpi, however, 5 x 7 color prints, negatives, and 35mm slides are also acceptable.

Photograph Soldiers or equipment in action—avoid boring static or posed photos. Be sure the photographs do not show any safety violations (i.e., a Soldier performing maintenance while wearing a watch or ring, or a Soldier outdoors without proper headgear). Good photographs may also be used for a poster or front or back cover.

Submissions by mail must include a printed manuscript with the text on a 3.5-inch disk. If you send photos, please include captions to describe what's happening in the picture(s). Mail your story to: U.S. Army Safety Center, ATTN: *Countermeasure*, Bldg. 4905, 5th Ave, Fort Rucker, AL 36362-5363.

We love e-mail because it's the quickest way to get your story to us. Just e-mail your story and any images to **countermeasure@safetycenter.army.mil** or **joey@safetycenter.army.mil**. Remember to include your rank, name, unit, address, and office telephone number (commercial and DSN). Also, please add a brief biography about yourself to help our readers get to know you.

Help us make *Countermeasure* an outstanding publication. After all, it's *your* magazine!

For more information, contact Bob Van Elsberg, *Countermeasure* Managing Editor, (334) 255-2688, DSN 558-2688, e-mail robert.vanelsberg@safety center.army.mil; or Julie Shelley, Staff Editor, (334) 255-1218, DSN 558-1218, e-mail julie.shelley@ safetycenter.army.mil.

ACCIDENT BRIEFS

Information based on preliminary reports of ground accidents.

AMV

Class A

■ One Soldier was killed and five Soldiers were injured when the HMMWV they were riding in struck a 5,000-gallon water trailer.

■ Two Soldiers were killed and one Soldier was injured when a civilian dump truck overturned onto their HMMWV.

Personnel Injury

Class A

■ Marine was killed while conducting an Army joint free-fall parachute operation. No other details were provided.

■ Army contractor suffered fatal injuries after being hit by a launched simulator. The simulator diverted from its flight path and struck the contractor.

■ Soldier died after collapsing during a 5-mile unit PT run. The Soldier had run about 4 miles when he collapsed.

■ Soldier collapsed and died after completing PT. No other details were provided.

■ Soldier collapsed and died while taking the APFT. No other details were provided.

■ Civilian truck driver suffered fatal injuries when he was struck by a forklift driven by a Department of the Army civilian. The driver was offloading the truck at the time of the accident.

■ Soldier drowned while swimming alone. The Soldier was found floating on the water's surface.

■ Soldier choked to death on a piece of hard candy. The Soldier was swimming with the hard candy in his mouth when he began to choke. The Soldier was pulled from the water, but efforts to revive him were unsuccessful.

■ Soldier was crushed to death by a tree limb. The Soldier was sawing a limb off a tree in his back yard and realized his child was in the path of the falling limb. The Soldier was able to save his child.

Class B

■ Soldier's middle finger was amputated when he attempted to exit a 5-ton truck from its rear gate. The Soldier had been installing bows on the 5-ton and grabbed a hinge seat support while stepping off the vehicle, causing the injury.

■ Soldier's foot was amputated after suffering a gunshot wound. The Soldier was getting out of bed when his hand and foot contacted a shotgun lying on the floor, causing it to discharge.

■ Soldier's big toe was partially amputated by a gunshot wound. The Soldier was cleaning his privately owned shotgun, but did not set the safety switch or clear the weapon. The Soldier dropped the shotgun, causing it to discharge and strike him in the foot.

POV

Class A

■ Soldier died after being struck by civilian vehicle. The Soldier was changing a tire on his vehicle when the other car crossed four lanes of traffic and hit him.

■ Soldier was killed when he was ejected from his sport utility vehicle on an interstate. The Soldier apparently lost control of the vehicle and overcorrected, causing the accident.

■ One Soldier was killed and two other Soldiers were injured when their vehicle overturned. The driver, who suffered fractures to his neck, attempted to make a turn at a high speed and lost control of the vehicle, causing it to roll several times. The deceased Soldier was not wearing his seatbelt and was ejected through the car's sunroof. The second passenger suffered cuts and lacerations. It was not reported if the driver and other passenger were wearing seatbelts. The Soldiers were on post and returning from the PX when the accident occurred.

■ Soldier suffered fatal injuries after being thrown from his motorcycle. The motorcycle hit a ditch, throwing the Soldier into a tree.

■ Soldier died when his vehicle overturned and burst into flames. No other details were provided.

■ Soldier suffered a permanent total disability when her motorcycle collided with a civilian septic truck.

■ Soldier was killed after being ejected from his vehicle. The Soldier apparently lost control of the vehicle, causing it to overturn.

■ Soldier suffered fatal injuries when his vehicle left the roadway and struck a tree. The Soldier was on PCS leave at the time of the accident. The Soldier was wearing his seatbelt.

ARMY GROUND RISK MANAGEMENT INFORMATION

Countermeasure Readership Survey

We need your feedback to keep this magazine helpful. Please take a few minutes to fill out this survey and return it using the pre-addressed mailer on the back or fax it to Mr. Robert Van Elsberg, 334-255-3003.

1. Name (optional)_____
_____**Rank/Grade**_____

2. Duty Status (Active, Reserve, Guard, Civilian, Other)_____

3. What is your—
Branch?_____
MOS or civilian specialty?_____
Job title?_____
Duty location?_____

4. How often do you read *Countermeasure*?
__Every month
__Rarely
__Occasionally

5. When do you usually receive *Countermeasure*?
__In the month it's dated
__After the month it's dated

6. How do you use the information in *Countermeasure*?
__In safety meetings
__In reading file
__To keep informed
__On bulletin boards
__In unit safety publications
__Other (specify in comments section)

7. Are there any kinds of stories you would like added to *Countermeasure*?
_____
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8. Have the articles ever helped you avoid an accident? Explain.
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9. Use the scale below to rate how useful these articles are to you.

None = 1, Low = 2, Medium = 3, High = 4

__DASAF's Corner
__Saved by the Belt/Helmet
__I Was There Stories
__Dear Joey (lessons learned)
__Seasonal articles
__Maintenance
__Munitions safety
__Accident Briefs
__Accident reviews
__Posters
__POV safety
__Other (specify)_____

10. Rate the overall quality of *Countermeasure*.

Poor = 1, Fair = 2, Good = 3, Exceptional = 4

__Content
__Layout
__Accuracy
__Appearance
__Effectively covers topic
__Choice of topics
__Illustrations
__Credibility
__Readability
__Interest to soldiers

11. Comments/suggestions to improve *Countermeasure*. _____

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ARMY GROUND RISK-MANAGEMENT INFORMATION

Countermeasure

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Soldier Stories

Countermeasure
ARMY GROUND RISK-MANAGEMENT INFORMATION

CONTENTS

features

U.S. ARMY SAFETY CENTER

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DASAF'S CORNER
From the Director of Army Safety

Lessons Noted, or Lessons Learned?

We are an Army at war. We have great pride in our Soldiers, for they are the centerpiece of our formations. They clearly are the "critical component" to our combat readiness. Each and every Soldier is special—a father, son, mother, or daughter. These men and women are expensive to train and important to our success in the Global War on Terrorism.

As a team, we must pay close attention to lessons learned from preventable accidents to protect our fighting ability and win our Nation's wars. However, if these lessons are noted rather than learned, we'll continue to pay the price and lose Soldiers unnecessarily.

As your Director of Army Safety, I personally receive an e-mail every time a Soldier is killed in an accident. I find it sobering that rarely is there a new kind of fatal accident, just a different name in the report. We continue to lose Soldiers to the same mistakes over and over: falling asleep while driving, vehicle rollovers caused by speeding, driving without seatbelts, improper handling of unexploded ordnance, negligent discharges and poor muzzle awareness, and improper weapons clearing procedures. On the aviation side, brownouts and poor crew coordination continue to rear their deadly heads.

Knowing these hazards cause 80 percent of all our accident fatalities, one could ask the question, "Are we actively learning from our mistakes and successes, or are we just noting them?" From statistical analysis and visits throughout our Army, I'm concerned that we might be doing too much of the latter. I'll give an example.

We recently investigated a vehicle rollover in OIF where a Soldier was killed. He wasn't wearing his seatbelt, and that was a major factor in his death. When we asked why the soldier was not wearing his seatbelt, we found the commander had told his Soldiers they didn't have to wear them. The commander was concerned his Soldiers would not be able to get out of their vehicles quickly should something unexpected happen. As an Army, we know that the risk of not wearing a seatbelt is much greater than that of not being able to get out of a vehicle quickly. However, that knowledge had not reached this commander in time to make a difference. It had been a lesson noted, NOT a lesson learned.

It's critical that we share our experiences now more than ever. Over the next 4 months we'll have more than 250,000 Soldiers on the move, and we'll conduct a 120,000-Soldier battle handover for OIF-2 alone. Our deployed Soldiers have gained invaluable experience and insight, including the development of standing operating procedures (SOPs) that may have helped prevent vehicle accidents and negligent discharges.

I ask these successful units to consider a couple of questions. Have you put your new SOPs and tactics, techniques, and procedures in writing so they become institutional knowledge? If so, have you provided those documents to your replacing unit AND the Army as a whole so your experiences can be turned into better training for all follow-on units?

Clearly, your transition home will provide different challenges than those you left overseas. What are you doing to transition your risk management thought process? Once

DASAF'S CORNER
From the Director of Army Safety

the enemy was the biggest risk, but now it will be privately owned vehicles (POVs). Over the last 10 years, POV fatalities have accounted for 56 percent of accidental deaths in the Army. It's hard to imagine returning home safe from a combat zone only to lose a buddy to a POV accident. Don't be the one to lose your battle buddy.

Here at the Safety Center, we continue to provide you information through our Web-based tools and written publications. Check us out on the Web! You'll be surprised at how easy it is to collect information that applies directly to your unit and location. Try out the ASMIS-1 POV module to help you plan and reduce risk while traveling. Until these tools are put to use, the Army's detailed knowledge of accidents will be just lessons noted.

Ensure you turn your own experiences into institutional knowledge. If you have a success story or experience the Army can learn from, send it to us at **joey@safetycenter.army.mil**. Allow us to turn lessons noted into lessons learned.

Keep your leader lights on!

BG Joseph A. Smith

HURRY UP AND GET HURT!

LTC CHRISTOPHER SHEDD
Florida Army National Guard

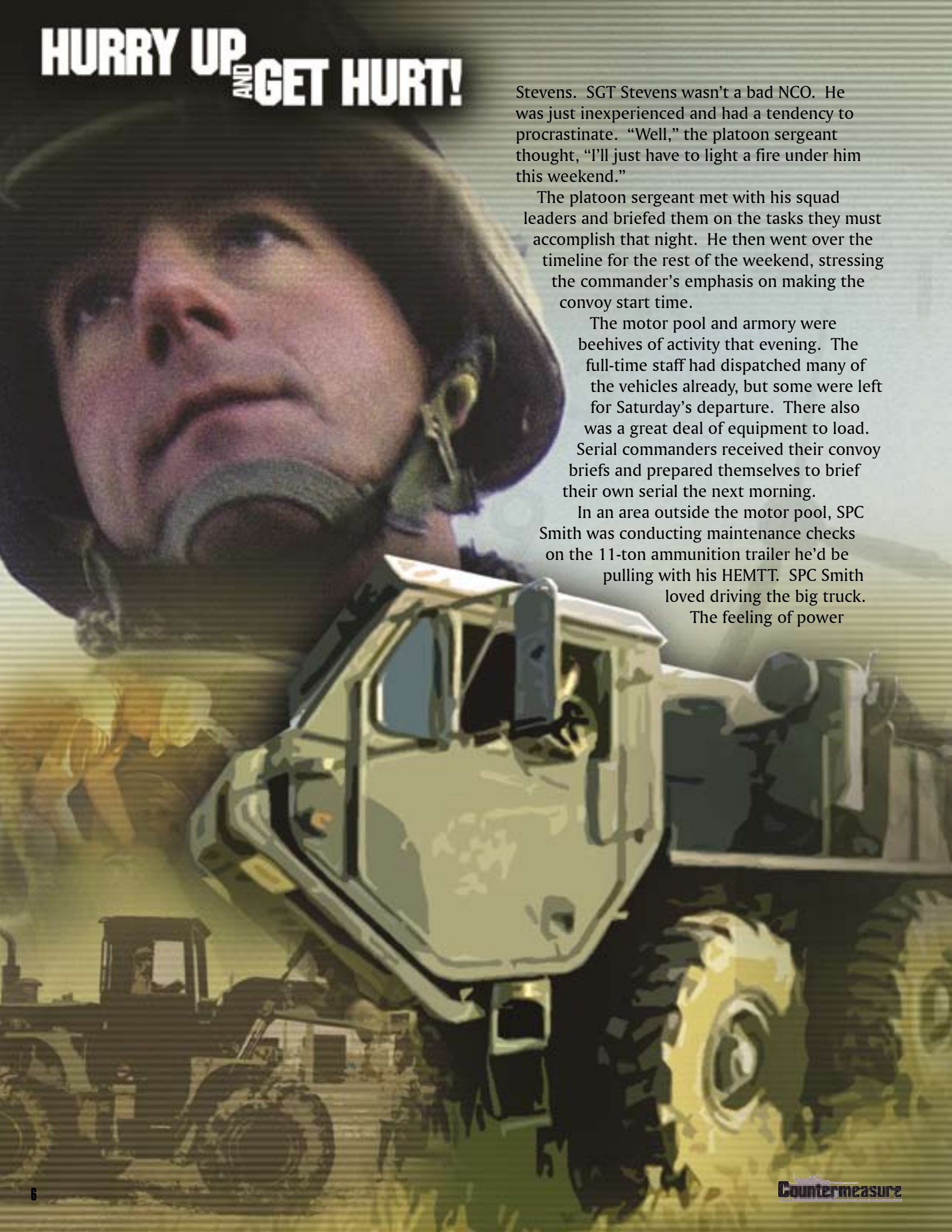
This article provides a very detailed report on the injury of a Soldier. As you read this, I ask you to place yourself in the role of an accident investigator and identify what you see as the contributing factors. When you've done that, please e-mail your thoughts to countermeasure@ safetycenter.army.mil. We'll be selecting the best, most comprehensive responses to share with our readers in the April issue. We'll also follow up with some comments from CW3 Angel Acevedo, a senior maintenance technician and risk management instructor. CW3 Acevedo recently supervised the 3d Infantry Division, 2d Brigade, 315th Infantry Battalion's drivers' training program.

It was a typical multiple unit training assembly (MUTA) five drill week end. The unit had planned a battalion field training exercise (FTX) at a training area a little over an hour away. Like most drill weekends, everyone seemed to have too much to do and not enough time to get it all done. At least the weather was clear, even though it was cold.

The training schedule called for the unit to get all the vehicles dispatched, loaded, and marshaled on Friday evening. The first serial of the ground convoy was due to depart early the next morning.

The Class III/V (fuel and ammunition) platoon sergeant wasn't looking forward to this FTX. His platoon leader was new and providing more distractions than leadership. He thought about the lack of qualified personnel in his platoon, especially in the ammunition section. He had more vehicles than any platoon in the company, but he wasn't sure if there were enough drivers to get them all to the field site. He also was concerned about his new ammunition squad leader, SGT

HURRY UP AND GET HURT!



Stevens. SGT Stevens wasn't a bad NCO. He was just inexperienced and had a tendency to procrastinate. "Well," the platoon sergeant thought, "I'll just have to light a fire under him this weekend."

The platoon sergeant met with his squad leaders and briefed them on the tasks they must accomplish that night. He then went over the timeline for the rest of the weekend, stressing the commander's emphasis on making the convoy start time.

The motor pool and armory were beehives of activity that evening. The full-time staff had dispatched many of the vehicles already, but some were left for Saturday's departure. There also was a great deal of equipment to load. Serial commanders received their convoy briefs and prepared themselves to brief their own serial the next morning.

In an area outside the motor pool, SPC Smith was conducting maintenance checks on the 11-ton ammunition trailer he'd be pulling with his HEMTT. SPC Smith loved driving the big truck. The feeling of power

he got from sitting high above the traffic with the roar of the giant diesel behind him was one of the reasons he stayed in the Guard. He was a good driver, and he was proud of his skill in maneuvering the eight-wheeled truck with its long trailer.

SPC Smith carefully went around the trailer and checked the tires. The left-rear tire looked a little low. He thought about the time it would take to get an air compressor—the whole battalion was running around in the motor pool! He decided the tire was low because of the cold weather. His car tires sometimes looked low on cold mornings, and they were always fine. "It'll be OK," SPC Smith thought as he finished the checks.

After formation the next morning, SGT Stevens briefed his squad on the updated timeline he'd just received. The ammunition section would be departing in about two hours, so he told everyone to recheck their vehicles and pick up their MREs for the day. SGT Stevens wanted to be sure his squad left on time. The platoon sergeant had made it clear that to be late was a really bad thing.

SPC Smith went to his truck and did a quick walk-around to ensure all the air hoses were installed correctly. As he walked around the trailer, he noticed the left-rear tire was completely flat. He silently hoped the motor pool still had the air compressor out where he could use it. As SPC Smith looked closely, however, he saw something he'd missed the night before—a bolt head sticking out of the tire.

He was in trouble now! There wasn't much time, and he was going to have to mount the spare. SGT Stevens was going to kill him! He looked around and saw PFC Williams driving the platoon's 4K rough terrain forklift, carrying a pallet of fuel hoses to a 5-ton truck. "That's it," SPC Smith thought. "I'll get PFC Williams to lift the corner of the trailer with the forklift while I change the tire." Using the forklift would allow him to change it quickly and without having to use the cumbersome jack.

SPC Smith called PFC Williams over, and they soon had the forklift positioned. SGT Stevens walked over and asked what they were doing. He was livid that SPC Smith had not dealt with the problem tire the night before, but he knew they were running out of time. When SPC Smith explained how he could change the tire using the forklift, SGT Stevens knew it wasn't the right way to do it. But what could it hurt? The forklift easily could lift the weight. SGT Stevens told them to get the tire changed, but for heaven's sake be safe doing it. He walked away to look over the rest of the squad.

SPC Smith ground-guided PFC Williams so he'd place the forks under the trailer evenly. The forks kept hanging on something under the trailer, so SPC Smith yelled for PFC Williams to stop. SPC Smith climbed between the forklift and the trailer to see what was catching the forks. As SPC Smith stood between the forks, PFC Williams' foot slipped off the forklift's clutch, killing the engine as the forklift lurched forward. In that instant SPC Smith screamed. The forklift had pinned him between the trailer and the forks at hip level. As PFC Williams restarted the engine and backed away, SPC Smith passed out and fell to the ground. The local fire and rescue unit carried SPC Smith to the emergency room. He was lucky. The impact chipped only a small piece of bone from his hip, and other than some serious bruising, he had no other injuries.

The unit learned a lot from this incident. A good Soldier did something he knew wasn't right to get the job done quickly. His squad leader, who also knew the correct way to change the tire, condoned the shortcut to meet the timeline. Shortcuts provide positive reinforcement because people usually aren't hurt when they use them. How many times do you speed in traffic to save a little time? Do you have an accident every time you speed? No, and that makes you feel the shortcut is worth the risk. Not following proper procedures will not cause an accident every time, but are you willing to risk your Soldiers' lives to save a few minutes? Soldiering is a very dangerous profession; shortcuts and not following the standards make it even more so. If you are a leader, demand that your subordinates follow and learn the proper procedures for their jobs. Watching your Soldiers work safely is a truly uplifting experience.

Contact the author at (904) 823-0472 or e-mail christopher.shedd@fl.ngb.army.mil

In Danger's Lane

JULIE SHELLEY
Staff Editor

Forklifts don't have a lot of the bells and whistles found on a HMMWV or tank, so you might think they're easy to drive. Think again! As the related story "Hurry Up and Get Hurt" illustrates, Army forklifts can and do cause injury—sometimes even death.

In the past 6 months alone, one Soldier and one civilian have been killed by forklifts on military installations. In those accidents, both victims were struck by a forklift during loading operations. And, personnel injury isn't the only problem. Valuable Army equipment has been damaged up to the Class A level during the past 2 years in forklift accidents.

Whether you've been assigned temporary duty involving forklifts or work around them all day, take steps to protect yourself. Here are some tips:

- Make sure all forklift operators—you included—are well trained, tested, and licensed.
- Conduct preventive maintenance checks and services daily on each forklift. Also, test and inspect all forklifts according to Technical Bulletin 43-0142.
- Wear your seatbelt. Many forklift fatalities are the result of the driver being crushed by the forklift's overhead roll bar. If your forklift begins to overturn, don't jump from it! Stay with the truck, hold on firmly, and lean in the opposite direction of the roll.
- Chock the vehicle being loaded or unloaded, especially if the forklift is driving on and off the vehicle. Unchocked vehicles can roll away from loading docks, causing the forklift to drop.
- Use loading dock protective rails, ground guides, or lane markers for loading dock operations.

> **"In the past 6 months alone, one Soldier and one civilian have been killed by forklifts on military installations."**

- Use extreme caution on grades and ramps. If driving on a graded surface, tilt the load back and raise it only as high as needed to clear the roadway. If high loads block your vision, drive backwards or use ground guides or lane marking pylons. Travel with the load within 4 to 6 feet from the floor whenever possible.
- Drive slowly into and out of warehouses. Going from bright daylight into a darkened warehouse will blind drivers just long enough to run into someone or something.
- Slow down and sound the horn at cross aisles and other locations where vision is obstructed.
- Look toward your travel path and keep a clear view of it.
- Don't drive up to anyone standing in front of a bench or other fixed object.
- Don't use forklifts for lifting personnel to an elevated level. Forklifts are not designed or approved to lift personnel.
- Ensure loads are balanced, and keep ground guides away from cargo fall zones. Unstable loads are dangerous—ground guides and load spotters have been crushed by falling cargo.
- Don't raise or lower the tines while the forklift is moving.
- Don't handle loads that are heavier than the forklift's weight capacity.
- Operate the forklift at a speed that will permit it to be stopped safely.
- Don't allow passengers to ride on the forklift unless a seat is provided, and make sure all passengers wear their seatbelts.
- When dismounting the forklift, set the parking brake, lower the forks or lifting carriage, and neutralize the controls.

Article compiled from material found on the U.S. Army Safety Center Web site, http://safety.army.mil, and the National Institute for Occupational Safety and Health Web site, www.cdc.gov/niosh. Contact the author at (334) 255-1218, DSN 558-1218, or e-mail shelleyj@safetycenter.army.mil.

A Turn for the Worse

MAJ JOSEPH MILLER
Ground Accident Investigator
U.S. Army Safety Center

The Accident Sequence

The HMMWV driver sped up on the winding desert road, trying to catch up to the convoy he was escorting. His senior occupant (TC), who'd earlier decided to stand in the gunner's hatch to get a better view, yelled at him to "slow down! But it was too late—the HMMWV hit a dip in the road and the driver lost control. The TC yelled "rollover!" and then dropped into the gunner's hatch, grabbing the nearby straps.

The driver tried to stay on the road by steering hard to the left—but he turned too hard. The HMMWV veered across the road to the left shoulder and hit a 16-inch-high dirt edge left by a road grader. The HMMWV straddled the dirt edge for 40 feet as the driver steered hard to the right, trying to get back onto the road. The front tires finally got a bite and the HMMWV veered sharply to the right. The driver's side front tire bounced over the 16-inch-high dirt edge and both front tires left the ground. The HMMWV then rolled over repeatedly and landed facing backwards on the road. The driver, who was not wearing his Kevlar or seatbelt, was thrown from the vehicle and died from head injuries. The TC, who was wearing his Kevlar, was thrown from the gunner's hatch and landed behind the vehicle. He suffered a fractured jaw and arm.

Why the Accident Happened

- Conducting a daytime convoy is a routine mission. The leaders were complacent in their planning and did not identify the hazards or develop and implement control measures.
- The driver did not conduct by-the-book "before" preventive maintenance checks and services (PMCS) with his TC supervising. The TC, under the direction of the convoy commander, checked the fluid levels, the condition of the tires, and ensured the vehicle had extra water. However, neither he nor the driver checked the steering, which had excessive play.
- The TC chose to ride in the gunner's hatch even though the vehicle's crew-served weapon was not mounted. The TC wanted to place himself in a higher position so he could observe the convoy. He was not in the passenger's seat, which would have allowed him to better supervise the driver.
- The driver drove too fast. Skid marks showed the driver was going over 50 mph on a sandy road with a 20 mph posted speed limit.

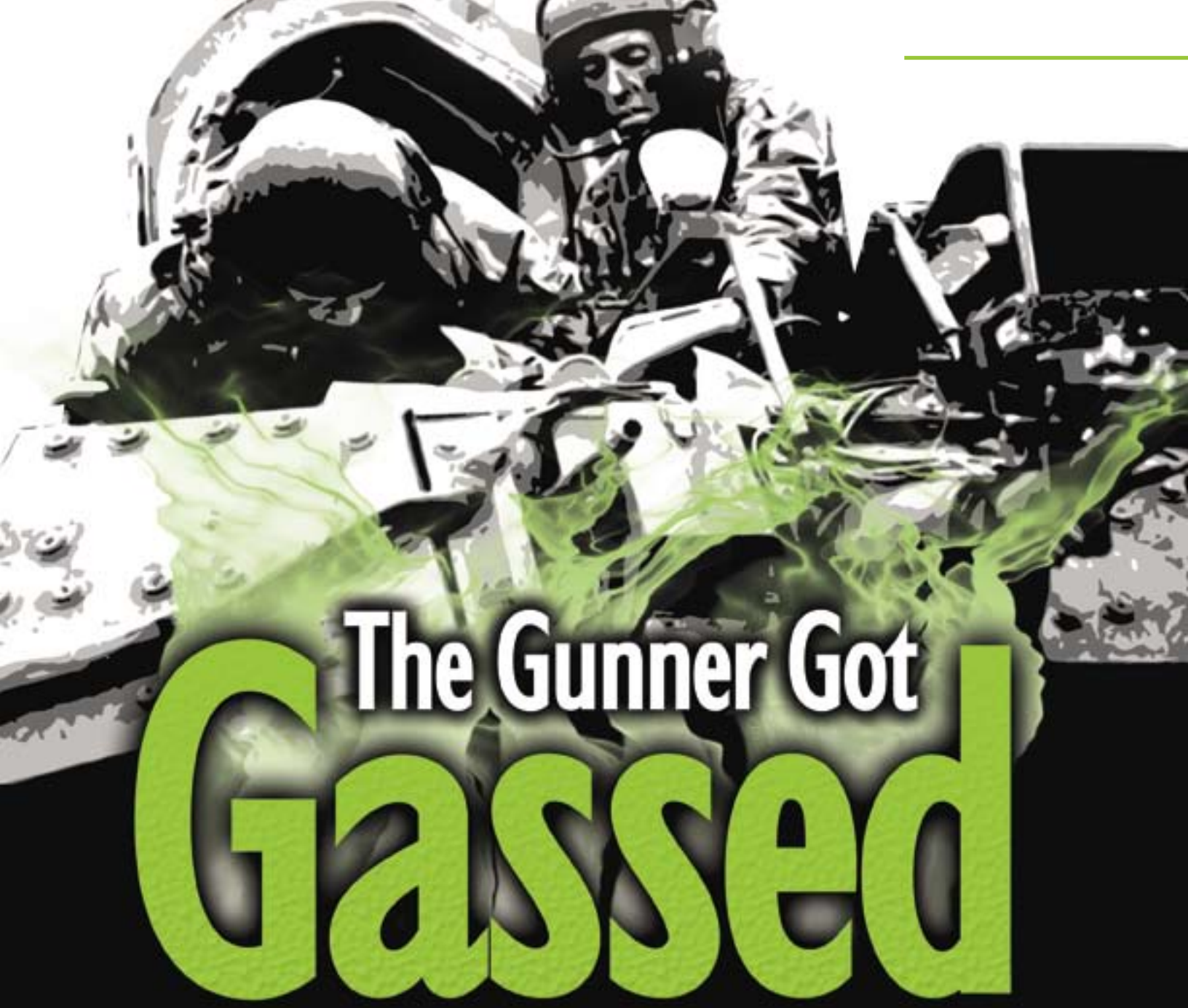
Why the Severity of the Injury?

- The driver did not fasten his seatbelt. Because the TC was standing in the gunner's hatch, he was not in a position to ensure the driver fastened his seatbelt.
- The driver was not wearing his Kevlar. The desert conditions were hot and dusty. The TC earlier observed the driver walking outside of the HMMWV without his Kevlar, but did not correct him. Because the TC was standing in the gunner's hatch, he was not in a position to ensure the driver wore his Kevlar as he drove.

Recommendations

- When planning missions, commanders and leaders must allow time for Soldiers to conduct PMCS and rehearse convoy control procedures.
- Senior occupants must ride in a position where they can supervise drivers and ensure they drive the proper speed, fasten their seatbelts, and wear their Kevlar.

POC: Ground Systems and Accident Investigation Division, DSN 558-3562, (334) 255-3562.



The Gunner Got Gassed

MR. EDWARD BENNETT
Armor Branch Safety Office
Fort Knox, KY

It was around 1300 on an August afternoon and the Bradley crew had been on the road for more than an hour, driving from the motor pool to the training assembly area. As they were driving the gunner fell asleep in his hatch, only to be awakened later by a gust of cool wind. When he awoke, he told the crew that he knew why he'd fallen asleep—he'd smelled exhaust smoke! However, because this was common during road marches, the crew ignored the gunner's complaint.

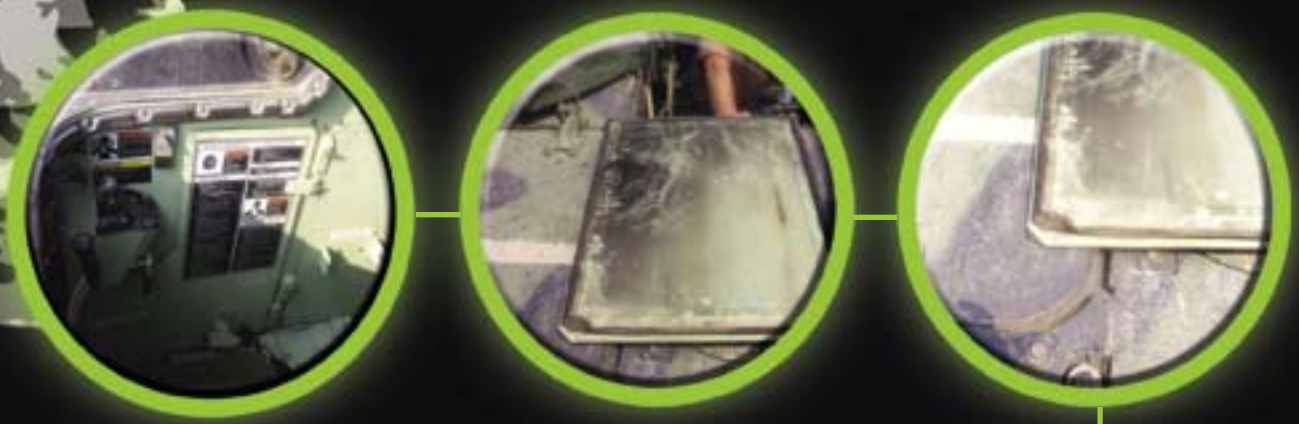
Just before arriving at the training assembly area, the gunner complained he'd fallen asleep again and had trouble waking up. The crew brought him into the assembly area, where he was transported to the unit aid station and then air evacuated to the post medical facility. He was treated and, having recuperated, was released to his unit.

The gunner had been treated for suspected carbon monoxide exposure. However, because the doctor didn't have the gunner's blood gasses checked, exposure to carbon monoxide couldn't be verified. The safety specialist working the incident asked the unit to hold the Bradley for

further investigation. He then asked preventive medicine personnel to test it for carbon monoxide.

The tests found the carbon monoxide level at the driver's station was 1 to 2 parts per million (ppm). The reading on the troop compartment floor was 4 ppm and, at the open overhead troop hatch, it was 5 ppm.

The industrial hygienist suspected the 5 ppm level was probably caused by the wind blowing exhaust gasses back into the hatch. The investigation found that the gunner had been riding half-in and half-out of the hatch, where the highest concentration was found. Also, the gunner was a smoker. This meant he might already have had an elevated level of carbon monoxide in his system. The carbon monoxide levels in the Bradley were well below the Occupational Safety and Health Agency maximum of 25 ppm.



During the investigation it was learned that the driver had done preventive maintenance checks and services and noticed the seal was crimped on the engine panel. However, it wasn't recognized as a problem at that time.

During testing on the Bradley, the crew chief again noted the seal on the engine panel had been damaged and that "blow-by" had left a visible black streak. However, because the carbon monoxide levels were not exceptionally high, the crew chief was told the vehicle could be returned to service after the seal was repaired.

After reviewing the findings, the vehicle went through a maintenance inspection before being put back in use. A motor pool mechanic found the coupling between the engine and exhaust was loose. This allowed exhaust gasses to escape, which could have contributed to the problem.

There are a number of lessons learned from this mishap:

- During preventive maintenance checks and services, don't ignore seals that have been pinched, twisted, or have gaps in them.
- Smokers can be impaired by even low levels of carbon monoxide.
- Take it seriously when a crewmember complains about passing out or having difficulty staying awake.

Contact the author at (502) 624-4303, DSN 464-4303, or e-mail edward.bennett@knox.army.mil

MSG Robert Spaulding and Mr. George Greenauer of the U.S. Army Safety Center's Risk Management Integration Division offered the following insights:

- Had the twisted seal been identified on a DA Form 2404 during preventive maintenance checks and services before the mission? It is the operator's responsibility to identify these deficiencies and bring them to the attention of organizational maintenance.
- There was no mention of operator-level maintenance. Tightening the coupling, repairing the seal, and reporting these deficiencies are operator-level maintenance items.

Editor's Note: The first of the "Joey Mails" this month relates the story of a negligent discharge more than 30 years ago in Vietnam. There are rarely any new types of accidents, and the Army is experiencing an alarming number of negligent discharges even today. This column will feature stories from those who have seen first-hand the devastation negligent discharges can bring.

I was serving as a platoon leader in my military police company at An Khe, Republic of Vietnam. I was on a routine patrol when I heard automatic weapons fire coming from a "hooch." I pulled my jeep beside the hooch and entered from the back. I heard a lot of commotion and screaming, and smelled the acrid odor of burnt gunpowder. I saw one Soldier standing over several others that were either dead or severely wounded. The Soldier still had his weapon, a CAR-15, in his hand. I ordered the Soldier to put his weapon down. He didn't respond, but I didn't feel he was a threat to me. He was in an almost trancelike state.

The commanding officer and first sergeant arrived quickly and assisted me in detaining the Soldier. They then began tending to the wounded Soldiers until medical help arrived. The local criminal investigation division secured the scene, and I was able to transport the Soldier for medical care. I felt he could become suicidal and a hospital environment would be better for him than a jail cell. The doctors agreed; he was MEDEVACed a few hours later.

This Soldier had fallen victim to his own excitement. He'd just returned from an extraction after being chased by a North Vietnamese Army patrol for several miles in the mountains. Glad to be safe and eager to tell his friends about the adventure, he forgot to clear his weapon when he boarded the helicopter to come back to the base camp. He was excitedly explaining the events to his buddies and still holding onto his weapon when he inadvertently pulled the trigger.

That day several irreplaceable lives were taken, and another was ruined forever. In the adrenaline rush after combat, it's easy to forget the little things—like clearing your weapon—that can have a huge impact on your life and others. Safety is just as important in a war zone as a training area, if not more so.

CW4 John M. Whitney Jr., Headquarters, 3d Brigade, 87th Division (TS), Camp Shelby, MS, john.whitney@usarc-emh2.army.mil

I was assigned as a platoon leader and arms room officer in Germany when my unit experienced an accidental discharge. Following law enforcement duty in a military community, Soldiers began to filter into the unit arms room to turn in their issued M9 service pistols. The trouble began when the patrol supervisor didn't maintain proper accountability following his shift. That wasn't his only failure; he also didn't supervise his Soldiers during weapons clearing procedures before they entered the arms room.

A private just out of initial entry-level training bypassed the clearing barrel outside the arms room and went to turn in his weapon. The

soldier handed the pistol, live rounds still in the magazine, to the unit armorer. The armorer was accustomed to clearing weapons for the second time and didn't remove the magazine or check the chamber. He took the weapon from the Soldier, unwittingly chambered a round, and thinking he was dry-firing the weapon, pulled the trigger. It wasn't a dry fire, though, because the pistol fired! The round missed the clearing barrel inside the arms room and ricocheted off the concrete floor, a wall, and the ceiling before finally stopping in an M249's buttstock. A 15-6 investigation following the incident revealed:

- The patrol supervisor failed to properly supervise newly assigned Soldiers working in law enforcement.
- The patrol supervisor failed to properly supervise clearing procedures.
- The unit armorer failed to use proper clearing procedures (complacency).

Fortunately no Soldiers were injured by the stray bullet. However, the incident taught leaders at all levels the importance of proper clearing procedures and the dangers of complacency. Treat every weapon as though it's loaded. You'll be glad you did!

Anonymous

Can you guess what happened here?

Can you guess what happened here? Instructions are made to be followed and sometimes if you don't, you can literally "shoot yourself in the foot." The foreign national trainee in the photos above didn't keep his weapon on safe or his finger off the trigger as he'd been instructed. When his weapon fired accidentally, he used the time-worn excuse of "I thought it was on 'Safe'—somebody must have switched it to 'Fire.'"

The result was a lot of pain and suffering, but at least he could still count to 10 on his toes. If the muzzle had been pointing just another 1/2 inch to the left, the blast would have blown off his big toe instead of just causing a flesh wound.

LTC Roman Bilynsky, 4th Forward Support Battalion, 4th Infantry Division, Tikrit, Iraq, roman.bilynsky@us.army.mil

Mail Call

I just read the article "Accidental or Negligent Discharge?" in the December 2003 issue of ***Countermeasure***. It was a great article, and I thought I would kick in with my experience on the subject.

Negligent discharges are near and dear to my heart. I had a "religious experience" when a Colt .45 Government Model went full auto on me and a 200-grain lead semi-wadcutter bullet put a crease in my forehead. Fortunately, I was wearing 3 mm thick safety sport goggles. The bullet penetrated my goggles, but was deflected just enough that it didn't enter my eye socket. Instead, the bullet hit my eyebrow and continued straight up my forehead.

I ended up with 13 stitches, 2 nights in the hospital, a large ambulance bill, and a concussion. The $8.65 I spent for those goggles saved my life. I'm certain of that.

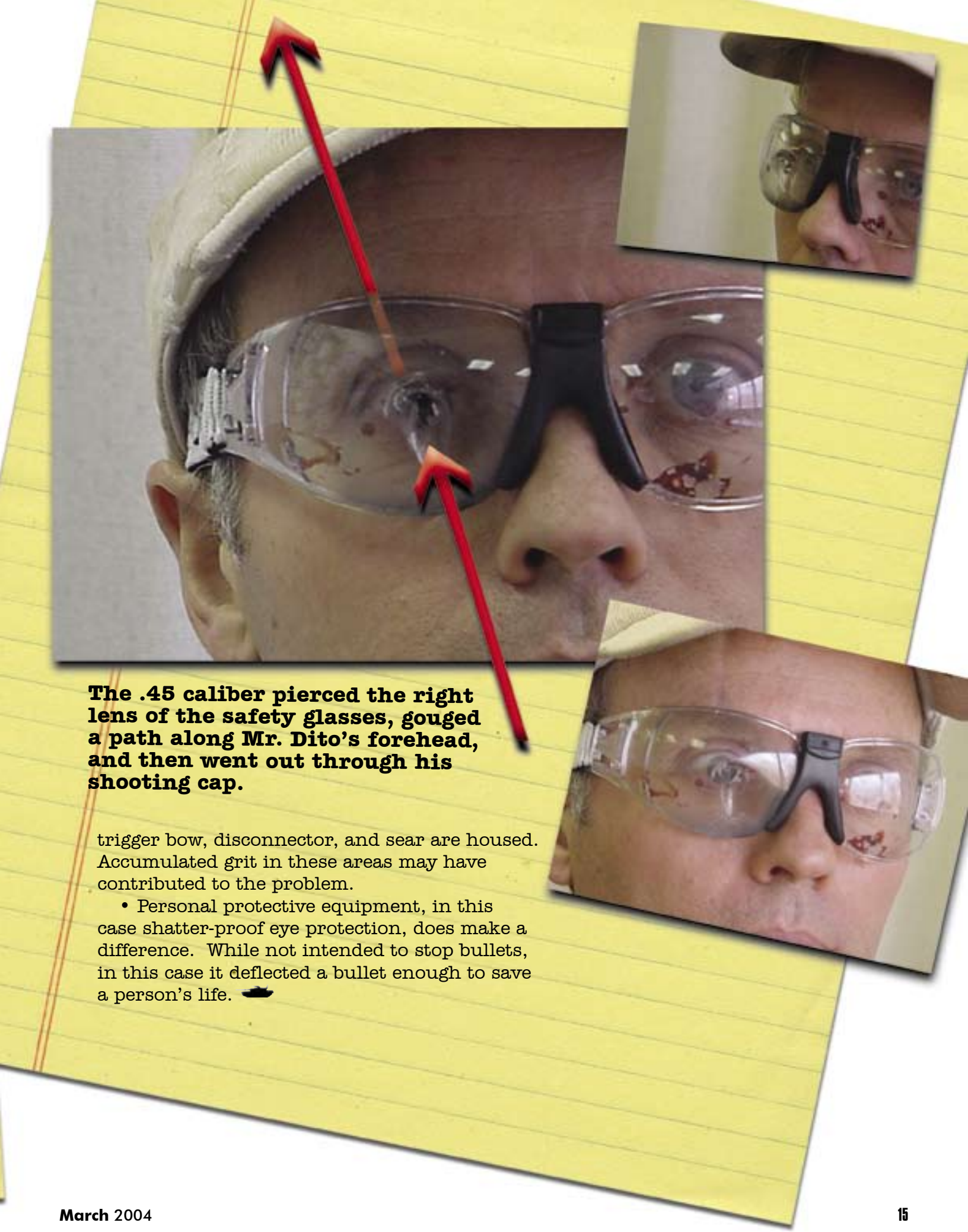
Was this an accidental or negligent discharge? It was 100 percent negligence on my part, and I'm guilty on the following counts:

- I never knew this type of pistol could malfunction and go full-auto.
- I'd never had professional instruction on the operating principles and maintenance of the Colt .45 automatic.
- I didn't know how to perform the standard safety checks for a 1911-style pistol.
- I didn't know some of the parts would need to be replaced after the gun had been fired extensively over several years.
- I ignored the warning signs that appeared during previous shooting sessions. I didn't know they indicated a serious mechanical failure was about to occur.
- I did not clean my pistol properly or often enough.

Mr. Michael Dito, USDA Forest Service, Golden Pond, KY (270) 924-2068, e-mail mdito@fs.fed.us

Editor's Note: Having read Mr. Dito's e-mail, I called him to find out more details about this accident. I'll share them below:

- The weapon was pointing downward at a 45-degree angle when it malfunctioned. Caught unawares, Mr. Dito's arms and hands were relaxed, preventing him from controlling the recoil as the muzzle swept upward toward his head.
- The pistol went full-auto when the slide was released to chamber a round from the magazine. The trigger was never pulled.
- The warning signs included "doubling"—firing two shots when the trigger was pulled—and the hammer falling from the full cock to the safety notch position. These are signs of sear problems.
- Mr. Dito rarely cleaned the inside of the frame where the



The .45 caliber pierced the right lens of the safety glasses, gouged a path along Mr. Dito's forehead, and then went out through his shooting cap.

trigger bow, disconnector, and sear are housed. Accumulated grit in these areas may have contributed to the problem.

• Personal protective equipment, in this case shatter-proof eye protection, does make a difference. While not intended to stop bullets, in this case it deflected a bullet enough to save a person's life.

Safety Messages are Serious Business

MAJ JOSEPH MILLER
Ground Accident Investigator
U.S. Army Safety Center

Safety messages are important because they inform us how to safely operate our equipment, vehicles and weapons systems. Commanders must ensure they and their subordinate leaders are familiar with the safety messages that pertain to their unit's equipment. Two fatalities occurred in 2003 when the chain of command was unaware of safety messages that were issued years before the accidents.

Safety messages are written and published in different formats. There are approximately 182 safety of use messages (SOUMs), 209 ground precautionary messages (GPMs), 264 maintenance advisory messages (MAMs), 64 safety advisory messages (SAMs), and 113 field advisory messages for a total of over 830 ground safety messages. There are also 452 aviation safety action messages and 231 safety of flight messages for a total of over 680 aviation safety messages.

The Office of the Deputy Chief of Staff, G-4 is responsible for managing and distributing safety messages. These messages can be viewed on the Army Materiel Command (AMC) Web site at http://aeps.ria.army.mil/. Reviewing the messages is easy: once Soldiers enter the website, they click on the Army Electronic Product Support (AEPS) logo. This is a restricted area, so Soldiers must insert their smart card (ID card) into the computer and type the card's password to enter the AEPS Web site. Soldiers then scroll down 27 categories in the "Popular Applications" column and click on "Safety Messages." Soldiers can then click on the different types of safety messages and select the vehicle, weapons system, or equipment they use. For example, if Soldiers clicked on SOUMs and selected the M88 Recovery Vehicle, they would see six SOUMs that apply to that vehicle.

The regulations governing safety messages are Army Regulation (AR) 750-6, Ground Safety Notification System, and AR 95-1, Flight Regulations. G-4 is currently revising these regulations and combining them into one document.

Safety messages are an ideal subject for a young NCO or officer to teach in the unit's noncommissioned officer professional development or officer professional development classes. Commanders should not wait until an accident happens to review safety messages. There is no reason why Soldiers should not be knowledgeable about the safety messages that apply to their equipment, vehicles, and weapons systems.

Contact the author at (334) 255-3261, DSN 558-3261, or e-mail millerj@safetycenter.army.mil

U.S. ARMY SAFETY CENTER

Eyes of Fire

CW2 CRAIG LAURENSON
Fort Drum, NY

I was working in the motor pool at Fort Hood, Texas, when I heard people yelling and running toward the gate. I was curious, so I went to see what was happening. When I got to the gate, I couldn't tell what had happened but later found out that a sergeant in my company had burned his eyes. Apparently he'd been working on a HMMWV battery when it exploded and sent battery acid into his face. After this incident we were all briefed about wearing our personal protective equipment (PPE).

As it turned out, the sergeant was OK and his eyes weren't permanently damaged. However, he did say that they burned like nothing he had ever felt before. I took this in, but figured "this could never happen to me." Well, let me tell you my story.

It was 6 years later and I was stationed at Fort Drum, NY. I was working on my car battery and never gave a thought to wearing any PPE. I always wear PPE to protect my eyes and ears when I mow the lawn or work with power tools. But hey, this was just my car. No loud noises, no big deal. By then I'd forgotten about the incident at Fort Hood.

I was standing in the driveway trying to pry a battery cap off when the cap suddenly broke free. I didn't turn my head in time and got battery acid in my eye. It burned like you would not believe! I couldn't see, so I felt and bumped my way through the garage to the door into the house. I stumbled inside, where my wife told me to flush my eye for 15 to 20 minutes. That was bad enough, but later I had to go to the doctor's office where they put dye in my eye and used a black light to check for any scrapes. I was lucky—my eye wasn't scratched. The doctor said that flushing my eye right away had been a good thing and probably helped prevent a more serious injury.

I could not believe this happened to me! When it did, I thought about the incident at Fort Hood. I now make it a point to wear eye protection whenever I work on a vehicle battery. (And the funny part was I was getting my car ready for the drive to Fort Rucker, AL, to take the Aviation Safety Officer Course!)

When someone tells you to wear your PPE, listen up and do it! They're not speaking just to hear themselves talk. They're trying to protect you.

Battery Safety Tips

- Always wear eye protection.
- Wear rubber gloves to protect your hands.
- If you handle batteries often, wear prescription glasses, not contacts.
- Do not smoke, have open flames, or make sparks around a battery. Batteries emit an explosive gas.
- Make sure the vent holes in the vent caps are open to prevent a dangerous buildup of gasses.

Contact the author at (315) 772-9644 or 9373

POV

Different Seatbelts

WILLIAM S. DEL SOLAR
CP-12 Safety Intern

When I got into a friend's car for a trip to a restaurant I immediately felt uncomfortable. Why? My friend's 1990 Volkswagen Golf had no lap belts—it only had shoulder belts, and that felt weird. You don't miss something until it's gone, and I missed the support and comfort of having a lap belt.

We made the trip safely, but what would've happened if we'd had a crash? Everybody knows you shouldn't wear your shoulder belt without also wearing your lap belt. But there I was with only a shoulder belt. I could see the headlines—"Safety Professional Strangled by Seatbelt in Accident." Not good.

I was curious and did some research. From 1990 through 1992, some Volkswagen Jettas and Golfs were sold in the United State with "knee bumpers" rather than lap belts. The knee bumpers met the government requirement for passive restraints. The logic was they would prevent drivers and front seat passengers from moving forward during a crash, so lap belts weren't necessary.

Remember the motorized shoulder belts that were attached to the door frame and automatically wrapped around your upper body when you closed the door? Because the shoulder belt was automatic, some people either forgot or chose not to wear their lap belt. In an accident, these people often "submarined" beneath the belt or sometimes "jackknifed" over it. The resulting injuries included decapitation, strangulation, paraplegia, and liver lacerations.

If you have one of those cars where the lap and shoulder belts are separate, make sure you wear both. In the case of my friend's Golf, the knee bumpers might help somewhat, but not like a complete three-point system. The funny thing was the car had all the lap belt mounting points! If you have one of these cars go by a dealership and get the lap belt installed. Now for

those of you who have but choose not to use the lap belt, I know several good lawyers for referral to your next-of-kin.

The author currently is assigned with the 2d Brigade Combat Team, 10th Mountain Division (LI), Fort Drum, NY. He may be contacted via e-mail at william.s.delsolar@us.army.mil.

Editor's Note: Got and idea on how to make the seatbelts in your Army vehicle more user-friendly, comfortable, and effective? Now is the time to make your opinion count. Please take a few minutes and fill out the U.S. Army Aeromedical Research Laboratory's Seatbelt Questionnaire. You can find it online at www.usaarl.army.mil/seatbelt/seatbelt.htm. Your comments will be anonymous.

Saved by the Belt

Nailed at an Intersection

WILLIAM COX
CP-12 Safety Intern

It was a nice summer Sunday afternoon and my cousin and I were riding to the lake in my brother's new car. As the miles went by we were having a good time, but that was about to change.

As we approached an intersection, a car ran the stop sign and hit our car. Although the speed limit was only 45 miles per hour, he hit us so hard our car spun around 180 degrees and went several hundred feet in our original direction. After coming to a stop, we all looked at each other to see if anyone was hurt. Fortunately for us, everyone was wearing a seatbelt. We then got out to check on the car that hit us.

The 16-year-old driver was still in his car, but shaken. He also was wearing a seatbelt and we found out he'd just gotten his driver's license the week before. He told us he was changing the radio station as he approached the intersection and just didn't see the stop sign. He also told us he was glad his parents had trained him to always put on his seatbelt before starting the car.

This crash shows just how fast an accident can happen. Although both cars were badly damaged, no one was injured. Everyone involved had been trained to use a seatbelt and had followed that training. Had we not listened, I might be writing about how someone died or suffered serious injuries in this accident. And that, of course, is assuming I was still here to write this story! Believe me, seatbelts work!

Contact the author at william.f.cox@us.army.mil

Seatbelts Work Going Backwards Too!

WILLIAM S. DEL SOLAR
CP-12 Safety Intern

The weather in northern New York is rather variable. The summers are great—not too hot and with cool evenings. However, the winters are a different story. When the Canadians come south to Fort Drum for winter training, you know the weather has to be cold!

It was the middle of December and my wife was on her way to work in our 1992 Ford Explorer. The road conditions ranged from bare pavement to icy patches, but it didn't seem bad enough for my wife to stop and put the Explorer into four-wheel drive. As she was going up a small hill she hit a slippery spot and the Explorer swapped ends, sliding across the center line and into the path of a tractor-trailer coming down the hill. The tractor-trailer slammed into the back of the Explorer, pushing it across the road and into a ditch.

The truck was from the company where my wife worked. The owner was a couple of car lengths behind the tractor-trailer and saw the whole thing. He pulled over and stopped to help my wife.

And what was the result of all of this? Our Explorer was totaled, but my wife, while bruised, was OK. Her seatbelt had saved her.

The National Highway Traffic Safety Administration reports that seatbelt usage has increased in some states to as much as 85 percent. But my own "surveys" of drivers in Alabama and New York run more in the 60-to-70 percent range.

The Army supports the national "Click It or Ticket" campaign because seatbelts save lives—yours and your families.' Take the time to buckle up whenever you get in the car, not just when you drive on post.

Saved by the Helmet

MAJ RICHARD A. ROLLER, MC, USA
Naval Air Station Pensacola, FL

There I was, flying through the air inverted with limited visibility! Does this sound like the beginning of an aviator's yarn? Not quite, but the story is true. Let me back up.

It was July, 1972, and a typical hot and muggy Sunday morning in my hometown of Little Rock, AR. I was the 16-year-old proud owner of a somewhat used (but brand-new to me) Honda motorcycle. My father had bought the bike as a gift for me the previous year, and I had been riding it since then. I considered myself a fairly proficient and careful rider, and I wasn't prone to taking risks.

On this particular day I planned to ride over to visit a friend who was also a motorcycle enthusiast. I ate a quick breakfast, slipped out the back door, rolled out of the garage, and headed down the driveway. Suddenly, my father stepped out from behind the house and motioned for me to stop. In his right hand he held my shiny red motorcycle helmet, which I probably had worn a total of 10 times in the past year. My father was a retired E6 who'd served in three wars and wasn't exactly the type of individual you said "no" to. While I did not think of myself as a rebellious youth, I did have a strong opinion about that helmet. I simply did not like wearing it. It was hot, it was confining, and I thought it looked "stupid." My father, on the other hand, felt strongly about safety and insisted I wear the helmet "or else!" So, I took off with my cranium snugly secure in my ugly helmet.

It had rained the previous night and the air was foggy and the streets were still wet. I wasn't speeding, but I probably was going too fast for the conditions. As I rounded a corner, I hit a patch of wet leaves and lost control. I skidded and "caught" a parked car with my bike's left crash bar. That's when I became airborne.

When I came to I was lying on my back, looking up into the face of the car owner. I was lucky. I had only a few deep abrasions on my legs and right shoulder. The left leg of my jeans was ripped away. When I took off my helmet I noticed a 4-inch wide strip missing from the top. I'd apparently slid across the pavement on my head and literally ground down my helmet. Were it not for the helmet I would've been missing a sizable portion of my scalp (and possibly worse). In addition, the crash bar saved my left leg from being crushed. My bike had several hundred dollars of damage and I had to do some serious explaining for my father (who actually seemed more relieved than angry).

I learned a valuable lesson that day about helmets, one that's been reinforced several times as I've worked in emergency rooms. Helmets save lives—the evidence is concrete.

Contact the author at (850) 452-9426, or e-mail richard.roller@us.army.mil

POV UPDATE

FY04 through January 2004

Class A-C accidents/soldiers killed

Cars	35/23
Vans	0/0
Trucks	9/3
Motorcycles	10/2
Other*	3/1

*Includes tractor trailers, unknown POVs, and bicycles

Total POV Fatalities 29

FY03	31	3-Yr Avg	31

UNFULFILLED POTENTIAL: Almost a Soldier

WILLIAM S. DEL SOLAR
CP-12 Safety Intern

The summer weather was perfect for a day at the beach: sunny, temperature in the mid-80s, and not too humid. Beach 11, located at the end of Presque Isle State Park on the southern shores of Lake Erie, PA, is a family beach. With its gently sloping bottom and few waves, many families take "mini-vacations" at Beach 11 during the summer months.

On this particular day, some swimmers in an unguarded area near Beach 11 reported that a friend had gone underwater, but didn't come back up. Lifeguards and Coast Guard personnel found the missing swimmer about 45 minutes later only a short distance away, in about 12 feet of water.

The young man was playing Frisbee with his friends. He was a non-swimmer, so he stayed in what he thought was shallow water. He didn't know the lake bottom at Beach 11 ripples in a series of gentle ridges parallel to the shore and drops off several feet with each ridge. He was standing in chest-deep water when he dove to retrieve a Frisbee thrown just beyond his reach. Diving out to get the Frisbee, he accidentally got in over his head.

You almost knew this young man. He was a Soldier-to-be in the Delayed Entry Program. He was supposed to leave for basic training at the end of the summer. He could have been your best buddy. But he chose to swim in an unguarded area and paid for that decision with his life. I spent 30 minutes diving to that murky bottom, looking for him in vain. I still remember how heavy his body was as I carried the stretcher off the beach.

Don't let the same thing happen to you. Don't swim in unguarded areas. Don't be someone else's burden.

The author currently is assigned with the 2d Brigade Combat Team, 10th Mountain Division (LI), Fort Drum, NY. He may be contacted via e-mail at william.s.delsolar@us.army.mil.

ACCIDENT BRIEFS

Information based on preliminary reports of ground accidents.

ACV

Class A

■ An M2 Bradley Fighting Vehicle suffered Class A damage when it caught fire. A mechanic replaced the fuel line after the crew reported smelling fuel, but on the way to their forward operating base the vehicle stalled and made a popping sound. The driver was treated for injuries suffered in the accident.

Class B

■ Soldier's left index finger was amputated after the gunner's hatch on an M113 Armored Personnel Carrier slammed on his hand.

Class B (Damage)

■ A Patriot radar system mounted on a HEMTT trailer suffered Class B damage when it hit the corner of a garage. The Soldier driving the HEMTT was attempting to exit the garage when the accident occurred.

Class A

AMV

■ Soldier drowned when the HMMWV he was driving ran off the roadway and into a canal. The Soldier was pinned underwater in the vehicle.

■ Two Soldiers were killed when their HMMWV was struck by an M1. The tank and HMMWV were approaching from opposite directions when the M1 hit the HMMWV on the driver's side.

■ Soldier suffered fatal injuries when the non-tactical, Army-owned SUV he was riding in was hit by a civilian tractor-trailer. The SUV's driver, also a Soldier, reportedly was trying to pass a slower vehicle just before the accident. The driver was not injured.

Class C

■ Two Soldiers suffered minor injuries when their HMMWV overturned. The Soldiers were test-driving the HMMWV on a dirt road when the rear end slid to the right on a hill. The right-rear tire went into a shallow ditch on the roadside, causing the vehicle to overturn. The Soldiers were wearing their seatbelts and Kevlar helmets, and were able to exit the vehicle and get help from military police patrolling the area.

■ Soldier suffered second- and third-degree burns to his chest, arms, and legs when a HMMWV hose assembly line burst. The Soldier was conducting PT when he realized the HMMWV parked nearby had a runaway engine. After he stopped to help, the Soldier reached over to kill the solenoid fuel cell when the hose assembly line burst. Hot fluid sprayed over the Soldier's body, causing the burns.

Personnel Injury

Class A

■ Soldier collapsed and died while running during PT.

■ Soldier died after falling down the stairs in his quarters. The Soldier had consumed an unknown number of alcoholic drinks before going downstairs to get something to eat. The Soldier suffered severe head trauma during the fall.

■ One Soldier died and another was injured after being electrocuted. The Soldiers were installing a radio antenna when it touched a power line.

■ Soldier died from a non-hostile gunshot wound. No other details were provided.

■ Soldier died 6 days after being burned over 65 percent of his body. The Soldier was improving the area around an ammunition bunker with an M9 Armored Combat Earthmover when the ammunition point caught fire.

■ Soldier was killed when another Soldier's M16 accidentally fired at a checkpoint. The round struck the deceased Soldier in the head.

■ One Soldier suffered a permanent total disability and another was injured when they were struck by a vehicle at a foreign intersection.

■ Soldier died from a non-hostile gunshot wound to his chest. Another Soldier was firing his M16 when a round accidentally struck the Soldier.

■ Soldier died 3 weeks after suffering a fall during PT. The Soldier was running when she fell and fractured her leg, causing fatal complications.

Class B

■ Soldier suffered a gunshot

wound to his leg, resulting in a permanent partial disability, when the M2 50-caliber weapon he was stowing in a HMMWV discharged.

■ Soldier's fingers were amputated when the C4 explosive he was emplacing detonated. The Soldier also suffered a fractured ankle, and two other Soldiers suffered injuries including burns, cuts, and a ruptured eardrum. The Soldiers were attempting to destroy captured ammunition at the time of the accident.

Class C

■ Soldier suffered a heat stroke during PT. The Soldier was taking a PT test and had completed the first two portions when he collapsed and lost consciousness during the 2-mile run.

■ Soldier suffered fractures to her leg during the 2-mile run portion of the APFT. The Soldier had been on profile for various injuries to her lower leg prior to the accident, but was cleared at the time of the test.

Class A

■ One Soldier was killed and two others were injured when their vehicle ran off the roadway and overturned. The degree of injury to the two surviving Soldiers was not reported.

■ Soldier suffered fatal injuries when he was ejected from his vehicle. The Soldier was on convalescent leave for foot surgery and had been drinking alcohol at his girlfriend's apartment just before the accident. He and a friend had left the apartment to get food and were on their way back when their vehicle slammed into the rear of a parked tractor trailer. The vehicle was estimated to be traveling 50 to 60 mph in a 25 mph zone at the time of impact. Although he was revived twice on the way to the hospital, the Soldier was pronounced brain dead and died the next morning. The passenger, who was wearing his seatbelt, was treated for minor injuries.

■ Soldier died when his vehicle struck a bridge. The driver was speeding at the time of the accident.

■ Soldier died when his vehicle was rear-ended by another vehicle. No other details were provided.

■ Soldier suffered fatal injuries when his vehicle ran off the roadway and struck several trees. The Soldier was ejected from the vehicle.

■ Soldier died after his vehicle overturned. The Soldier was home on pass for Thanksgiving when the accident occurred.

■ Soldier died when the vehicle she was riding in was rear-ended and spun out of control, and then struck on the side by two other vehicles.

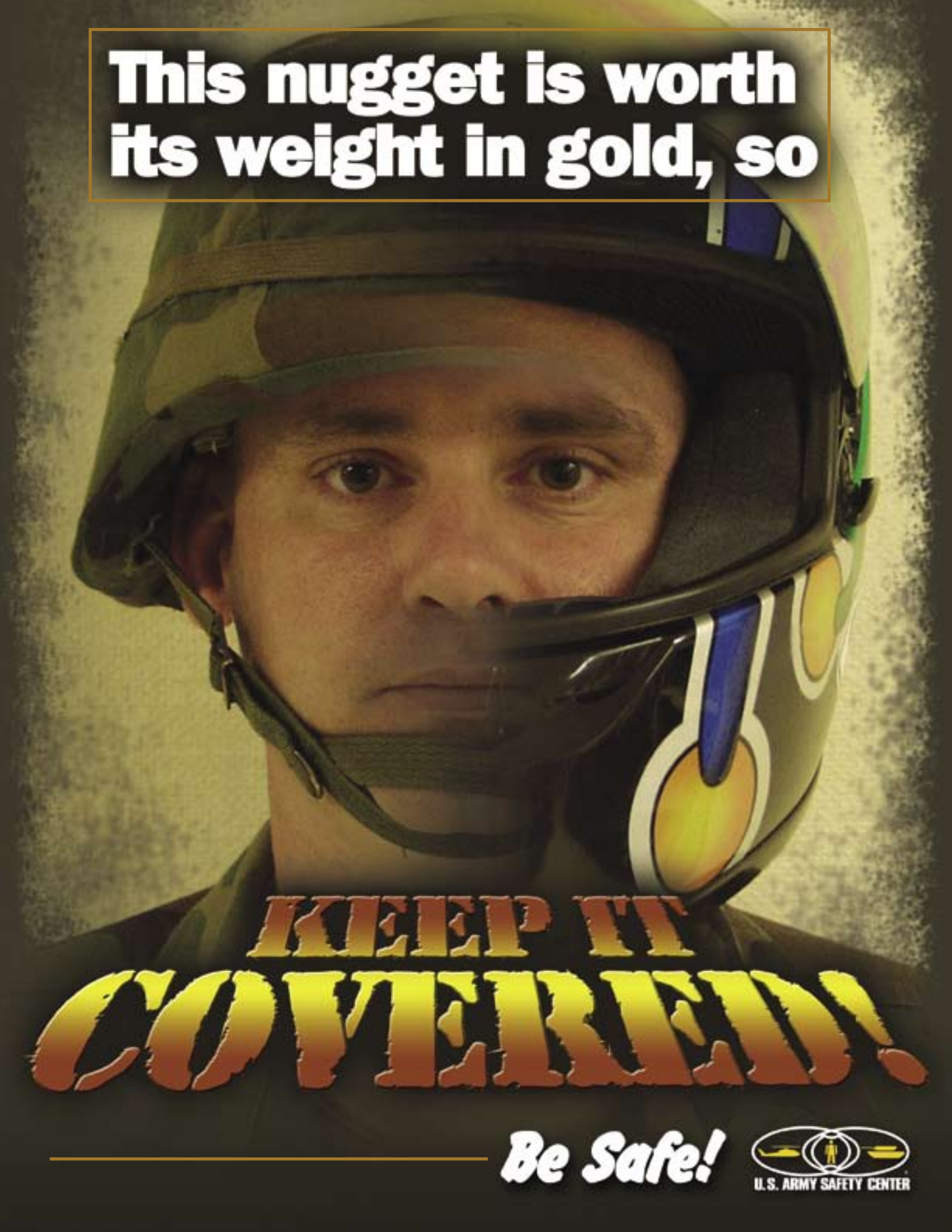
Class B

■ Three Soldiers suffered extensive injuries, including broken bones and head injuries, when their vehicle overturned several times. The Soldier driving the vehicle fell asleep at the wheel after leaving a nightclub.

■ Soldier suffered a permanent partial disability when he was ejected from his vehicle. The Soldier's vehicle crossed the median and struck another vehicle driven by a civilian.

■ Three Soldiers suffered back injuries when their rental vehicle was rear-ended by a utility truck. The Soldiers were stopped at a red light behind two other cars when the utility truck, traveling about 30 mph, hit their vehicle. The impact caused the rental vehicle to hit the cars in front of it.

■ Soldier suffered a compound fracture to his ankle when a civilian vehicle pulled out in front of his motorcycle. The Soldier turned his motorcycle in an attempt to put the motorcycle between him and the other vehicle, as he was taught in the Motorcycle Defensive Driving Course. The injury was caused when his ankle caught between the motorcycle and the car. The Soldier was wearing personal protective equipment.


This nugget is worth its weight in gold, so
KEEP IT COVERED!
Be Safe!
U.S. ARMY SAFETY CENTER

ARMY GROUND RISK-MANAGEMENT INFORMATION

Countermeasure

VOL NO 4 http://safety.army.mil APRIL 2004

Be Safe!

The Army's Safety Campaign to Prevent Accidents

Countermeasure
ARMY GROUND RISK-MANAGEMENT INFORMATION

CONTENTS

features

U.S. ARMY SAFETY CENTER

on the web
http://safety.army.mil

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DASAF'S CORNER
From the Director of Army Safety

Incoming! The Army Safety Campaign

Our Acting Secretary of the Army, the Honorable Les Brownlee and our Army Chief of Staff, GEN Peter Schoomaker, send a letter to every Army family who has lost a Soldier while serving in the Global War on Terrorism. For those of us who have had to write those somber letters, we will never forget how heart wrenching it was each and every time. The welfare of our Soldiers is our greatest responsibility, and the death of any American Soldier is something our senior leadership takes very personally.

The Army leadership has always emphasized the enforcement of safety. However, this January Secretary Brownlee hit a new point of emphasis; he was simply sick of sending letters to families who lost loved ones to accidental fatalities. During Fiscal Year 2003, 255 Soldiers died in accidents. In the first four months of this year, 101 Soldiers have died. We certainly have a tough job to do for our Nation, and we cannot afford to be risk-averse. However, accidental fatalities are NOT the cost of doing business. Engaged, caring leadership can prevent accidents from happening.

In a January trip to Iraq, Secretary Brownlee saw first-hand the effect of quality leadership in the actions of a young company commander. Before any vehicle rolled out on a mission, the captain looked each Soldier directly in the eye and said, "I want YOU to be safe!" He wasn't doing it out of procedure or obligation. He was doing it because his unit was a "band of brothers" who truly cared about each other's safe return. Because they cared so deeply for one another, safety was personal.

When Secretary Brownlee returned from Iraq, he charged the Army Safety Center to develop an Army Safety Campaign and inspire units across the Army to adopt the model he saw in Iraq. The motto for the Army Safety Campaign is "BE SAFE!" Why be safe? Because your Soldiers are counting on you to bring them home safely, and your family is counting on you to make it home.

The practice of bringing all your soldiers home safely is a lot tougher than writing it on paper. Commanders and leaders in the field are already doing a great job at pushing the importance of safe practices and protecting their Soldiers' welfare. However, the Army Safety Campaign will apply Army-level resources, communication tools, and knowledge that are not available at the unit level. The Campaign will have two main efforts: (1) to enable Army leaders at all levels to risk manage more effectively through the use of new Web-based tools, and (2) to inspire stringent enforcement of basic standards through a multi-faceted communication campaign.

The Army Safety Center is working overtime to build and refine Web-based programs and put Army-level safety knowledge at the hands of all Soldiers. These tools, the Army Safety Management Information System-1 (ASMIS-1), Risk Management Information System (RMIS), Accident Reporting Automation System (ARAS), and the Commander's

DASAF'S CORNER

From the Director of Army Safety

Acting Secretary of the U.S. Army
HON Les Brownlee

Chief of Staff, U.S. Army
GEN Peter J. Schoomaker

Sergeant Major of the U.S. Army
SMA Kenneth O. Preston

"Communication of the Army Safety Campaign began with emphasis at the highest level."

Safety Brief, if used, give the leader on the ground the ability to predict and prevent the most likely accidents.

Communication of the Army Safety Campaign began with emphasis at the highest level. The campaign plan was briefed to general officers at the Senior Army Leader Conference in early February. Secretary Brownlee, GEN Schoomaker, and Sergeant Major of the Army Kenneth Preston personally appear in the Army Safety Campaign Video found on our Web site, providing every Soldier and Army employee with their message. SMA Preston has taken the lead in communicating the importance of proper training and standards enforcement throughout our Army. For example, in this issue of *Countermeasure* he addresses the troubling problem of negligent discharges.

In addition to our senior leadership, the Army Safety Center has provided new tools to help you communicate the importance of safety to your Soldiers. The "Drive to Arrive" series of videos includes top country music stars and NASCAR drivers asking our young Soldiers to use risk management and stay safe.

All of our new risk-management and communication tools can be found on our Web site at www.safety.army.mil. Be part of the Army Safety Campaign; take five minutes to look and see what is there. Inspire the Soldiers in your unit to do the same. It may help your unit predict and prevent the next accident. Most of all, rigidly enforce those basic standards that may be inconvenient but, nonetheless, keep your Soldiers safe. A simple correction or additional question may prevent you from having to send a terrible letter.

Our Army at War—Be Safe! Make it Home Wherever You Are

Joe Smith

BG Joseph A. Smith

Safety Alert:
HMMWV Electrical Fires

1. There were three significant accidents where HMMWVs caught fire while being transported. A Class A fire (more than $1 million loss) occurred in a ship hold where a suspected "Protective Control Box" allowed a starter to overheat and catch fire, destroying four communication HMMWVs and damaging four others. The second fire occurred during an Air Force Air Mobility Command C-17 flight when a dirty STE/ICE-R diagnostic connector (cannon plug) allowed current flow and resulted in smoke filling the cabin. The plane had to make an emergency landing. The third incident occurred on board another transport ship when the front winch began smoking. The cause and damage cost was not reported.

2. Surface Deployment and Distribution Command (SDDC) is reiterating the publication of the following Safety of Use Messages (SOUMs) and Maintenance Advisory Messages (MAMs) for all Deploying Unit Commander Actions:

MAM #98-006	DATE:	201809Z FEB 98
MAM #98-007	DATE:	201819Z FEB 98
TACOM SOUM #99-07	DATE:	R 301214Z APR 99
TACOM SOUM #00-015	DATE:	R 311651Z MAY 00
TACOM SOUM #01-012	DATE:	R 20145Z MAR 01
TACOM SOUM #02-002	DATE:	R 171515Z JAN 02

Web site to retrieve these messages: **http://aeps.ria.army.mil**

All deploying unit commanders are requested to ensure unit vehicle maintenance personnel comply with all technical maintenance manuals, instructions, and above messages. The SDDC requests that all HMMWVs be inspected for electrical system defects prior to deploying from home installation and before arriving at ports of debarkation.

Joseph A. Smith
Brigadier General, U.S. Army
Commanding

U.S. ARMY SAFETY CENTER

Do You Really Kn
That Weapon is

About a year ago, then Sergeant Major of the Army Jack Tilley published an article in *Countermeasure* magazine discussing negligent weapons discharges. It's time to revisit this serious issue. Since the beginning of the Global War on Terrorism, 25 Soldiers have died and another 14 have suffered permanent disabilities because of negligent weapons discharges. In almost every case, it was another member of the Soldier's unit who was responsible. How tragic to survive the battlefield only to be shot by your battle buddy! Who is the real enemy?

Some think these numbers are relatively low, but I'm here to tell you even one is unacceptable and we, as leaders, can't stand for it. We must identify the problem, establish solutions, and train our Soldiers so we'll never have to tell another family member their loved one died because of "friendly fire." Accidental or negligent discharge—call it whatever you want—is a core safety issue I am focusing on as Sergeant Major of the Army.

Many of these discharges occurred in base camps or areas where the weapons control status was "green" except for Soldiers in a security role. So what went wrong in these incidents?

In almost every case Soldiers didn't follow established procedures on when, where, and how to clear their weapons. We call these procedures "standards." You'll find clearing barrels at the entrances of compounds and base camps, at the base of guard towers, and at helipads. Clearing barrels are the focal point for leaders such as OICs, NCOICs, and convoy commanders to ensure their Soldiers' weapons are cleared and in green status.

In one incident a Soldier was shot and killed in his tent because another Soldier didn't clear his weapon when his team returned from a mission. Peeling the onion a little more, we found this Soldier was riding in the back of a truck with several other Soldiers and was asleep during the clearing process. These Soldiers weren't required to dismount the truck, so instead they handed their weapons to another Soldier on the ground to clear them. Unfortunately, one weapon—the one involved in the shooting—was missed. In this incident, unit leaders failed to hold Soldiers responsible for clearing their weapons and NCOs responsible for supervising the process. The result of leaders not enforcing standards and

allowing Soldiers to become complacent was the needless death of a young Soldier.

In another incident a Soldier was killed when he was shot in the head by a 25 mm cannon on an M2A2 Bradley Fighting Vehicle (BFV). The deceased Soldier and another Soldier were standing approximately 20 feet in front of the BFV, which was positioned on the unit perimeter for security operations. The crew kept the 25 mm cannon loaded, with the "ghost round" cycled. The BFV was unmanned until the driver entered the vehicle to start the engine. When he switched on the MASTER POWER switch, the 25 mm cannon cycled and fired a round, killing the Soldier. The other Soldier was severely wounded in the neck by a discarding petal from the projectile.

ow if Loaded?

SMA KENNETH O. PRESTON
Sergeant Major of the Army

I told this story while visiting troops stationed around Iraq and asked them if they would ever stand in front of a loaded weapon on a range. In every case the answer was "Never!" We must emphasize that we train as we are going to fight.

In this incident, unit leaders allowed Soldiers to become complacent about the potential danger associated with weapons orientation. Unit leaders did not enforce keeping loaded crew-served or vehicle-mounted weapons manned at all times.

I love to watch seasoned Soldiers and leaders moving along a busy city street. Seasoned Soldiers know their weapons are lethal and ensure their muzzles are never pointed at anyone as they move among the populace. These Soldiers instinctively practice muzzle awareness all the time.

When in the ready position, seasoned Soldiers keep their trigger finger poised alongside their weapon's magazine well and off the trigger until they need, or anticipate the need, to shoot. How do Soldiers become seasoned and skilled? The answer is training and experience.

Training enforces important disciplines such as muzzle awareness and trigger finger position. Leaders must teach and enforce the right standards and never allow Soldiers to become complacent in weapons handling. Weapons handling is a perishable skill. Repetitive focused training builds experience, creating Soldiers who are inherently safe.

Long periods of time between training events or during combat operations (when it might be hard to train) can lead to complacency. Recurring focused training on weapons handling and unit standing operating procedures can combat complacency and reinforce established standards. We need the discipline of first-line leaders along with the oversight of senior leaders to halt these needless, tragic deaths.

Negligent discharges often happen because of the reasons listed below:

- Lack of muzzle awareness and discipline
- Insufficient training
- Ineffective supervision
- Negligence
- Inattentiveness
- Indiscipline

These same reasons caused nine Soldiers to be killed or seriously wounded while cleaning their weapons. Soldiers not clearing their weapons and maintaining a weapons control green status in designated areas killed or wounded 18 others. Twelve Soldiers were injured or killed because of a lack of muzzle awareness and discipline, coupled with unintentionally pulling the trigger. Learn the standard, teach the standard, and enforce the standard.

I've learned during the last year that if a unit doesn't have well-established standards and discipline before they deploy to Afghanistan, Iraq, or the Balkans, they'll have a tough time establishing standards once they're there. Ultimately, it's Soldiers who pay the price in needless deaths and accidents.

Weapons proficiency is the province of the NCO. From the youngest corporal to the Sergeant Major of the Army, we're the primary trainers and guardians of the standard. Competence is our watchword. Our young Soldiers look to us for an example to follow.

The Soldiers we train today will be tomorrow's leaders; just as today's leaders will be tomorrow's senior leaders. We must give our Soldiers and leaders the tools, techniques, and procedures to prepare them for that task. I need your help!

Hooah!

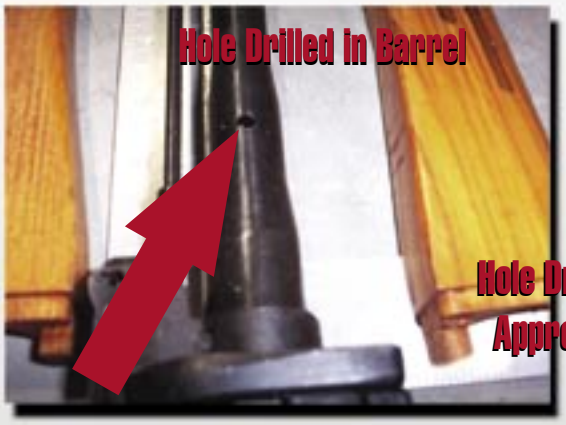
Are Captured Weapons Safe to Shoot?

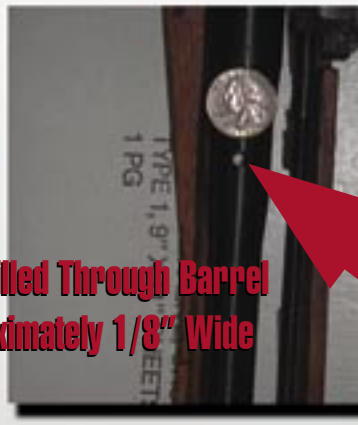
BOB VAN ELSBERG
Managing Editor

Ever since David felled Goliath and used the giant's own sword to behead him, warriors have captured their enemy's weapons and used them or kept them as trophies. Sometimes using the enemy's weapons is a battlefield expedient. Many soldiers in Vietnam cast away their malfunctioning M-16s and picked up an enemy AK-47 or SKS as their battle rifle. During Operation Iraqi Freedom, captured AK-47s have been issued to tank crews to supplement their M-4 carbines.

But there can be problems. Recently a Russian-made Dragunov SVD sniper rifle shipped from Iraq to an Air Force base in the United States for counter-terrorism training exploded when it was test fired. Investigators examining the weapon found someone had drilled a 1/8-inch hole through the barrel about 2 inches forward of the chamber. When the weapon was test-fired, gas exiting the holes vented directly into the hand guard. The high pressure (upwards of 44,000 psi for the 7.62x54R cartridge) shattered the hand guard, sending pieces flying as far as 30 feet. Fortunately the weapon was mounted in a vice and remotely fired. Had someone been holding that weapon they'd be counting in fractions on their fingers—that is, if they still had any! And this wasn't the only sabotaged weapon. Another Dragunov SVD from the same weapons cache was found sabotaged in exactly the same way.

Let's face it, captured enemy weapons—especially those of Russian design—can be fascinating. The Dragunov SVD looks "sinister"—completely in character with its role as a sniper weapon. The many variations of the





Kalashnikov (AK-47, AK-74, AKM, etc.) represent the most recognizable weapons in the world. The Makarov pistol, while not as powerful as the Beretta M9, is handy, compact, and reliable. And there are other weapons, such as hand grenades. Last year a soldier in Afghanistan blew off his hand while attempting to demonstrate how to use a captured Chinese-built hand grenade. His accident reflected his lack of familiarity with the weapon.

The tactic of sabotaging weapons is not new, and soldiers need to be very careful not to be injured or killed. SFC Bennie Cagle, a ground accident investigator for the Army Safety Center, offers the following tips to protect yourself against sabotaged weapons:

• If you encounter a discarded enemy weapon, treat it as if loaded and remain wary until the weapon is proven to be safe.

• If you must use a captured weapon because of a shortage of approved U.S. military weapons and such use is endorsed by the chain of command, then:

- Check the action to see it functions properly.

- Make sure the weapon is unloaded, the chamber is empty, and then check the bore for obstructions.

- Don't attempt to fire the weapon until it has been inspected thoroughly.

- If you are not sufficiently familiar with the weapon to inspect it yourself, take it to someone who is familiar with the weapon. Have the weapon field stripped to ensure all parts are intact and haven't been tampered with.

- Make sure you use the correct ammunition! 7.62 mm NATO ammunition is NOT interchangeable with the Russian-designed 7.62x39 (used in the AK-47 and many of its variants) or the 7.62x54R cartridge used in the Dragunov SVD and other weapons. Also, although the Makarov and Beretta pistols fire 9 mm cartridges, they are not interchangeable. The 9x18 mm Makarov has a projectile diameter of .363-inch versus the .355 of the Beretta's 9x19 mm cartridge. While it might be possible to fire a 9x19 mm cartridge in the Makarov, the undersized bullet would be inaccurate and the much higher firing pressure would be dangerous to the shooter.

• In combat, all bets are off. If your weapon malfunctions and there is an enemy weapon available, use it. However, if possible, try to become familiar with how various enemy personal weapons work before you're in a situation where you need to use one.

Russian-made Dragunov SVD

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Editor's Note: Information concerning the sabotaged Dragunov SVD was provided by Mr. Joseph Vigil, chief of ground safety, Air Force Special Operations Command, Hurlburt Field, FL. He may be reached at (850) 884-2829, DSN 579-2829, or e-mail Joseph.Vigil@Hurlburt.af.mil

Attacking Privately Owned

Last year 103 of our Army's Soldiers didn't make it home because of privately owned vehicle (POV) accidents. One hundred and three families—fathers, mothers, husbands, wives, sons, and daughters were told that their special loved one was not coming home. When a Soldier dies in a POV accident, it creates a hole in a formation that leaves fellow Soldiers and leaders asking themselves what they could have done to prevent the loss. And funeral wreaths hang where yellow ribbons were once displayed with pride.

This story happens all too often across our Army. To save Soldiers' lives, the Army is re-energizing its campaign to prevent POV accidents on several fronts. This campaign includes Army-level and major command tools and programs to help installations and units reduce accidents. The most critical element of the campaign is getting leaders to emphasize personal discipline and accountability.

The Army has several POV accident reduction tools and programs. They include Click It or Ticket, the ASMIS-1 POV Risk Assessment Tool, and Combating Aggressive Driving training. In addition, the U.S. Army Safety Center (USASC) has begun deploying centralized accident investigation (CAI) teams on selected fatal POV accidents. Also, USASC is providing information on post-deployment POV and motorcycle safety training, and distributing POV safety video clips featuring NASCAR drivers. Let's take a closer look at these tools.

Click It or Ticket

Army installations are working with local law enforcement to support the national Click It or Ticket campaign. Military Police and local law enforcement officers are conducting traffic stops, spot-checking drivers and passengers to ensure they're wearing their seatbelts, and issuing tickets to those who aren't. Department of Defense standards require all vehicle occupants on federal installations to use seatbelts. Traffic surveys have shown that this program can increase seatbelt use to nearly 100 percent, potentially saving several Soldiers' lives annually. Seatbelts don't prevent accidents, but they save lives by reducing the severity of injuries when accidents do happen. Military Police enforcement, leader emphasis, and personal discipline are essential to increasing seatbelt use.

ASMIS-1 POV Risk Assessment Tool

This automated program was featured in the January 2004 issue of *Countermeasure*. The ASMIS-1 POV module is an automated risk assessment tool to help leaders and Soldiers identify risks and develop effective control measures for the trips Soldiers will be taking. The goal is for Soldiers to understand the travel hazards of their trip and discuss with their first-line leaders how to reduce those risks. The program includes a summary of fatal accidents that have occurred under similar POV travel conditions. The program can be found at https://safety.army.mil/asmis1//.

Combating Aggressive Driving

The Installation Management Agency (IMA) is providing this training at selected locations based on the population and recent accident trends. For example, have you ever had someone cut you off in traffic, tailgate you, or pass you on a double yellow line? Those are just a few examples of aggressive driving. The Combating Aggressive Driving program concentrates on recognizing aggressive driving and how to deal with it. The program also teaches Soldiers to recognize when they are driving aggressively and ways to keep from being an aggressive driver. This program is an expansion of a pilot program tested by Forces Command (FORSCOM) at Fort Polk, LA.

POV Centralized Accident Investigations (CAI)

During October 2003, USASC deployed a CAI team to look into a fatal POV accident at Fort Lewis, WA. The purpose was to better understand POV accident causes, identify effective prevention

Vehicle Accidents

DENNIS KEPLINGER, CSP
Policy and Strategic Programs
U.S. Army Safety Center

efforts for units and installations, and show how Army and unit leaders can be more effectively involved in reducing POV accidents. All POV accidents where Soldiers are injured or killed must be reported to USASC, which will continue to send CAI teams to selected accidents.

Post-deployment POV Safety Training

Soldiers returning from the desert to their home station might be a bit rusty on their POV driving skills. Without specific leader intervention, these reduced driver skills combined with leave, celebrations, and extended travel plans can lead to an increase in POV accidents. Soldier and unit reintegration planning must include a review of accident avoidance techniques. Retired Mississippi State Trooper, Captain Pete Collins, recently spoke to a group of Soldiers at Fort Campbell, KY, and shared his 30 years' experience in dealing with POV accidents. A video of that presentation will be available for redeploying units in the near future.

Motorcycle Safety Training

The Army and Air Force Exchange Service reports that nearly 6,000 deployed Soldiers will return to home station and take delivery of brand-new motorcycles. New riders are at the greatest risk of being involved in accidents. Motorcycle safety training improves a rider's chances of avoiding a collision or surviving an accident. Motorcycle safety training also is required by Army regulations for anyone registering or riding a motorcycle on post. The Motorcycle Safety Foundation (MSF) will be working with the IMA to provide additional motorcycle safety training courses to meet the anticipated demand. Also, FORSCOM has coordinated with AAFES to offer motorcycle safety training to those who purchase their new bikes through AAFES.

NASCAR Videos

NASCAR has teamed up with USASC to produce several short public service traffic safety messages. Several NASCAR drivers will be seen in the public service announcements in AAFES theaters. The messages will address relevant safety topics such as seatbelt use, speed, fatigue, and alcohol.

Leaders, buddies, and families can set a good example and help influence Soldiers to make smart driving decisions. With all the tools and initiatives underway across the Army, it's still the Soldier behind the wheel who must have the discipline to BE SAFE!

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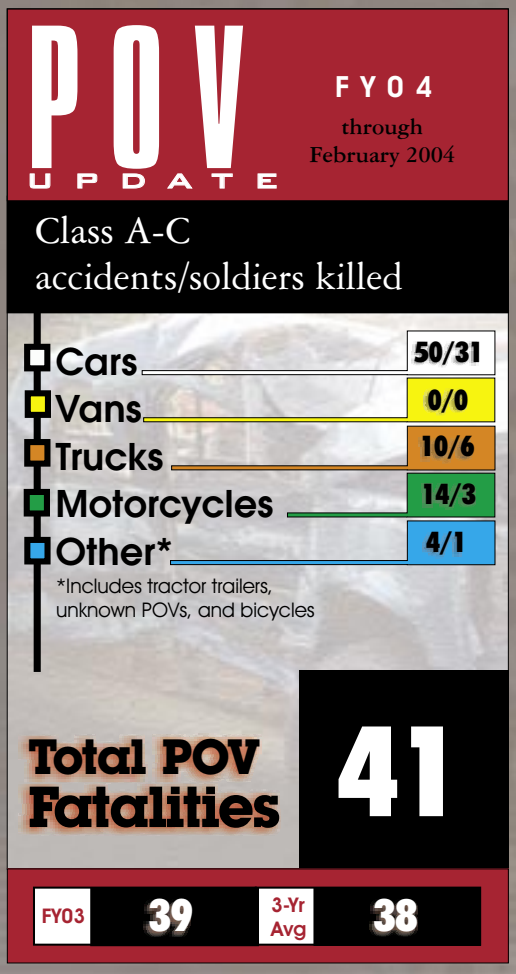


USAREUR's Reintegration Program Eases Iraq Returns

Troops and family members eagerly anticipating reunion after a year of untold hardships—both in Iraq and at home—might feel like they've earned a nice, long vacation. But there are a few things returning Soldiers need to take care of first.

GEN B.B. Bell, U.S. Army Europe (USAREUR) Commander, has made one thing clear: "Don't worry. No training, maintenance, or other unit work until troops have had plenty of time for rest and recuperation." GEN Bell calls this time an opportunity "to heal the warrior spirit."

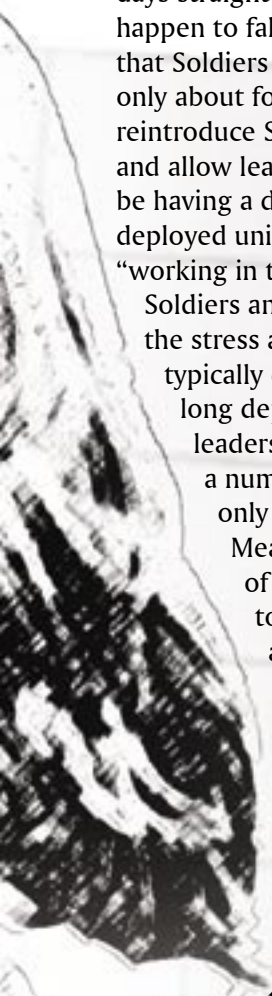
The First Seven Days

Officials have mapped out a 45-day program designed to smoothly transition troops from the combat zone to home station. The process is called the Deployed Cycle Support Program and is designed to focus on the human dimension of redeployment. That process begins the moment the plane touches down in Europe. The main objective is to account for each Soldier and get them reunited with their family or into the barracks.

Each wave of arriving troops will be greeted by a general officer and a brief welcome-home ceremony. The only other speed bump before being released is that Soldiers will have to turn in weapons and any

other sensitive items.

The next day begins a seven day series of briefings, medical screenings, and other tasks. That's seven days straight—no weekends or federal holidays that happen to fall within that window. The good news is that Soldiers will be on a half-day schedule, working only about four hours a day. The idea is to gradually reintroduce Soldiers to life outside the combat zone and allow leaders to identify any Soldiers who might be having a difficult time readjusting. There will be deployed unit chaplains and local community chaplains "working in tandem" to prepare Soldiers and their spouses for the stress and family friction that typically come in the wake of a long deployment. Community leaders also are planning a number of retreats not only for couples, but also for single Soldiers. Meanwhile, school leaders will have teams of counselors and psychologists on hand to help children deal with any reunion anxiety.



The Fun Begins

After Soldiers have ticked off all 17 required "pre-block leave" items on their reintegration checklist, they will be eligible to immediately begin 30 days of vacation. The Army has reopened the Von Steuben Hotel in Garmisch specifically for returning troops and those on mid-tour rest and relaxation (R&R) leave. The Patton Hotel, another Army-run lodge in Garmisch, has dedicated half of its rooms for troops just out of the combat zone. Both facilities are offering discounted packages. Returning troops and their families also can expect deep discounts in their local communities for everything from trips and tours to arts-and-crafts programs.

Plans are also in the works to extend the time parents can remove their preschool children from child development centers without being charged. Currently, parents can take their children out for two weeks; however, four weeks is being requested so families can spend the entire block leave together without having to pay for child care not being used. Likewise, teachers and administrators of Department of Defense Dependents' Schools in Europe are preparing for extended absences among school-age students. Students will have two weeks to make up any missed assignments upon returning.

Show Me the Money

"With tax breaks and combat zone stipends, many troops should have plenty of cash waiting for them when they get home. But they should also be prepared to see a lot of that extra money in their paycheck disappear," said COL Kevin Troller, Commander of the 266th Finance Command. On average, most troops have been getting an extra $1,000 a month; however tax exclusion, hazardous duty, and hostile-fire pay all end once Soldiers leave the Middle East.

"Don't worry. No training, maintenance, or other unit work until troops have had plenty of time for rest and recuperation."

Back to Work

Once block leave is over, officials say a final eight days have been carved out for Soldiers to finish up any unresolved personal issues. That's also the time to check off any remaining items on the reintegration checklist. Battalion commanders will use the checklist to certify each Soldier has completed the reintegration process with USAREUR Headquarters, so troops should expect that step to be high priority when they get back to work.

That rounds out the 45-day plan. From there the focus will shift to fixing gear and eventually heading back out to the training ranges. Officials hope to have units combat-ready within 270 days after arriving back in Europe.

Note: The 3rd Infantry Division, Fort Stewart, GA, and the 101st Airborne Division, Fort Campbell, KY, have implemented similar post-deployment reintegration programs. Privately owned vehicle safety is one key focus for returning Soldiers. Fort Stewart tripled the number of motorcycle safety courses presented because of the large number of returning Soldiers who have purchased motorcycles. Fort Campbell is currently offering the Motorcycle Safety Foundation Basic Rider's Course for new motorcycle riders. Nearly 100 new riders have attended during February and March.

Editor's note: We at the Army Safety Center continually strive to develop ways to protect our Soldiers, both on and off duty, and very often look to existing best practices as we become aware of them. This redeployment strategy, implemented by GEN Bell for Soldiers returning from combat to USAREUR, is a best practice. This this article excerpted from ***Stars and Stripes*** *and edited due to space limitations. For the complete article, go to http://www.stripes.com.*

Operation Guardian Angel

During war, Army buddies watch over each other. However, when they leave their buddies and return home, they need family and friends to watch over and assist them through what can be a difficult time of readjustment.

Why are Soldiers Returning from War at High Risk?

Many Soldiers are returning from a war zone where they have served for 12 months or longer. Returning home will be a major readjustment for them. They will have to readapt to a normal lifestyle again because driving, social interaction, and everyday life will be much different from what they experienced in Iraq. Some Soldiers may tend to drink too much, while others may experience difficulties with relationships. These factors place them at high risk for accidents and injuries.

What is Operation Guardian Angel?

Operation Guardian Angel is a national campaign that encourages families, friends, neighborhoods, and communities to remind Soldiers to be safe after they've returned home. Operation Guardian Angel's goals are to protect Soldiers from accidents and injuries, to let Soldiers know Americans are proud of them and care about them, and to provide citizens an opportunity to get involved with Soldiers. Anyone, civilian or military, who cares enough to help Soldiers can be a Guardian Angel.

What can Guardian Angels do?

Guardian Angels can talk to Soldiers and remind them to drive carefully, have a designated driver if they drink, or offer to call a cab to get the Soldier home safely. In recreational activities such as hiking or swimming, Guardian Angels can remind Soldiers of the importance of using the buddy system and appropriate safety gear. The Guardian Angel's role, just as the name implies, is to be there for Soldiers and help them be safe for the sake of themselves, their families, friends, and the Army.

Editor's Note: The Guardian Angel program was initiated by LTG Ricardo S. Sanchez, commander of Combined Joint Task Force 7 (CJTF-7), Baghdad, Iraq. CW4 Darrell Smith, V Corps Aviation Safety Officer, developed the program for Soldiers returning from Iraq. If you would like to apply to be a Guardian Angel, you may do so on the U.S. Army Safety Center's Web site at ***http://safety.army.mil/guardianangel/index.html****.*

Know Your Drive-Off Capabilities

CW2 MATTHEW MENDENHALL
Aviation Safety Officer
1st Battalion, 212th Aviation Regiment
Fort Rucker, AL

When you're driving an Army motor vehicle, whether in a tactical convoy or off-road in the field, you need to know about any dangers along the route. Perhaps there are critical areas where driving off the road is not an option because of dangerous terrain. Perhaps some areas are better than others for a comfort stop. If you've driven an Army vehicle, you probably can imagine any number of tactical scenarios where you'd need to drive off the road in a hurry.

The problem is that some Soldiers arrive at their units with little or no driving experience. Imagine a Soldier driving Chalk 3 in a 10-vehicle convoy when the dirt road turns into a muddy, slippery mess. Do you really think that Soldier will be thinking far enough ahead to plan his actions should a drive-off be necessary?

I'll give you a case in point.

I was a 19-year-old infantryman taking part in a field exercise with my unit. The exercise was nothing out of the usual; in fact, it was very typical because of the rain and mud. I was driving Chalk 2 and had three years' driving experience. However, this was the first time I'd driven outside the unit training area. The rain was coming down hard, the rutted dirt road was just wide enough to fit through, and there were large erosion ditches on both sides.

I knew the ditches were there, but I was only paying attention to what was going on right in front of me. I was about five truck lengths behind the lead truck when it suddenly swerved off the road and back on again. Fortunately for him, he did this on a section of the road that didn't have the erosion ditches. Just then I noticed a turtle in the road in front of me. I started to swerve off the road to miss it, but my truck commander grabbed the wheel and kept it from turning. I'd thought I could swerve just as the lead truck had. In that instant, I didn't think about the ditches on either side of me—I just wanted to miss the turtle. Fortunately, it was a lucky day for all involved. I didn't go into a ditch and the turtle got across the road without being squashed.

The point is, however, that drivers need to be briefed on drive-off problems or limitations before they get on the road. Some roads run along thousand-foot-tall cliffs, while others might border mine fields. To keep drivers on the "straight and narrow," make sure you emphasize the "terrain" part of your mission, enemy, terrain, troops, and time available (METT-T) briefing. And do it before your drivers head out on a mission!

Contact the author via e-mail at matthew.mendenhall@us.army.mil

HERE'S JOEY!

I was getting geared up to take an all terrain vehicle (ATV) riders' course. The instructor told us how the ATV worked and showed us different riding techniques, which we would practice later. When the structured portion of the class ended, we rode around the training area as the instructor pointed out hazards such as ditches and creek beds.

We had eight riders in our class. As the "Free Ride" portion of the class began, we split into two groups of four and went in opposite directions. My group consisted of a captain, second lieutenant, first sergeant, and a sergeant first class. We took turns leading the group as we rode around the training area. Before we were done, there would be a couple of "memorable" incidents!

The first incident happened as we completed a lap around the training area. The group leader unwittingly rode a little too close to a ditch—he later recalled that it "snuck up on him." He was able to avoid the ditch and tried, unsuccessfully, to wave off the second rider. The second rider missed the warning and went into the ditch sideways.

At first I thought the rider had broken his leg. Fortunately, because he kept his knees tucked in tight to the machine, he was not injured. The narrow ditch was about 6 feet deep, and the ATV was wedged in the bottom. We were able to stand it upright and pull it out with another ATV. Looking back, we should have reassessed the situation and called it a day.

But we didn't—we continued our free ride and headed to a steep hill. We'd climbed many hills throughout the day. The leader lined up his approach and began climbing the hill, but about half-way up the ATV started to stall, so he downshifted. The ATV took off and then everything seemed to happen in slow motion. The leader fell backwards onto the ground and landed in a kneeling position. The 600-pound ATV then rolled backwards and stopped on top of him. The rest of us hurriedly ran up and rolled the ATV off him. He said the pain was intense, and we assumed the worst. Fortunately, we had a medic on site who took command of the situation. He dispatched a rider to the training facility to call for an ambulance. In the meantime, the medic secured the rider's neck and was able to roll him over onto his back.

He could still move his toes and arms, which were positive signs. The ambulance eventually showed up and took him to the hospital. His X-rays showed only a small

chip in a vertebra. Although he had pulled and bruised several muscles in his back, he was very lucky not to have broken his back, neck, or ribs. After he realized how serious his accident was, he said, "If I had not been wearing my helmet, I know my head would have been crushed."

Lessons Learned

- Risk assessments are a valuable tool. A site recon prior to the training would have elevated the risk assessment level.
- The use of protective equipment is NOT negotiable—it's a must when training!
- Pay attention to the events and incidents around you and learn from them.
- No matter how much you train to be safe accidents can still happen, so be ready to respond.
- Think safety and act safely.

CPT Chad Roudebush
C-1-125 FA
MIARNG

Readers Write

What Does Peligroso Mean?

The January 2004 issue of Countermeasure featured a story titled, "What's in that Can O' Air?" In the story the author almost torched himself using what he thought was a foreign-made can of air to clean the lens of a Proxima projector. The author noted there was a picture of a cat and a dog on the label, which also had the word "Peligroso" printed on it. Since he wasn't quite sure what those meant, we asked our readers for some help. CW4 Joseph Davis, FLARNG; and Mr. C. Robert Durand, Fort Snelling, MN, gave us the correct translation of the word "Peligroso" (dangerous). SGT Jason P. Deters, MIARNG, offered the following insights:

Peligroso means "dangerous" in Spanish. The can of compressed air most likely came from Spain, and probably used ether as a propellant because of the low cost. The picture of a cat and dog may have been a warning that the fumes were noxious or harmful to small pets. Many European manufacturers of canned air use ether as a cheap propellant.

Later, he added ...

The mental image of a soldier making everything dress-right-dress for a presentation only to have a ball of fire put a crease in the process is hilarious. I actually had a similar, but not so severe, incident with a Proxima while preparing for a general's brief. There was dust and a greasy fingerprint on the lens, which I attempted to wipe off with a soft cotton cloth. Well, the lens was hot enough I burned my fingers and scorched the cloth, which left a foul odor in the room that lingered for nearly an hour. Hindsight being 20-20, I've decided to ensure the Proxima is powered down and cool in the future before attempting such on-the-spot maintenance!

Three Duds Looking for a BLAST

WILLIAM COX
CP-12 Safety Intern
Fort Hood, TX

Remember the old cartoon where Bugs Bunny was trying to help a gremlin detonate an artillery shell? The gremlin swung his sledgehammer time after time, but only made a "clink." Frustrated, Bugs took the sledgehammer, wound up, and let fly the hardest swing he could. As the sledgehammer was just about to hit the front of the shell, Bugs stopped the swing and, with a terrified look on his face, said, "What am I doing!" You'd think such shenanigans would only happen in cartoons—but you'd be wrong. Give young Soldiers some free time and unexploded ordnance (UXO), and you'd be surprised at the results.

I was a brand-new Army private stationed in Germany and was with my unit at Hohenfels on my first field problem. I was very excited because this was something totally new for me.

We pulled into a defensive position inside a tree line at night and put out the standard guard. The next morning while the squad leader was at a meeting, I got together with a couple of buddies and investigated the area. We discovered some belted M-60 blank rounds and unfired Hoffman devices. The way we acted, you'd have thought we were kids who'd found a new toy box.

We fashioned necklaces from the Hoffmans and started pouring the gunpowder from the M-60 rounds onto the ground. After pouring out a sufficient amount of powder, we lit it just to watch it burn—you know, typical Soldier "fun stuff." This went on for about an hour. We were having a grand time until our squad leader suddenly returned, saw us and almost had a heart attack. He immediately put a stop to our fun and told us to gather all the remaining ammunition and bring it to him. We had no idea what the big deal was. Afterwards, he "educated" us on the hazards we'd faced.

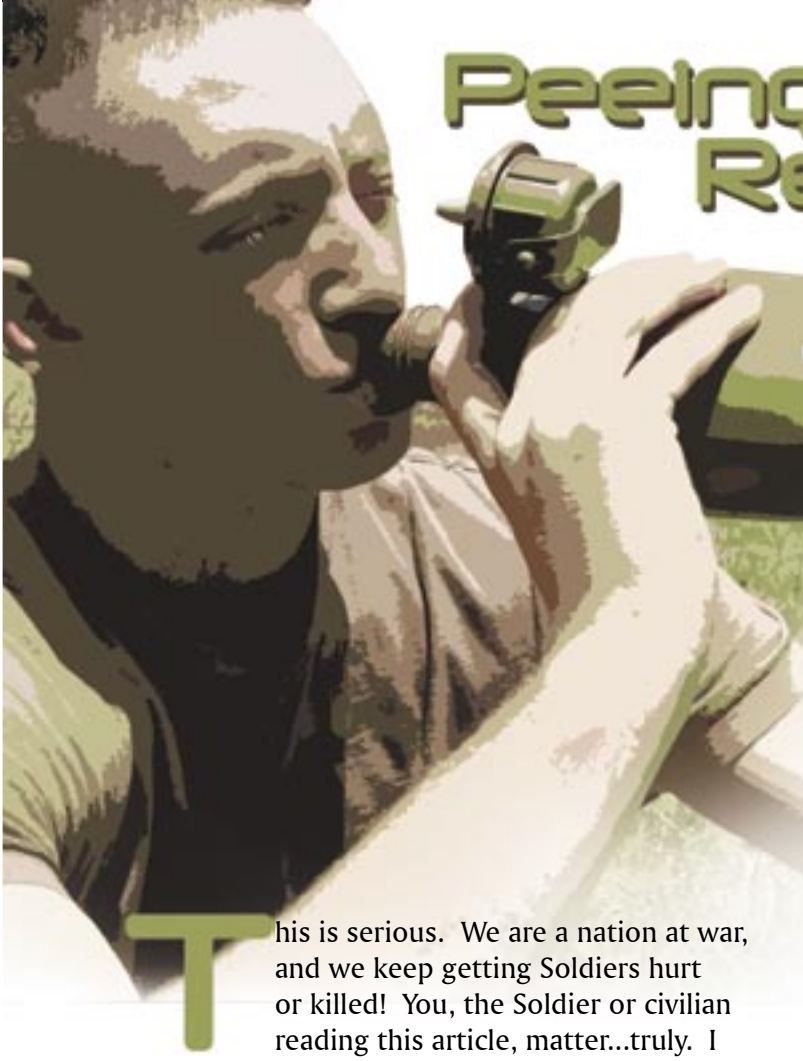
Later, as I moved up through the ranks, I understood what he taught us. We had unwittingly placed ourselves in great danger. I always remembered this lesson and taught my Soldiers about the danger of playing with ammunition—even if it was only training ammunition.

Young Soldiers are always looking for ways to entertain themselves in the field. Unfortunately UXO can look a lot like "toys" to inexperienced Soldiers looking for some "creative" fun. However, playing with UXO can give them a "bang" they may never recover from. If you're a leader, educate your Soldiers so they don't learn the hard way. If you're a Soldier, remember the life you save could be your own.

Safety Rules for UXOs

- Never approach a suspected explosive ordnance item.
- Avoid the area where unexploded ordnance is located.
- Never attempt to move or disturb explosive ordnance.
- Never attempt to disassemble any explosive ordnance item.
- Never transmit radio signals near explosive ordnance.
- Report ordnance to your supervisor.
- Mark the area where the ordnance is located in a highly visible fashion to protect others.

Leave the ordnance handling to the professionals. It takes trained experts to accurately assess the situation and remove any explosive hazards. For more information on the marking of UXOs, check Graphic Training Aid (GTA) 9-12-1, Field Manual (FM) 21-16, and FM 90-13-1.



Peeing White, Ready to Fight!

LTC JOSEPH F. MCKEON
Command Surgeon,
U.S. Army Safety Center

This is serious. We are a nation at war, and we keep getting Soldiers hurt or killed! You, the Soldier or civilian reading this article, matter...truly. I don't care if you're an MH-47 pilot or a contractor in a tool room. You matter. There aren't enough of us to go around as it is. Take care of yourself and your battle buddy. Make sure you make it home! Odds are you are only about one-fourth of the way through your life. Don't rush things and end up dead. Take a minute and do it right!

OK, here we go again...another article on heat injury prevention. Is it almost summertime already? Time flies, whether you're doin' 20 or just getting through your initial obligation. Any way you look at it, it's going to get hot. And heat kills, literally. Batteries, paint jobs, unwatered plants, dogs left in cars, or unacclimatized Soldiers—the single biggest environmental threat is heat. And it's unforgiving.

Here's the deal. We've got four divisions moving in, four moving out. Everybody is going to be exposed to a heat threat this summer. Whether you are deployed for a month to a maneuver training center (NTC, JRTC, or CMTC) or for a year elsewhere, you will be faced with a heat threat in the coming months. When you're packing your full battle rattle with your sleeves down and your gloves on, you're a walking teapot. As your body sweats to cool off, you're losing water. If you wait until you're thirsty enough to want to drink, it's too late—you're already behind the curve! Do you realize that just a 2-percent decrease in your total body water will lower your functional IQ? Who can afford to lose intelligence? Heck, if I had 10 more IQ points, I could have been a pilot instead of just a flight surgeon!

So how can you tell if you're adequately hydrated? You've seen the charts that tell you how much to drink for a certain workload in a given environment. Some Soldiers think "more is better"—so as long as they continue to down water, they'll be OK. However, metabolic needs vary with the individual, and it's possible to become water intoxicated and die. A good rule of thumb is you should have to hit the latrine every 90 minutes to two hours. Check your urine color. It should not be a concentrated yellow color. We used to say, "Peeing white, ready to fight!"

If it's lunchtime and you haven't gone since you got up, you aren't drinking enough. Coffee doesn't count. Caffeine (also from sodas) is a diuretic. That means it makes you urinate more than you drink. You are "bouncing checks" as far as hydration goes (more coming out than going in). So drink water, not coffee or sodas.

If you're a leader, check on your troops. If you think you aren't a leader, think again. Whenever two or more are gathered, somebody is the leader! Look out for your battle buddy, and look out for yourself. Drink water, avoid strenuous work in the heat of the day, and acclimatize before stressing your troops.

Take care of yourself. Where else are you going to live?

Contact the author at (334) 255-2763, DSN 558-2763, or e-mail joseph.mckeon@safetycenter.army.mil

There I Was Being St

ANONYMOUS

There's a difference between being "crazy" and being "stupid." Crazy is weighing the risks and then ignoring them to do something needless and dangerous. Stupid is doing something dangerous without even considering the consequences to yourself or others.

I was a 19-year-old private first class with less than a year's active duty. I was working as a legal specialist for a mechanized infantry battalion. I had built a pretty good relationship with my command, and was respected for my work ethic. My experience was described as "beyond my years."

Our Corps had a policy called "family time" where Soldiers were released on Thursdays at 1500 for personal time. I lived in the barracks, and my friends were my coworkers and supervisors. It was during one of these family times that my world came crashing down.

I was in my squad leader's room. He was a corporal who seemed to have it all figured out. We'd been drinking beer for a couple of hours, and all he kept talking about was how great his new car was. My roommate, a specialist, came up to see what we were doing. My roommate really loved his car and believed he couldn't be beat, so the conversation immediately escalated to a challenge for a race.

We headed out without thinking twice. I rode with my roommate, as I was comfortable with his driving abilities, and the corporal followed us in his car. We drove about a mile to a range road, pulled up side by side, and took off. The race was close at the start, but my roommate and I quickly pulled ahead and were soon doing better than 100 mph. As we approached a 70-degree sweeping curve, we slowed and rounded the bend with ease. The corporal saw this and thought it was his opportunity to pass us and win. He continued accelerating, but the curve was too sharp. He ran off the road, cut his wheel, careened across the median, and hit a tank trail on the other side of the road. His car rolled three times and finally landed on its wheels.

When we turned around to go to his aid, I saw something I'll never forget and never want to see again. The roof of his new car had caved in. The windshield had collapsed into the driver's compartment and was blood-splattered. I saw the corporal's limp body slumped over in the driver's seat. At first I thought he was dead, but he came to as we opened his door.

A member of the range safety staff drove up within a minute and called for an ambulance

and the military police. We left the corporal in the car until medical personnel arrived. They pulled him from the car and evacuated him to a hospital. He had broken his neck, but at least he survived. He was later air evacuated to Fort Sam Houston, TX, to have a metal brace bolted

tupid

to his head with long, metal screws. He had to wear that thing for months. Picture it.

The corporal lived because he wore his seatbelt—no doubt about it. He'd been doing approximately 115 mph when he attempted to round that curve.

What happened to the three of us? Not much. I was arrested at the scene for underage drinking, and my roommate was released. The corporal's blood samples were lost, so no (DUI) charges were filed. My roommate and I received a good old-fashioned butt chewing from the battalion executive officer.

But that doesn't mean there weren't consequences. The first thing I lost was the confidence of my chain of command. I worked through it, but this incident hung over my head for years. Do I appreciate my commander not taking legal action against us and choosing instead to let us learn from our mistake? You bet. I'm still in the Army today because my commander didn't feel that making an example of me was necessary. The result of our actions was more than enough.

Where did we, as young Soldiers, fail? We failed to consider the possible consequences of our actions, and we failed to see alcohol as a factor. We failed to see the corporal's alcohol problem, which was identified later. Basically, we failed to take care of each other. In the end, there were no rewards, no winners, and no bragging rights … only losers.

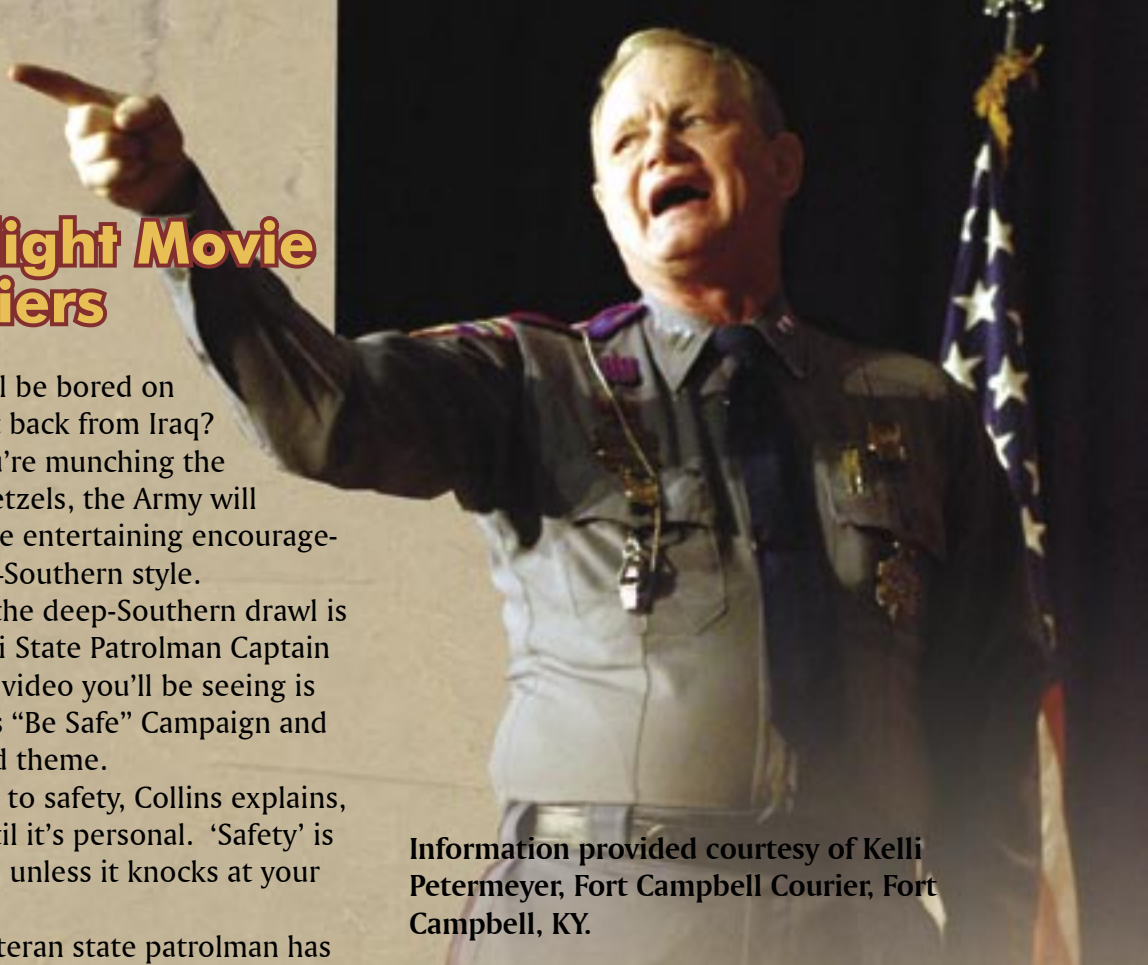
What about our chain of command? They didn't give us the training we needed to recognize the dangers we could face. Young Soldiers don't have the life experiences to help them weigh the pros and cons of their actions or recognize the possible consequences. Our chain of command also failed after the incident by not using it as a learning experience to identify where we went wrong and what we could have done different. This is called risk management, which is only learned through training.

It's no different with today's generation of young Soldiers than it was 10 years ago, except that leadership has more experience with risk management. Leaders need to use their experience to teach Soldiers to be safe so they don't repeat the cycle of lessons learned the hard way.

"Leaders need to use their experience to teach Soldiers to be safe so they don't repeat the cycle of lessons learned the hard way."

If you're a leader, learn what young Soldiers do in their off-duty time. If they drink, teach them to do so responsibly. If they like fast cars and racing, take them to a local racetrack, pay their entry fee, and let them race in a controlled environment. They'll learn to be safe because you've trained them to be safe. Don't let them become another statistic!

Editor's Note: The name of the author has been withheld by request. Also, this article reinforces the point made in last month's DASAF's Corner. Lessons noted but not learned are wasted opportunities to make things safer. The price for that oversight could be a Soldier's life.



An In-Flight Movie for Soldiers

Think you'll be bored on that flight back from Iraq? While you're munching the airline pretzels, the Army will provide you a little entertaining encouragement to be safe—Southern style.

The man with the deep-Southern drawl is retired Mississippi State Patrolman Captain Pete Collins. The video you'll be seeing is part of the Army's "Be Safe" Campaign and has a very focused theme.

When it comes to safety, Collins explains, "No one cares until it's personal. 'Safety' is just another word unless it knocks at your door."

The 30-year veteran state patrolman has worked 184 fatalities. He talks about a chilling experience where he held a little boy thrown from his drunk father's pickup truck. The father didn't buckle the boy's seatbelt, and he died in Collins' arms as his father watched from a distance. He also recalls the day he knocked on a mother's door to tell her all three of her children died on the way to their school's homecoming football game. The driver who hit them had a blood alcohol content of .38.

He explains that although he was trained to write down names and not get involved, he could not follow those rules.

"I committed the cardinal sin as a trooper. I let my job get personal and it changed my life forever," he said.

Because of his experiences, he wants to make safety "personal' to others in the hope it may one day save their lives. He said he is honored to be part of the Army's Safety Campaign because it allows him to give something back to the Soldiers who keep the American flag flying.

Information provided courtesy of Kelli Petermeyer, Fort Campbell Courier, Fort Campbell, KY.

Your Opinions Can Change Things!

Tired of inconvenient, uncomfortable, inadequate, or hard-to-use seatbelts in Army vehicles or aircraft? Do you have an idea for making those seatbelts more user-friendly, comfortable, and effective?

Now is the time to make your opinion known! The U.S. Army Aeromedical Research Laboratory (USAARL) would like to hear what you've got to say. Just take a few minutes and fill out their seatbelt questionnaire at **www.usaarl.army.mil/seatbelt/seatbelt.htm**. All suggestions or comments will be kept confidential.

For more information, contact Mr. John Gouda, USAARL, Fort Rucker, AL. He can be reached by e-mail at john.gouda@us.army.mil

ACCIDENT BRIEFS

Information based on preliminary reports of ground accidents.

ACV

Class A

- Foreign national civilian was killed when the parked vehicle he was sitting in was struck by an M1A1 Abrams tank and overturned. No other details were provided.

Class B

- Bradley Fighting Vehicle was destroyed by a fire that reportedly began in the turret area. The heater is the suspected source of the fire. No personnel were injured in the accident.

AMV

Class A

- Soldier died from trauma to his chest after he fell from an LMTV. The LMTV was towing a water trailer when it hit a bump in the road, causing the Soldier's door to come open. The Soldier was the TC at the time of the accident.

- Soldier was killed when the 5-ton truck he was driving overturned. The Soldier reportedly had swerved to avoid a hole he mistook to be an explosive.

- Soldier suffered fatal injuries when the HMMWV he was driving struck the inside curb in a traffic circle and overturned.

Class B

- Four Soldiers were hospitalized with injuries when their HMMWV overturned. The driver swerved to avoid a collision with a civilian vehicle, causing the HMMWV to roll over.

Personnel Injury

Class A

- Soldier died after being struck by an M-60 round during night infiltration course training. No other details were provided.

- Two Soldiers drowned in a river. One Soldier fell from a patrol boat into the river, and the other Soldier jumped into the water to retrieve him. Both Soldiers' bodies were recovered the next day.

- Soldier was killed when the bomb she was defusing exploded. No other details were provided.

- Soldier died while conducting PT. No other details were provided.

- Soldier was killed while emplacing communication lines. The Soldier inadvertently contacted a high voltage wire and was electrocuted.

- Soldier suffered fatal injuries when the homemade bomb he was defusing exploded. No other details were provided.

- Soldier died after being struck in the chest by an M-4 round. Another Soldier was cleaning the weapon when it discharged the round, killing one Soldier and wounding another in his shoulder.

Class B

- Soldier lost his left eye after accidentally puncturing it with a screwdriver. The Soldier was replacing the air intake system filter when he applied pressure to the system's cover with the screwdriver, causing the system to come apart. The force caused the Soldier's hand to strike his eye. The Soldier was working on his POV at the local post's auto craft shop.

POV

Class A

- Three Soldiers were killed when their vehicle ran off a highway overpass and crashed onto the roadway below. The accident occurred during the early-morning hours on an interstate highway.

- Soldier suffered fatal injuries when the vehicle she was riding in collided head-on with another vehicle. The civilian driving the other vehicle also was killed.

- Soldier died when his vehicle ran off the roadway, became airborne, and collided with an embankment. The Soldier was returning home from a shopping trip when he lost control of the vehicle, causing the accident. Tests showed the Soldier had a blood alcohol content of 0.176 at the time of the accident. In addition, the Soldier was not wearing his seatbelt.

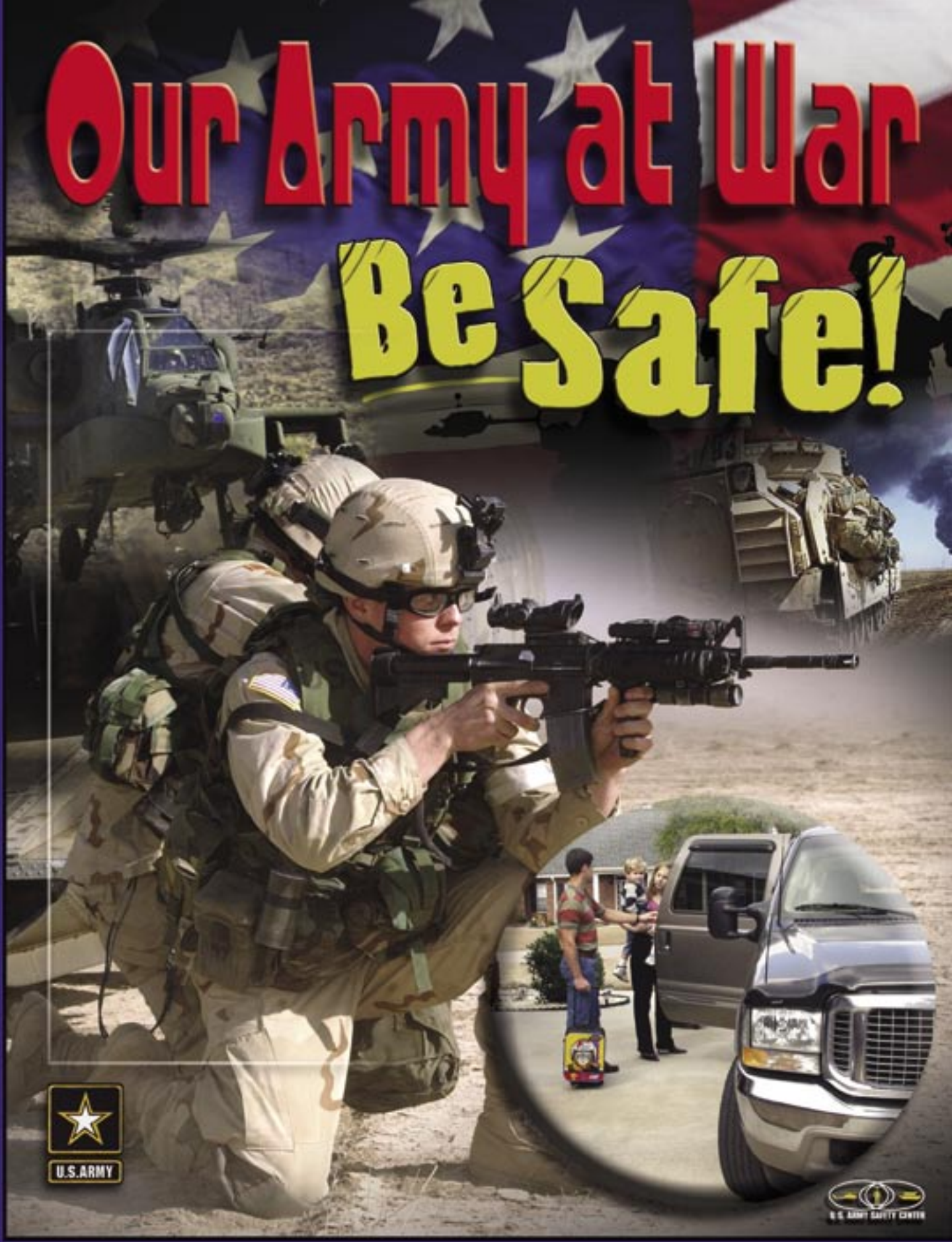
- Soldier was killed when the vehicle he was riding in ran off the roadway, struck a tree, and caught fire.

- Soldier suffered fatal injuries when the right-front tire of his vehicle exploded, causing his vehicle to veer out of control and strike a tree.

- Soldier was killed when he lost control of his vehicle and it left the roadway and struck a tree. The Soldier, who was speeding, had swerved to avoid a tractor-trailer that moved into his lane.

Our Army at War

Be Safe!



Make it Home

ARMY GROUND RISK-MANAGEMENT INFORMATION

Countermeasure

VOL 25 NO 5 http://safety.army.mil MAY 2004

Between Hell and a Hot Place

Countermeasure
ARMY GROUND RISK-MANAGEMENT INFORMATION

CONTENTS

features

U.S. ARMY SAFETY CENTER

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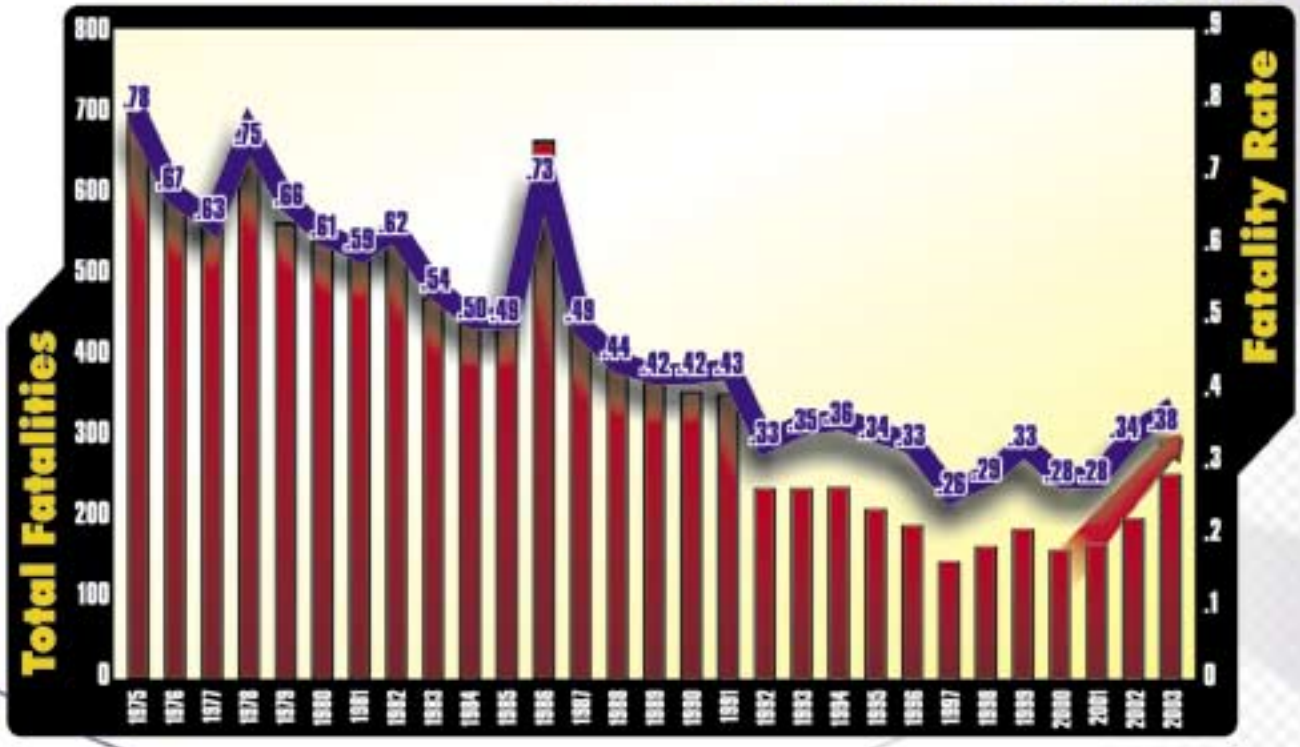
DASAF'S CORNER
From the Director of Army Safety

Paragraph 6 Won't Cut It Anymore!

The steady reduction in Army accidental fatalities between 1975 and 2000 is one of the Army's true success stories. During these years, we came to recognize that protecting Soldiers' lives was vital to preserving our combat readiness. As an Army, we developed a series of programs designed to aggressively attack the three main accident categories: materiel failure, environmental conditions, and human error. During those 25 years, safety modifications to our equipment have made materiel failures extremely rare. In addition, aggressive research programs and control measures have radically decreased the number of accidents caused by environmental conditions. The most significant factor was the emphasis on safety by senior leadership. That emphasis resulted in a decrease in the number of Army accidents caused by human error.

Since Fiscal Year 2000, the Army has experienced a troubling increase in accidental fatalities. The number of environmental and materiel causes remains low, and senior leadership emphasis continues to be strong. In fact, senior leaders are energizing the system to promote risk management. The major commands are actively involved, and their safety programs have some great initiatives. So where are we falling short? Clearly, the Global War on Terrorism has increased our Soldiers' exposure to risk as they conduct 7-day-a-week operations throughout 120 countries. But there is more to the story …



DASAF'S CORNER
From the Director of Army Safety

A careful study of the root causes of Army accidents over the last 12 months has identified a glaring trend: the failure of junior leaders to properly manage risk. Company-level planning and troop-leading procedures routinely fail to mitigate our most basic hazards. On the ground, junior leaders are not following troop-leading procedures and, therefore, recons, pre-convoy inspections, and rollover drills and rehearsals are not mitigating risks. In the last three weeks, three HMMWVs, an LMTV, and an M2 Bradley have experienced rollover accidents that resulted in six fatalities. Whether it is a platoon leader who fails to properly reconnoiter and supervise mission planning or a squad leader who fails to demand his soldiers wear seatbelts and not speed, most accidents can be prevented by basic actions at the junior leader level.

So, is our junior leadership to blame? If so, then how come they have performed so admirably in every other facet of the Global War on Terrorism? Why would their ability to conduct risk management be any different? The truth is, as an Army we have failed to teach and coach our junior leaders on how to properly mitigate risk. We give our future leaders one or two hours of classroom instruction and, three months later, expect them to conduct risk management as a convoy commander in Baghdad. More often that not, the cadre at our schools complete the field training risk management plan without including their students in the process. How can we expect junior leaders to understand and use risk management if we don't give them the chance to practice it during their troop leader procedure training? Simply put, we can't.

How are we doing in the field? We are not teaching our junior leaders the right lessons. We teach them that risk management is, literally and figuratively, paragraph 6 of their operations order—an afterthought. By this, they infer safety is a restriction to their training or mission. However, when safety is embedded early in the mission-planning process, the unit can implement better control measures and conduct more challenging training.

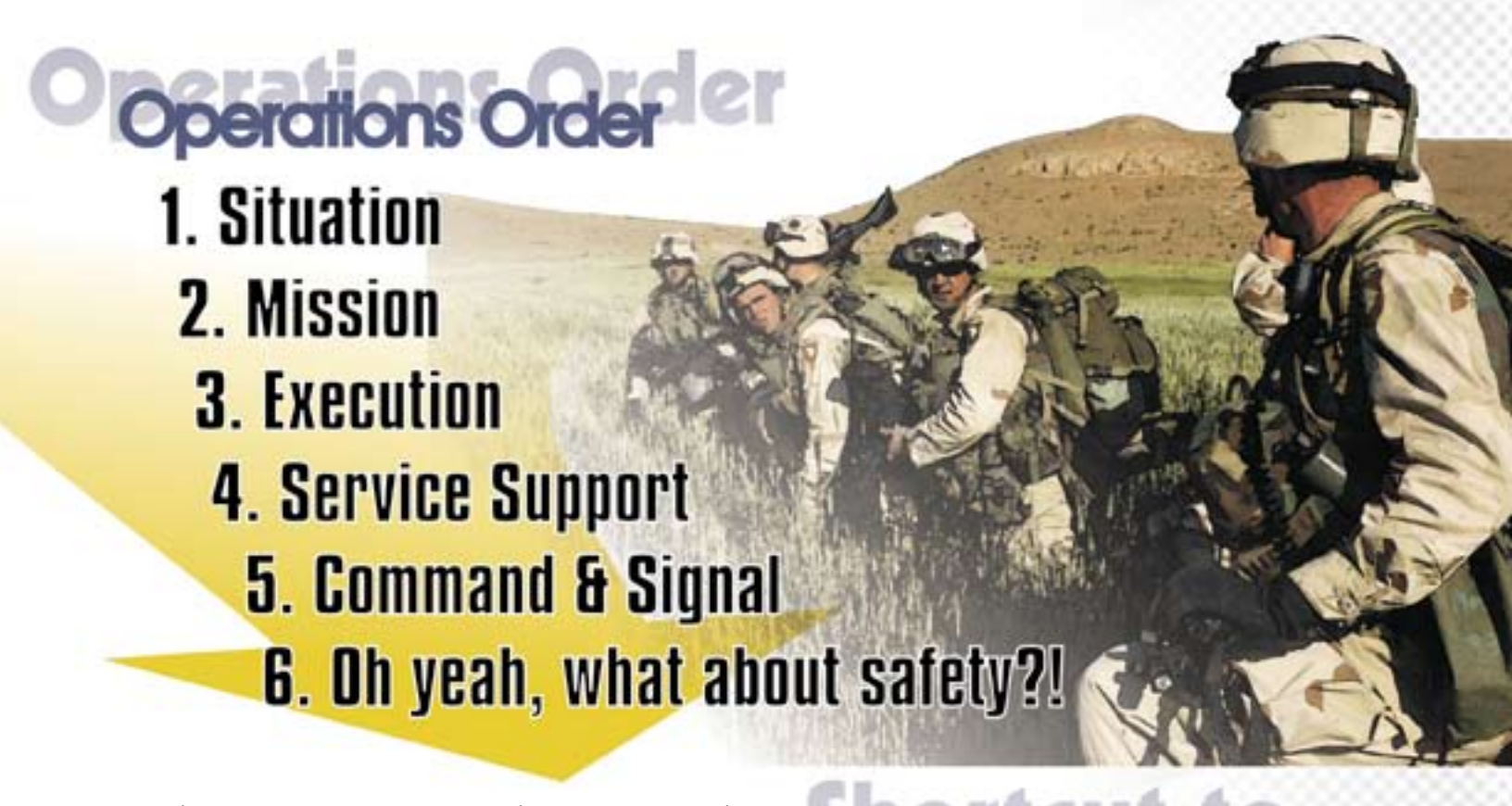
Safety is not about being risk averse. It is about mitigating risk so everyone makes it home from a hard mission to fight another day. Our most powerful control measures are standards and discipline. The Special Operations Forces regularly conduct complex missions around the world, but do so with one basic premise: do the basic things right. Just by doing the basics to standard, any unit can make the tough jobs look simple. This is the attitude we need to instill in our Soldiers, especially our junior leaders.

The Safety Center is actively working with Training and

8 Troop Leader Procedures

1. Receive the Mission
2. Issue the Warning Order
3. Make Tentative Plan
4. Start Necessary Movement
5. Reconnoiter
6. Complete the Plan
7. Issue the Complete Order
8. Supervise

Operations Order



Doctrine Command (TRADOC) to improve the quality of risk management training by taking it out of the classroom and embedding it into troop-leading and field training. Furthermore, we are developing videos and interactive tools to improve our leaders' understanding of how to use our ASMIS-1, RMIS, and ARAS tools to conduct better risk management. In the interim, we need every Soldier, regardless of rank, to stop treating risk management as an afterthought. As GEN Schoomaker has repeatedly stated, "We cannot afford to be risk averse, but we must be smart about managing our risks."

In 1992, the introduction of the five-step risk-management process resulted in an immediate reduction in Army accidents. Former Army Chief of Staff GEN Dennis Reimer's emphasis on reducing off-duty accidents in 1997 had a similar positive impact. These initiatives were successful because they inspired an immediate culture change. To curb the current accident trends and make the Army Safety Campaign a success, we also must inspire a culture change in the way we view risk management.

Our Army is at War.
Be Safe and Make it Home!

Joe Smith

BG Joe Smith

Shortcut to Online Safety

Tired of memorizing userids and passwords? You can now use the same password you use for your Army Knowledge Online account to access our online Risk Management Information System (RMIS) and Accident Reporting Automation System (ARAS) safety tools.

You say you can't get an AKO account, but still want to access RMIS? Just register through our new system at *https://safety.army.mil* and click on the ARAS banner or the "Sign-in" or "RMIS" buttons at the top of the page.

Need RMIS information immediately? Contact our Help Desk at (334) 255-1390, DSN 558-1390, or e-mail *helpdesk@safetycenter.army.mil*

https://safety.army.mil

BETWEEN HELL

The Bradley Fighting Vehicle's engine stalled and the vehicle rolled to a stop after rounding a bend in the trail. The driver checked his gauges, but couldn't figure out why the engine had quit. No matter. It was the end of a hard rotation at the National Training Center (NTC). The Bradley had live ammunition on board and it was a hasty live-fire attack. The crew would make do and continue the mission.

The driver restarted the engine, shifted the transmission into gear and stomped on the accelerator. The Bradley had barely gone 10 feet when the crew heard a loud clattering, followed by a sudden bang and popping noise. Fuel had gotten into the oil, reducing its ability to lubricate the engine. As a result, the engine seized and threw a rod. Part of the rod tore through the bottom of the oil pan, taking a piece of the block with it. At the same time, friction ignited the residue of fuel and other fluids in the engine compartment and started a fire.

This entire sequence happened quickly and was so violent it blew the engine compartment panel off its brackets and into the driver. The driver was stunned and rapidly exited his driver's hatch after seeing flames in the engine compartment. In his haste to exit the vehicle, all he did was yell "fire!" to the rest of the Bradley crew and the dismounts riding in the compartment.

Upon hearing the driver yell "fire," the crew and dismounts began to react. The Bradley commander (BC) reported his situation over the radio. The dismount squad leader was unsuccessfully trying to open the rear troop door. Smoke from the fire began flowing into the crew compartment, and the dismounts yelled for the driver to lower the ramp so they could get out.

The driver heard their cries and climbed back into his compartment. He initiated his part of the vehicle fire crew drill, opening the ramp so the dismounts could escape.

The observer controller (OC) saw all of this from a distance. The Bradley had missed a turn while navigating, and the OC thought it was attempting to get back on course. Even when the ramp was lowered and the dismounts poured out, the OC thought it was a security halt. Not until he saw smoke rolling from the rear of the vehicle did he understand the situation. He immediately informed his higher, and then dismounted his track to direct the crew to use their portable fire extinguishers to fight the fire.

Within 15 minutes the fire spread into the turret area and crew compartment. This made the situation even more dangerous because of the live 25 mm ammunition and TOW missiles on board. The Soldiers moved safely away from the vehicle and, after about 30 minutes, the ammunition began cooking off. The Bradley was destroyed but, fortunately, no Soldiers were injured.

During the investigation, several key factors that led to the accident became apparent. Had these factors been recognized and handled appropriately, this accident might have been prevented or, at least, the damage lessened.

With the rapid pace of deployments and training cycles affecting the Army during

AND A HOT PLACE!

SFC RAYMOND HAMILTON
Ground Accident Investigator
U.S. Army Safety Center

Photos: MR. TERRY SMART
PM Combat Systems Safety

the Global War on Terrorism, several units (such as the one in this story) have opted to leave equipment behind in administrative, or low-usage, storage. With few personnel remaining behind to monitor this equipment, the Army has contracted civilian mechanics to perform 10/20-level maintenance checks and repairs. If managed properly, this process should effectively maintain the equipment in 10/20 status, as required. However, without aggressive military quality assurance, the result can be non-mission capable equipment awaiting the unit's return for proper services and corrective maintenance.

Checking the Bradley's maintenance history, the investigating board could not find a record of a complete or properly conducted service (annual or semiannual) during the preceding two years. What documentation was provided showed a technical inspection (TI) consisting of checking the oil and operator-level maintenance checks. Witness interviews confirmed these findings.

Prior to going to NTC, the unit had maintained an aggressive training schedule. The training included several gunnery and range exercises, and culminated in training events from squad level to brigade level. Since returning from its last combat rotation in July 2003, the unit had experienced an approximately 75 percent turnover in personnel. Experience—defined as how long the Soldiers had worked together and the length of time Soldiers had served in key leadership positions—was relatively low. A lot of young sergeants had stepped up to the plate to fill positions of higher responsibility, and new officers had rotated into platoon leadership slots.

Maintenance was identified as an issue early on, and time was allotted for unit maintenance personnel to conduct services. The work load was divided between civilian contractors and military mechanics during the equipment hand over. The unit had opted to perform all Bradley services themselves. However, a change of mission for the unit drastically shortened the planned time for maintenance.

Several Bradleys in this unit, including the one that had the accident, had their engines replaced about a month before going to the railhead for NTC. In this Bradley's case, no engine oil sample was taken, so the engine wasn't registered in the system for maintenance tracking purposes. After arriving at NTC, unit maintenance personnel had the opportunity to have a sample taken and tested, but chose not to do so. As a result, they missed a vital step in the Army maintenance process. Additional maintenance was performed on the Bradley while it was in the rotational unit bivouac area before rolling into the box.

The board reviewed the unit's tactical standing operating procedures (TACSOP) and maintenance

"The command had properly ide but failed to properly assess it a control measures to reduce the

standing operating procedures and determined the unit's own guidance, if followed, would be effective for operations.

Note: Observer/controllers at NTC teach, coach, and mentor using each unit's TACSOP, and provide feedback to the unit through an after action review (AAR). Also, there is an exercise operation procedures manual (EXOP) at NTC that contains minimal operating procedures for all units deploying there. However, the EXOP should never be used to replace Army guidance or unit TACSOPs.

The battalion commander performed a risk assessment for the NTC training rotation and identified vehicle fire as a hazard. When investigators reviewed the unit's risk mitigation guidance, there was no reference to crews rehearsing vehicle fire drills, as described in applicable technical manuals (TMs) or field manuals (FMs). The Soldiers and leaders on the destroyed Bradley didn't understand the vehicle's fire suppression system. The command had properly identified the hazard, but failed to properly assess it and provide proper control measures to reduce the risk.

The battalion risk assessment was provided to subordinate commanders for review and implementation. During interviews it was obvious that Soldiers were not being taught the risk management process. It was also clear that key platoon leadership didn't grasp the five-step risk management process or how it could help them accomplish their mission with minimal personnel or equipment losses.

National Training Center guidance requires platoon and company leaders to inform OCs that crews have performed fire evacuation and other safety drills before rolling into the box. However, the OCs aren't required to confirm that.

Depending on mission requirements, the accident Bradley's crew and dismounts had changed during the rotation. However, rollover and vehicle fire evacuation drills were never properly rehearsed. Even when this Bradley went into a 15-foot-deep wadi on a night mission (a near-miss earlier during the rotation that resulted in minimal equipment damage and no personnel injuries), it was stated that rollover drills hadn't been performed. In addition, several of the dismounted infantrymen said they didn't know the Bradley had seatbelts. When the Bradley was recovered from the wadi, it had lost a lot of engine oil. The company maintenance personnel instructed the driver to top off the fluid levels and continue with the mission. The only inspection performed on the Bradley was the driver's TI.

The exterior handle for the squad compartment FM 200 Halon system is located on the right rear of the vehicle.

The lever for the squad compartment fire suppression system is on the lower-left part of the driver's control panel.

ntified the hazard, and provide proper risk."

Prior to the wadi incident, another track driver had been using this Bradley. While performing preventive maintenance checks and services (PMCS), the driver identified a potential fuel leak, and also noticed fuel in the engine oil. In addition, dismounted infantry, along with the BC and crew, said they'd noticed a strong fuel smell in the crew compartment during the rotation.

Company maintenance personnel were informed of these problems. They couldn't find the fuel leak, but they did find fuel in the oil. Because of mission requirements and the limited number of mission-capable Bradleys in the platoon, a decision was made to continue using this Bradley. The crew attempted to take it to a unit maintenance collection point (UMCP) for troubleshooting, but the UMCP had jumped to another location on the battlefield, so the Bradley returned to the unit's assembly area (AA).

With that brief history in place, let's observe what happened during the 10 to15 minutes after the driver yelled "fire."

- The driver failed to activate the engine fire suppression system by pulling the exterior manual handle or turning the interior knob.
- The BC failed to activate the squad compartment fire suppression system by pulling the interior or exterior manual pull handles. In addition, he failed to ensure the crew performed a vehicle crew fire drill before the accident happened.
- The dismounts failed to properly follow crew drill procedures and evacuated the Bradley without taking the two portable fire extinguishers mounted in the squad compartment. They also failed to activate the squad compartment fire suppression system by pulling the interior fire suppression handle.
- No effort was made by the dismounts or the Bradley crew to extinguish or fight the vehicle fire until the OC directed them to get the portable extinguishers. Even then, no one initiated the vehicle's manual fire suppression system.

The Bradley's occupants focused on removing sensitive items instead of containing and extinguishing the fire and, as a result, the Bradley was lost. This is another example of a mechanical failure caused by human error. It demonstrates the cumulative nature of this accident—along with early warning signs—and the resulting domino effect. Although the hazard was identified as "Vehicle fire," the following main risk-mitigating factors were missed:

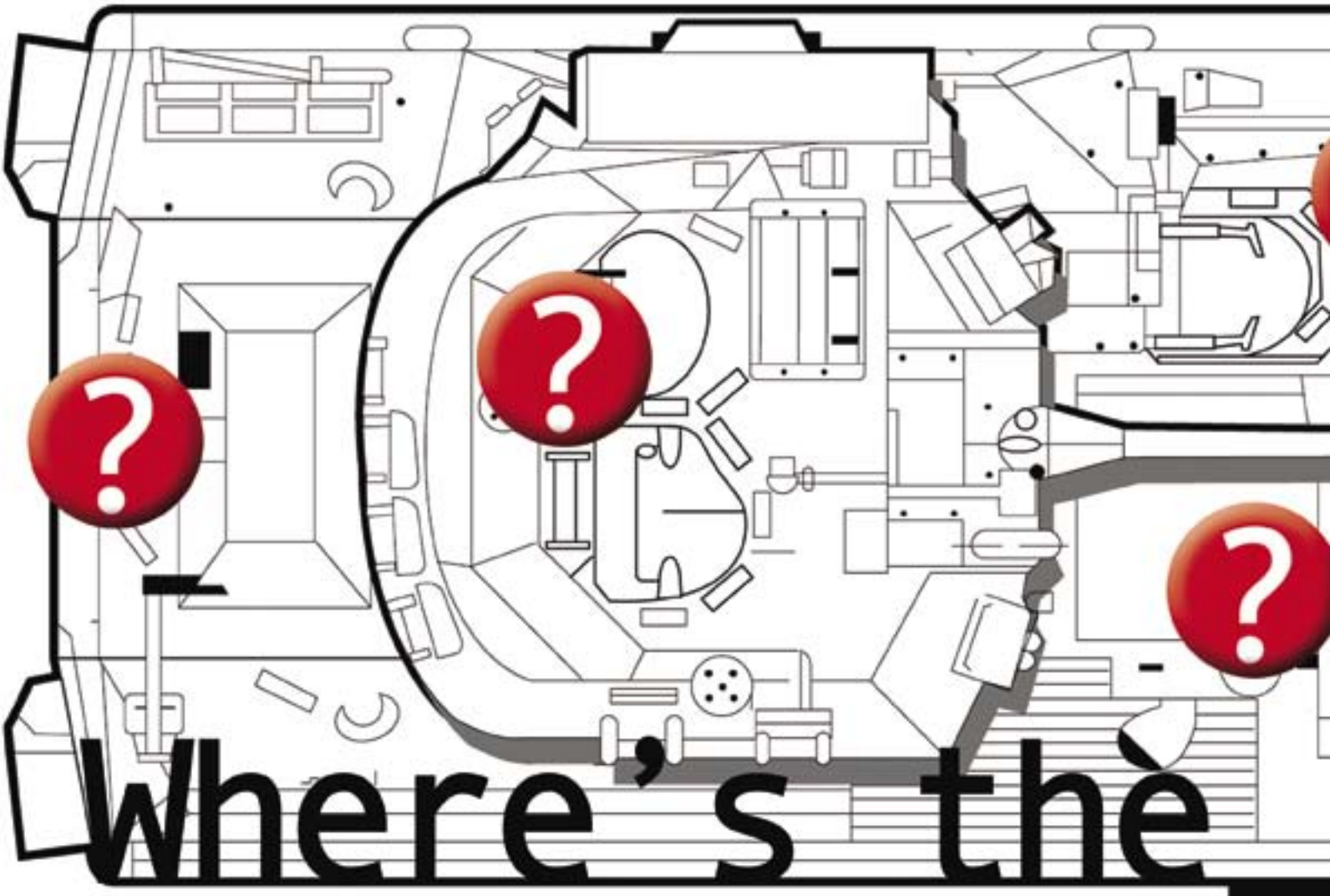
- Proper vehicle maintenance in accordance with applicable technical manuals.
- Crew and occupants trained on vehicle fire suppression system.
- Rehearsal of vehicle fire crew drills with dismounts and crew.
- Perform rehearsals as required when vehicle occupants or crew are changed.

The lesson learned was expensive—but it could have been worse. A Soldier could have been severely burned or killed. Do YOU know what to do if you have a vehicle fire? (See the following story, "Where's the Fire?")

The interior handle to activate the squad compartment suppression system is located to the left of the ramp.

The handle for the engine compartment's FM 200 Halon system is located on the left front of the vehicle.

Contact the author at (334) 255-2933, DSN 558-2933, or e-mail raymond.hamilton@safetycenter.army.mil

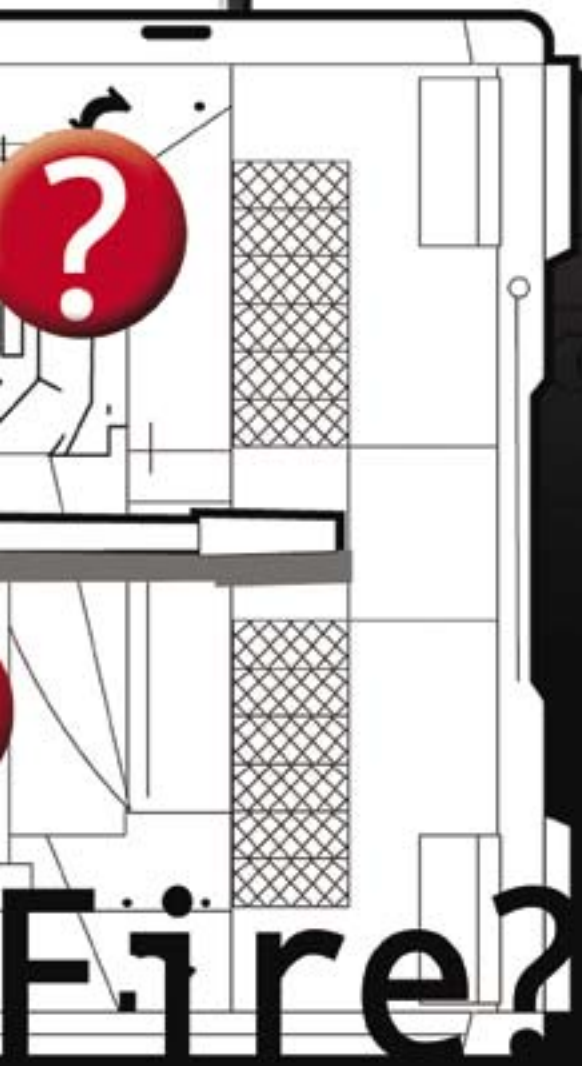


How ready is your crew for a fire on your Bradley Fighting Vehicle? What actions must the driver take? What about the Bradley commander (BC)? What about the guys in the back? You say, "C'mon that's all common sense stuff—we did all of that fire evacuation training years ago." Unfortunately, common sense is not so common, and if we fail to rehearse these basic drills we are leaving the safety of our lives and equipment to chance. So let's take a few minutes and review some of the basics.

First, let's discuss how the Bradley's fire suppression system works. The Bradley has two separate fire suppression systems, one for the squad compartment, and a separate system for the engine compartment. Each system has separate fire bottles. The ones for the squad compartment are next to the turret, while the fire bottle for the engine compartment is underneath the instrument panel. It's important to remember that the two systems are totally independent. If one system activates, it will not automatically activate the other system.

The squad system (the one in the back) will work in the automatic mode or manually, depending on how the switch is set. In the automatic mode, once the sensors in the vehicle detect a fire, the system activates and discharges Halon fire suppression agent from the two rear fire bottles into the squad compartment. You can manually activate the system by pulling either the fire extinguisher handle located in the right rear of the squad compartment by the ramp, or the exterior handle at the right rear of the Bradley. Don't panic! The horror stories about Halon sucking the oxygen from your lungs are just not true. You have plenty of time to get out. A good load plan and rehearsals of Crew Drill 3 in Field Manual (FM) 3-21.71 (7-7J) are an important part of the evacuation process. (Note: this crew drill can be used or modified for any of the turreted Bradley variants.)

Once again, the engine fire suppression system is separate from the squad system and must



MSG MIKE BARKSDALE
A Co, 2-58 Inf Regt
Fort Benning, GA

be manually activated. After shutting down the engine, the driver needs to reach under the instrument panel and turn the knob to the left. As an alternative, the driver can pull the exterior handle by the driver's hatch to activate the engine system. Keep in mind that the exterior fire extinguisher handles only operate ONE system. The handle at the right rear is for the crew compartment, the one at the left front is for the engine compartment.

When was the last time you checked the fire suppression system? How about that fire bottle under the instrument panel? We all know it's a pain to check. However, without good preventive maintenance checks and services (PMCS) how do you know it will work if you need it? Make sure to check the cables that run from the handles on the outside to the valves on the bottles. These cables deteriorate, lose support, and develop kinks over time. If the cables look bad, write them up and have the mechanics check them.

OK, so now we know what to do if we have a fire. However, how can we keep a fire from starting in the first place?

First, Ground Precautionary Message (GPM) 02-001 addresses a problem with cracked fuel fittings on the engine. This GPM directs your mechanics to replace the brass fittings with steel fittings the next time they pull the pack. Do yourself a favor and make sure the mechanics have replaced the fuel fittings on your Bradley.

Second, there is a problem with the power cable for the driver's night viewer getting pinched in the driver's hatch. If that happens, the cable can short out and cause a fire in the vehicle. There is a new cable and routing to fix this problem. Check out issue number 31 of *Bradley Bits* for information on routing the 1W300 cable to avoid this problem. *Bradley Bits* is on the Program Manager Bradley Web site at http://www.pmbradley.org.

Finally, do your best to keep the hull clean. If possible, pull the pack in a place where you can wash out the hull (I know, easier said than done—but a rag will help!) If you have a large amount of petroleum, oil, and lubricants (POL) in the bottom of the hull, it can quickly become a fire hazard.

Don't let your Bradley become another fire statistic in the U.S. Army Safety Center database. Follow your "–10" PMCS and take a minute to educate yourself on the fire suppression system. If you are trained and know what to do, you won't have to be afraid. You can save your life and others and preserve a critical piece of equipment.

"Follow your "-10" PMCS and take a minute to educate yourself on the fire suppression system."

This article was adapted from the October 2001 issue of *Countermeasure*. Contact the author at (706) 544-9252, or e-mail michael.barksdale@us.army.mil

Blazing Booties!

MSG MICHAEL BARKSDALE
A Co, 2-58 Inf Regt
Fort Benning, GA

Wanna "take it in the shorts" really bad? Mixing NOMEX and the Combat Vehicle Crewman (CVC) uniform with issue-type polypropylene (poly-pro) underwear can give a whole new meaning to the words "rump roast." While NOMEX will withstand temperatures up to 700 degrees, poly-pro melts at less than half that heat. During a fire, NOMEX can transfer enough heat to your poly-pro underwear to melt it to your skin! Doesn't sound to me like a very comfortable way to survive a vehicle fire.

OK, if you can't wear poly-pro what can you do? During winter, a combat vehicle is just like a refrigerator! Your only choice is to wear aramid or 100 percent cotton underwear. Below is a table of national stock numbers (NSNs) for both types. Tell your supply folks to use an advice code of 2b. This code will ensure that you don't get a substitute made of synthetic materials.

A second issue exists concerning the gloves available at clothing sales and other stores. While these gloves are black and look just like NOMEX CVC gloves, they've been tested and are not fire resistant. Because of that, they aren't suitable replacements for the NOMEX CVC glove. The list below provides the NSNs for the proper gloves.

Lastly, keep your CVC uniform clean. Oil, grease, or household starch will cause the fabric to burn. Cleaning the CVC uniform to remove these contaminants will restore its fire retardant properties.

Don't survive a vehicle fire only to find yourself with poly-pro melted to your skin or third-degree burns to your hands. Worn properly, the CVC uniform and gloves will help protect you from burns should a fire happen in your combat vehicle.

Adapted from the October 2001 issue of *Countermeasure*. Contact the author at (706) 544-9252, or e-mail michael.barksdale@us.army.mil

National Stock Numbers

Drawers, 100% cotton, cold weather

8415-01-051-1175	X-Small
8415-00-782-3226	Small
8415-00-782-3227	Medium
8415-00-782-3228	Large
8415-00-782-3229	X-Large

Undershirt, 100% cotton, cold weather

8415-01-051-1174	X-Small
8415-00-270-2012	Small
8415-00-270-2013	Medium
8415-00-270-2014	Large
8415-00-270-2015	X-Large

Undershirt, Flyers, Man, Aramid

8415-00-485-6547	SMALL
8415-00-485-6548	MEDIUM
8415-00-485-6680	LARGE
8415-00-485-6681	X-LARGE
8415-01-043-8375	X-SMALL

Drawers, Flyers, Aramid

8415-00-467-4075	SMALL
8415-00-467-4076	MEDIUM
8415-00-467-4078	LARGE
8415-00-467-4100	X-LARGE
8415-01-043-4036	X-SMALL

Gloves, Combat Vehicle Crewman

8415-01-074-9428	SIZE 5
8415-01-074-9429	SIZE 6
8415-01-074-9430	SIZE 7
8415-01-074-9431	SIZE 8
8415-01-074-9432	SIZE 9
8415-01-074-9433	SIZE 10
8415-01-074-9434	SIZE 11

Letters to the Editor:

Keeping Returning Soldiers Safe

I am writing as the mother of a Soldier who recently returned from Operation Iraqi Freedom (OIF). While my son was serving in Iraq, I faithfully corresponded and sent morale-booster packages to him, his squad, his platoon sergeant, and other Soldiers in his platoon. Birthdays, Valentine's Day, Easter, Fourth of July, Halloween, Thanksgiving, and Christmas were some of the events they missed with their families, so we parents laced our letters, cards, and e-mails to them with love, hope, and prayers. We diligently prayed they would come safely home.

Now by the grace of God they are home. For the most part, they're between 21 and 26 years old. They're all young and they've all saved up their hazard pay. They're anxious to get out, be free, make up for lost time, and spend that hazard pay.

Summer's on the way. Although they've not been home for long, six Soldiers (my son included) from one platoon have bought new motorcycles and I'm sure there are more within the company. One of these Soldiers already has had an accident and is in intensive care as I write this. We don't know if the accident was caused by human error, mechanical problems, lack of training, or lack of experience. I do know that I called my son and asked him to promise not to ride his newly purchased motorcycle again. He gave me that, "Yeah, mom."

Soldiers had to gain experience beyond their years to survive the dangers they faced during OIF. But that doesn't mean they'll come home knowing how to safely ride a motorcycle.

I believe safety can work—but only if people work together. We, as Soldiers' families and friends, must work together to protect them after they've come home. Why bring them back safely from Iraq only to see them die on their home soil on a motorcycle?

An Army mom and proud of it!

Editor's Note: The mother who sent this letter has recently joined Operation Guardian Angel. The U.S. Army Safety Center supports this V Corps/CJTF-7 program. It is designed to get concerned families, friends, and patriotic Americans involved in helping Soldiers stay safe after they return from OIF. With more than 6,000 new motorcycles on order through AAFES for returning Soldiers, this is an area that desperately needs dedicated Guardian Angels. If you're interested, visit the Guardian Angel Web site at http://safety.army.mil/index-guardianangel.html. Why not sign up and help the Army win the War on Accidents?

A TENT CAN BE A DANGEROUS

SFC BENNIE CAGLE
Ground Accident Investigator
U.S. Army Safety Center

You're sitting in your tent over in the "sandbox." It may not be much of a home compared to what you left behind, but at least you figure you're relatively safe. You're reading a paperback book when you suddenly hear a "blamm!" Startled, you drop the book only to see one of your battle buddies slump to the floor. A few feet away, another Soldier looks at his weapon. Shocked and horrified, he can't believe what he's just done.

Think this is unlikely? In separate incidents barely a year apart, two Soldiers were injured in accidental shootings at the same forward operating base. During January 2003, one Soldier accidentally shot another in the chest with an M9 pistol. Barely a year later, a second Soldier accidentally fired his M4 and hit another Soldier in the head. Both shootings happened in GP Medium tents, which served as the Soldiers' sleeping quarters. One Soldier completely recovered. Sadly, the other Soldier will spend the rest of his life disabled.

The differences between these two accidents are less important than the similarities. Let's take a look at those.

- Both accidents involved (only) enlisted Soldiers E-4 and below.
- Both accidents occurred in the Soldiers' sleeping quarters.
- Both accidents were caused by a Soldier mishandling his weapon.
- Both Soldiers were surprised when their weapons discharged.
- Both Soldiers were shocked to have shot another Soldier they considered a best friend.
- Both shooters were considered by their leadership to be among the best Soldiers in their respective organizations.

How can one Soldier shoot another, even accidentally? For the answer, both accidents must be analyzed further than just the pulling of the trigger.

First, there were no NCOs present during either of these accidents to supervise these Soldiers. In one accident, there were no NCOs living in the tent with their Soldiers. During the other accident, all the NCOs were in the motor pool.

Second, there was a past history of problems. In one accident, Soldiers had previously mishandled their weapons, but had not been corrected by their NCOs. In the other accident, NCOs had allowed more than six months to pass since they had supervised their Soldiers doing weapons clearing and functions checks.

Finally, both accidents happened in sleeping areas, places where televisions, radios, and video games can distract Soldiers from the task they're performing. For this reason, some units have

policies preventing Soldiers from performing weapons maintenance in sleeping areas.

How do we prevent such accidents from happening again? The answer is that NCOs must train their Soldiers in proper weapons handling and periodically check and retrain them as needed. Weapons clearing and handling is NCO business. If NCOs are not involved in training and supervising, these accidents will continue. An NCO for one of the injured Soldiers said that if a Soldier needed supervision, then he didn't need that Soldier. The truth of the matter is if an NCO doesn't want to supervise his Soldiers, then the Army doesn't need that NCO!

As NCOs, you must train and supervise your Soldiers during operations. That's the only way you're going to bring them home safely!

Contact the author at (334) 255-2381, DSN 558-2381, or e-mail bennie.cagle@safetycenter.army.mil

BATTLEGROUND

"WEAPONS CLEARING AND HANDLING IS NCO BUSINESS."

Doin' the 'D

BOB VAN ELSBERG
Managing Editor

I was driving west on I-40 toward Oklahoma City, anxiously looking forward to meeting an old friend I hadn't seen in years. It was a chilly November morning and the last thing I wanted to do was get outside my nice, warm car. However, as I headed down the road, I spotted a woman who'd pulled onto the right shoulder and was attempting to change her right-rear tire. I could see she was alone and having a hard time. I could hear my dad's words in the back of my head: "A man always helps a woman in trouble."

I glanced at my watch. This was going to delay my arrival in Oklahoma City, but I couldn't just drive by and leave the lady out there in the cold struggling with her tire. So I pulled to the right-hand shoulder and then backed up to where she was stopped. She was relieved to see someone had stopped to help her.

I jacked up the car and blocked one of the wheels so the car wouldn't roll. I went to her trunk and saw a temporary "donut" spare tire. I hated them—I'd rather lose a little trunk space than run around on an undersized tire that doesn't match the rest. Still, what could I do?

I removed the flat tire and mounted the spare, then let the car down and put the jack and flat tire in the trunk. The woman thanked me profusely. I encouraged her to drive slowly and carefully because donut spares are not designed to perform like a full-sized tire. As I pulled away, I watched her in my rearview mirror. She was putting some items back into her trunk and would soon be on her way. Even though the stop had delayed me, I felt good about having taken the time to help her.

I hadn't been back on the road for more than a few minutes when a car rapidly overtook me, swept into the left lane, and passed me like I was parked at the curb. I glanced at my speedometer—I was doing the speed limit. Then I recognized the car. It was the woman I'd helped a few minutes earlier! She was tearing down the interstate and weaving through traffic like she was at a road race. I began to wonder if I did her a favor by changing the flat.

I watched her disappear into the distance. I still had an hour to go before I reached Oklahoma City. I figured I might see her again—this time as a crumpled mass of metal on the side of the road. That didn't happen to her, but it has happened to others. Last year an Army National Guardsman was on her way home from duty and driving on a temporary (T-type) spare. Witnesses said she

Here are some tips for drivers using temporary spare tires:

- DO NOT exceed the maximum vehicle load rating noted on the tire placard.
- DO NOT exceed the manufacturer's recommended speed limitations for driving with a temporary spare. That speed should be listed in your owner's manual.
- DO NOT tow trailers when using a temporary spare.
- DO NOT attempt to repair or remove the temporary spare from its wheel.
- DO NOT drive through an automatic car wash with a temporary spare. The temporary spare is smaller than a conventional tire and thus reduces the vehicle's ground clearance. As a result, the vehicle could get stuck and be damaged.

In addition, Nissan North America, Inc. suggests the following when using temporary (T-type) spare tires:

- Drive carefully while the T-type spare tire is installed. Avoid sharp turns and abrupt braking while driving.
- Do not use more than one T-type spare tire at the same time.
- When driving on roads covered with snow or ice, the T-type spare tire should not be used on the drive wheels.
  - For front-wheel drive vehicles: Use the original (full size) tires on the front, and the T-type spare on the rear.
  - For rear-wheel drive vehicles: Use the original (full size) tires on the rear and the T-type spare on the front.
  - Important: Do not use tire chains on T-type spares. Use chains only on the original (full size) tires.

was going faster than 70 mph when she lost control of her car, which went off the road and overturned. Even though she was wearing her seatbelt, she was killed in the crash. The owner's manual for her car cautioned drivers not to exceed 50 mph when using a temporary spare tire.

Her experience was a tragedy, but you don't have to make the same mistake. If you have to drive on your temporary spare, check your owner's manual for information on speed limitations and handling concerns. Those can vary from vehicle to vehicle, so just because you've read one owner's manual don't assume you know everything. Also, check the inflation pressure on the temporary spare from time to time BEFORE you need it. Just like normal tires, they can lose air pressure over time. There's nothing quite as frustrating as having two flats—one on the ground and the other in the trunk! In addition, temporary spares are not intended for long-term driving. It's important to get the damaged tire repaired or replaced as soon as possible.

Editor's Note: Safety information for this article was provided by the Tire Industry Safety Council and Nissan North America, Inc., copyright, Nissan 2003. Nissan and the Nissan logo are registered trademarks of Nissan.

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POV UPDATE

FY04 through March 2004

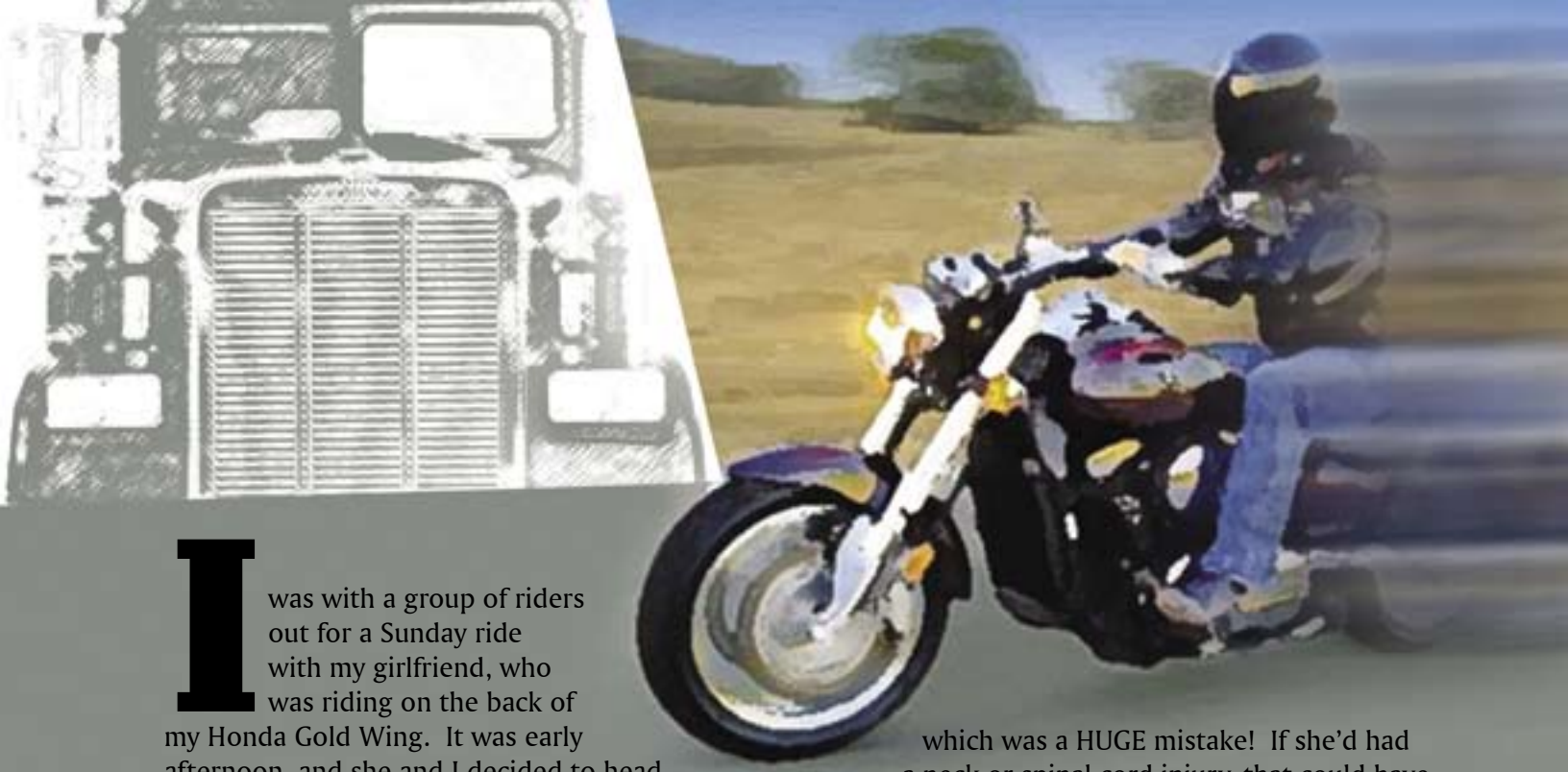
Class A-C accidents/soldiers killed

Cars	62/34
Vans	0/0
Trucks	21/8
Motorcycles	19/5
Other*	4/1

*Includes tractor-trailers, unknown POVs, and bicycles

Total POV Fatalities 48

FY03	45	3-Yr Avg	45



When 18 Wheels Trumps Two

MR. RYAN BROWN
Pensacola, FL

I was with a group of riders out for a Sunday ride with my girlfriend, who was riding on the back of my Honda Gold Wing. It was early afternoon, and she and I decided to head back to San Antonio. Once we got back onto Interstate 10, I set the cruise control at 70 mph and put a compact disc in the player. Just south of Kerrville we went into a right curve that headed up an incline.

As we were going up the incline, an 18-wheeler in the lane on our right decided to pass a motor home. It may be that the diesel driver couldn't see us because of the angle of his cab and the position of his trailer. Whatever the reason, he suddenly whipped into our lane.

Rather than tangling with an 80,000-pound truck, I opted to go into the median, where I felt we had a better chance of surviving. As I went into the median, the Honda's tires hopped and skipped over fist-sized rocks. There was no way I could keep control, so I turned the forks to the left so we would be thrown ahead of the bike when it went down. I knew we would slide further than the bike, and I didn't want to slide into it as it tumbled.

I can only imagine how much WE tumbled as we went down at 70 mph. All I remember between the crash and the ambulance arriving is that I woke up and ran to my girlfriend to see if she was OK. Someone had removed her helmet, which was a HUGE mistake! If she'd had a neck or spinal cord injury, that could have made things much worse. Luckily, that wasn't the case, and once I saw she was all right, I passed out. The ambulance took us to the hospital and, when I awoke, we were both in the emergency room.

Without my helmet, I know I would have been killed. As it was, I broke my clavicle and cracked a shoulder blade and three ribs. Were it not for my jacket, gloves and long pants, the rocks would have torn into my skin. The bike, on the other hand, was a mess! The brake cable was the only thing still holding the front forks and wheel together!

I can't stress enough how proper safety training helps prevent accidents, and how protective gear helps you survive those accidents that do happen. The Motorcycle Safety Foundation basic and advanced courses I took didn't just teach me how to ride, they taught me why a motorcycle behaves the way it does. Because of that, I knew what to do in an accident and am still here to share this story.

Ride smart—ride safe!

Contact the author at (800) 700-7001, extension 217, or e-mail prbrown@hotmail.com

ACCIDENT BRIEFS

Information based on preliminary reports of ground accidents.

AMV

Class A

■ Soldier suffered a permanent total disability when the M931 he was driving overturned. The truck was pulling a water trailer that fishtailed, causing the accident. The Soldier, who was wearing his Kevlar helmet and seatbelt, suffered injuries to his head.

■ One Department of the Army Civilian (DAC) was killed and three Soldiers were hospitalized after their vehicles collided head-on. The three Soldiers were in a HMMWV and acting as the lead vehicle in a convoy at the time of the accident. The DAC was driving a Government-leased sport utility vehicle.

■ Soldier was killed when the non-tactical Government truck he was riding in overturned. A U.S. Air Force member was driving the truck and reportedly was not injured.

■ Soldier died after being struck and pinned by a HEMTT during a roadside convoy maintenance operation. The Soldier was standing on the curb as the HEMTT was backing up and attempting to link with a disabled vehicle. The Soldier was pinned by the HEMTT's right-rear wheels.

■ Soldier was killed when the HMMWV he was driving struck another HMMWV head-on and overturned into a water-filled ditch. The Soldier was pinned in the overturned HMMWV and drowned.

■ Soldier suffered fatal injuries when the HMMWV she was riding in overturned. The driver lost control of the HMMWV while speeding, causing the vehicle to roll over and pin the deceased Soldier beneath it.

■ Soldier was killed when the M925 he was riding in overturned. The truck was hauling an M198 Towed Howitzer when the driver reportedly lost control. Injuries to the driver and other passenger were not reported. Snow and ice conditions were present at the time of the accident.

■ Soldier died after he was ejected from the turret of the HMMWV he was riding in. The driver attempted to avoid a pothole and overturned the HMMWV, causing the deceased Soldier to be thrown from the vehicle. The driver, who was not wearing his seatbelt, suffered a fractured pelvis.

Personnel Injury

Class A

■ Soldier was presumed to have drowned when she was swept into the ocean by a large wave. The Soldier was standing with a group of people on a beach when the wave came in.

■ Two Soldiers were killed when the captured enemy munitions they were destroying detonated prematurely. No other details were provided.

■ Soldier collapsed and died following the 2-mile run portion of the APFT. No other details were provided.

POV

Class A

■ Soldier suffered fatal injuries when he lost control of his vehicle on an interstate exit ramp, striking a concrete barrier. The vehicle rolled over three times before coming to a stop. The Soldier was not wearing his seatbelt.

■ Soldier suffered a permanent total disability when his motorcycle collided with another vehicle, throwing him over the bike's handlebars. The accident occurred on post.

■ Soldier was killed when his vehicle collided head-on with a log truck. The Soldier, who was wearing his seatbelt, reportedly was speeding and passing slower vehicles when he hit the truck.

■ Soldier suffered fatal injuries when his vehicle ran off the roadway and struck a tree. Snow and ice conditions were reported at the time of the accident.

■ Soldier was killed when his vehicle struck a pickup truck head-on. No other details were provided.

■ Soldier suffered fatal injuries when his vehicle collided head-on with another vehicle. No other details were provided.

■ Soldier was killed when he lost control of his vehicle, causing it to cross the centerline and collide with another vehicle. No other details were provided.

■ Soldier died after his vehicle fell on top of him. The Soldier reportedly was having mechanical trouble with the vehicle and was working underneath it when the accident occurred.

Care to fill your canteen from this container?

Sure, someone wrote the words "Do Not Consume," "Coolant," and "Antifreeze" on the outside. But could you read that at night? These containers are designed so that Soldiers can identify them by touch in the dark. (Note the word "Water" molded on the side.) Drinking from this container could put a Soldier on ice—

forever!

U.S. ARMY SAFETY CENTER

Be Safe!

ARMY GROUND RISK-MANAGEMENT INFORMATION

Countermeasure

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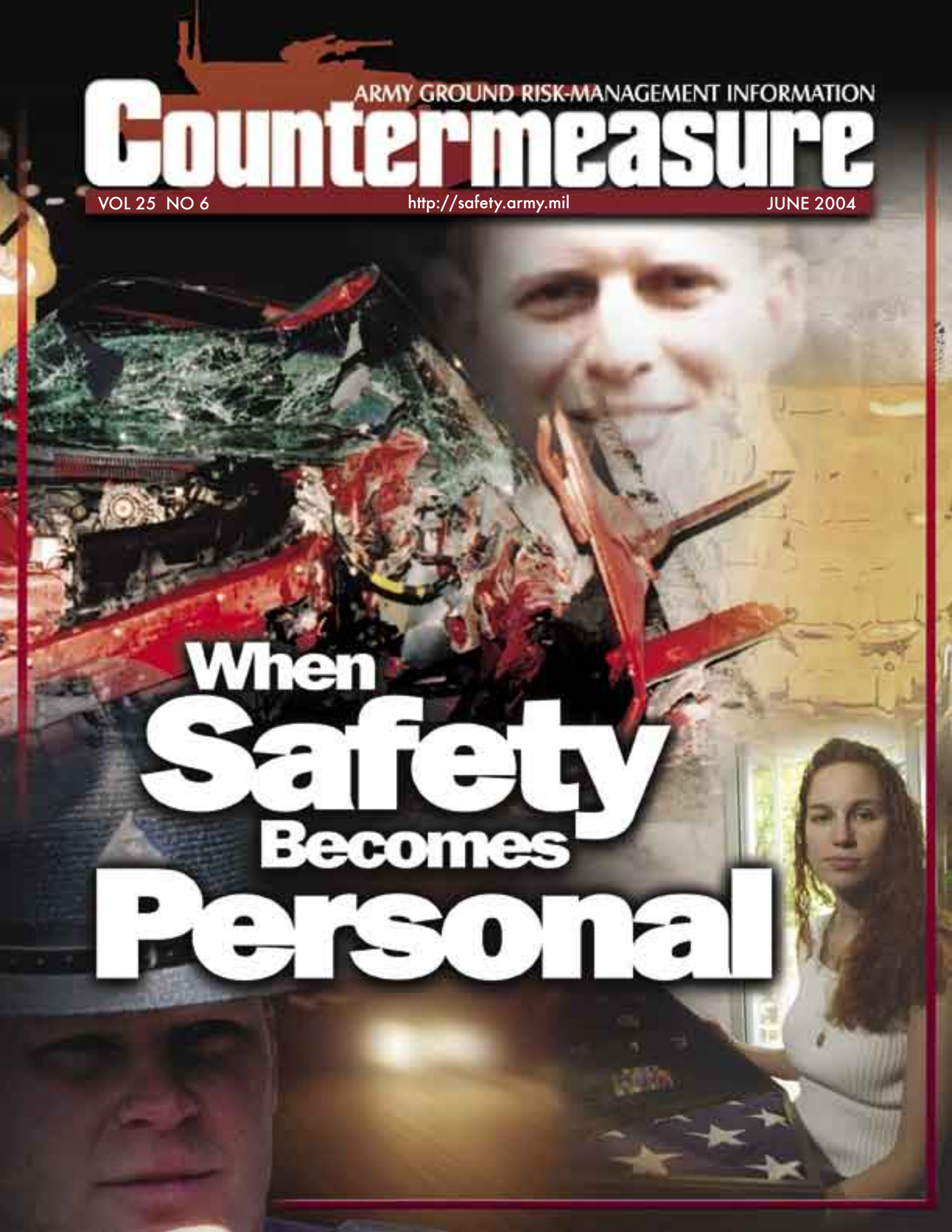

When Safety Becomes Personal

Countermeasure
ARMY GROUND RISK-MANAGEMENT INFORMATION

CONTENTS

features

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DASAF'S CORNER
From the Director of Army Safety

Is Perception Reality?

In the opening month of Operation Iraqi Freedom (OIF), I served in theater as an assistant division commander for the 82d Airborne Division. Four days after "G-day," I had the opportunity to visit a company of Soldiers from an Apache Longbow battalion that had been in a difficult battle south of Baghdad. Several aircraft in the company were damaged beyond immediate repair and not all of the mission's objectives were met. As a senior leader, I was interested to learn the reasons for the mission's outcome.

The platoon leader who'd led the first aircraft into the battle was particularly frustrated. Here's how he described the mission: The joint suppression of enemy air defense (J-SEAD) was fired too early and was, therefore, ineffective; and close air support (CAS) was unavailable during the mission time window. The lack of synchronization gave the enemy time to react, creating a hornet's nest directly around the Apaches' battle positions and routes of flight. I asked him, "What do you think we need to do differently?"

"Sir," the lieutenant stated bluntly, "we need to start by disbanding the Safety Center!" The lieutenant had no way of knowing that I would soon become the commanding general of the Army Safety Center.

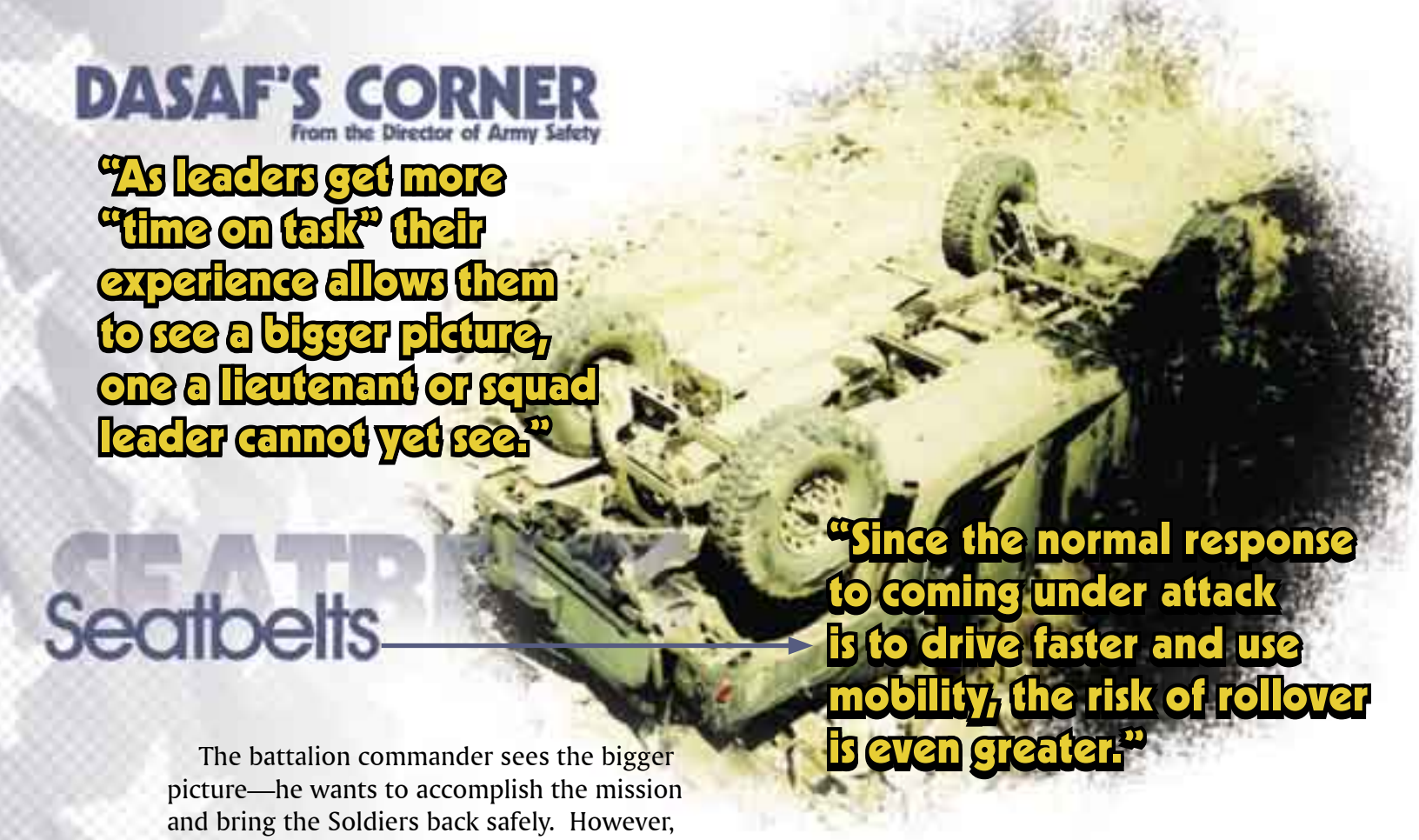
Did the Safety Center cause a lack of J-SEAD synchronization or establish CAS allocations for the night? Obviously not. However, the lieutenant felt that so many good home-station training events had been cancelled or watered down "in the name of safety" that the unit was not ready to conduct difficult combat operations. He felt the Army was more worried about fratricide than about killing the enemy. He believed we practiced "risk aversion" rather than "risk management." The platoon leader attributed the mission's planning failures to an institutional attitude, and he felt the roots of that attitude began at the Safety Center.

That was his perception … but is it reality? That Apache platoon leader's words have echoed through my head for the last 10 months as I've traveled across our Army. If you listen closely, you will hear echoes of "safety" as a bad word among our junior leaders. They feel safety is a constraint rather that a combat multiplier for mission accomplishment. "It slows them down," "It doesn't allow them to train on the razor's edge," and in combat, "There just isn't time for it." Since many junior leaders feel "safety" is a bad word, it's not being embraced down where the rubber meets the road.

Little in life is truly black or white—perception or reality depends on where you sit. We must work hard to balance the risks of our profession. As leaders get more "time on task" their experience allows them to see a bigger picture, one a lieutenant or squad leader cannot yet see. A lieutenant may complain when a battalion commander orders the use of seatbelts during convoy operations through an urban area in Iraq or Afghanistan. The lieutenant believes that wearing seatbelts reduces his Soldiers' warrior spirit and mobility should the convoy come under attack. But the battalion commander knows that even in theater, the risk of dying during a rollover caused by an improvised explosive device (IED) or by speeding is significantly greater than the risk of not being able to exit a vehicle under enemy fire. Since the normal response to coming under attack is to drive faster and use mobility, the risk of rollover is even greater.

DASAF'S CORNER

From the Director of Army Safety



"As leaders get more "time on task" their experience allows them to see a bigger picture, one a lieutenant or squad leader cannot yet see."

"Since the normal response to coming under attack is to drive faster and use mobility, the risk of rollover is even greater."

Seatbelts

The battalion commander sees the bigger picture—he wants to accomplish the mission and bring the Soldiers back safely. However, if the battalion commander fails to make the lieutenant understand the bigger picture, the lieutenant will walk away viewing safety as simply a deterrent to the mission. When junior leaders don't embrace safety, they won't enforce safety during the 23 hours of the day when senior leaders aren't watching. This is what I see happening across our Army.

In last month's issue, I stated that the actions of our junior leadership would determine the success of the Army Safety Campaign. Inspiring junior leaders will require senior leaders to engage them with discussion, education, and mentorship. It will take both good old-fashioned leadership and some out-of-the-box thinking. The Army Safety Team has some great tools to help—check out our Web site at **https://safety.army.mil**. Our Web-based tools can help coach leaders on how to conduct their challenging missions safer and in a manner the digital generation will find interesting and intuitive. In another initiative, U.S. Army-Alaska (USARAK) recently held a junior leader safety council to establish "bottom-up" initiatives and a peer-teaching program. This might be worth a shot in your unit.

The Chief of Staff, Army, GEN Peter Schoomaker, emphasizes training hard and to standard. He doesn't want our Soldiers to be risk averse, so let's get the job done. Embed risk management in all you do. Make standards and discipline your control measures. Question things that appear to hide behind "safety" or that inhibit realistic training, because in combat you'll fight like you've trained.

The current accident trend is on course to be our worst in 10 years. To curb that trend, we must stimulate a culture change among our Soldiers and junior leaders. We must do more than just teach safety—we must inspire it.★

Our Army is at War.
Be Safe and Make it Home!

Joe Smith

BG Joe Smith

SAFETY SENDS

From the Director of Army Safety

"Safety Sends" is a new Army Safety Campaign Plan initiative to help keep senior leaders abreast of current accidents and their impact on combat readiness. Composed weekly by the Director of Army Safety, BG Joe Smith, "Safety Sends" is provided to general officers and features summaries of accident trends and snapshots of accidents that occurred the week before, including contributing factors. In future issues, *Countermeasure* and *Flightfax* will feature condensed "Safety Sends" messages.

We are an Army at war, and that Army is a fast-moving train with over a quarter-million Soldiers moving in one direction or another. Every Soldier and piece of equipment in this fight counts. Fatalities continue to rise, and we have two enemies in this war: The human enemy and accidents. Since World War I over half of our wartime losses have been due to accidents—not the enemy. As professionals we study the art of war in great detail, but that study is focused only on the enemy, not on accidents.

The Acting Secretary of the Army, Chief of Staff of the Army, and Sergeant Major of the Army fully recognize the importance of engaging both enemies. The strategic message is clear: The most potent weapons against accidental losses are leader involvement and accountability across the force. Each of us must commit to the fight and get the message down to first-line leaders and individual Soldiers. Conducting small operations safely with junior leadership is our challenge, and nothing we do will be effective unless we make safety personal.

Over the last six months, the Army Safety Center has made great strides to develop and refine digital tools to attack this undeclared enemy. This is the first step in making the study of accidental losses easier, and an integral part of our culture. Visit our Web site at **https://safety.army.mil**. First-line supervisors should use these tools in their risk management process. The Risk Management Information System (RMIS)—the Safety Center's accident database—recently became more accessible than ever to supervisors wanting vital accident statistics, and getting a password for the protected RMIS site is now at the touch of a button. All you need is an Army Knowledge Online (AKO) account. The new "Login" link found on the Safety Center Web site uses your AKO password for all our tools, including the new Accident Reporting Automation System (ARAS), and the Army Safety Management Information System-1 (ASMIS-1). Now you don't have to remember another user name and password!

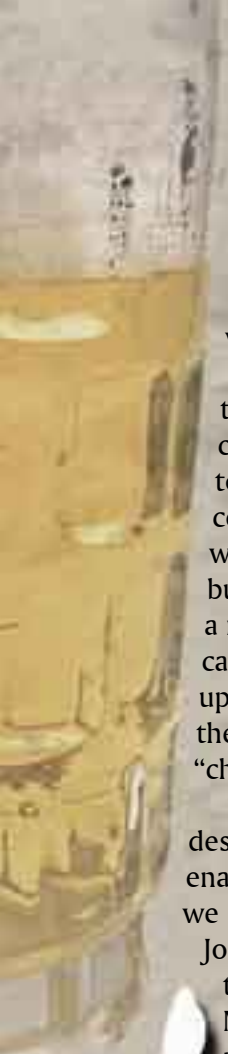
Privately owned vehicle (POV) accidents continue to be one of our greatest challenges in reducing fatalities. The POV module of ASMIS-1 has been on the street for just over two months and already has 7,700 registered users and over 5,000 risk assessments on file. We recently reviewed 109 POV accidents and found that only one user had been involved in a crash, and he was a passenger! This shows the system is connecting with the digital generation. If you really want to make a difference in your formation, mandate that a printed copy of your Soldiers' POV assessments be attached to leave and pass forms. The ASMIS-1 system can be accessed through the Safety Center's Web site at **https://safety.army.mil/asmis1/**.

We have the right focus on the main operations, but we aren't getting it right in our supporting efforts—those small convoys and single-ship aircraft missions. We haven't adequately prepared our junior leaders, who must execute these missions with the right skills, education, and access to knowledge to make good risk decisions. Focusing on pre-mission planning, troop-leading procedures, and pre-combat checks is critical. Thanks for taking the time to hang in there. We are at your disposal and will help in any and every way to protect the force as we fight the Global War on Terrorism.★

BG Joe Smith
Director of Army Safety

Joelle's S

I couldn't help but be moved as I sat across the table from Mariah Venus. The trim 22-year-old woman with warm, reddish-auburn hair struggled with her words, her eyes moist with tears that gently flowed down her cheeks. At moments, her silence spoke more eloquently than could words. As I looked at her I thought she was far too young to carry the grief she was bearing—much too young to be a widow. Yet she was. Behind the eyes that stared so intently were memories, echoes of the past that in lonely moments ebbed from the shadows into consciousness. But this was her story to tell. It's a story that began when a young NCO walked into her life.



story

BOB VAN ELSBERG
Managing Editor

"He had just gotten off a flight coming back, I believe, from Kuwait … he, with a couple of his rugby buddies, showed up at Hoss's Deli wearing a sarong and a T-shirt. He was full of himself and had a smile that would eat you alive," Mariah recalled.

Staff Sergeant Joseph L. Venus—"Joelle" to his friends—was a 28-year-old Air Force computer software designer assigned to Langley AFB, VA. He was too busy celebrating that day to notice Mariah, who was working as a bartender at Hoss's, but that would change. Joelle captained a rugby team sponsored by Hoss's and came back a couple of months later to set up a team party. He invited Mariah, and the party turned into their first date. Their "chemistry" worked immediately.

"I guess the term 'love at first sight' described us … we were both incredibly enamored with each other from the first time we sat down and talked," she said.

Joelle fell in love and proposed to her on the one-year anniversary of their first date. Mariah accepted, and they were quietly married on April 16, 2000, in Hampton, VA. Within three weeks they bought a house, a fixer-upper in a quiet residential area of Newport News, VA. They were always hosting Joelle's friends from his unit, so on the Fourth of July a bunch came over for a barbecue. The party went late, but since they'd both arranged to take five days off, they felt they had plenty of time to do things together. It was disappointing when their phone rang Thursday morning and Joelle had to go to work. Mariah decided to stay home to clean the house. Joelle kept in touch by sending her e-mails throughout the day.

That day he tracked down a couple of old friends he'd served with previously. Back then they'd all been confirmed bachelors, but now two were married and the third was engaged. Excited, Joelle called Mariah and asked if he could go out for happy hour at Philly's Pub and Sub in Newport News and meet some friends.

"I told him it was fine," Mariah said. "He asked me if I was angry and I told him, 'No, we still have a weekend to spend together."

He came home, changed clothes, and asked Mariah if she would come get him after happy hour should he need a ride. "I told him I would," she said.

He borrowed Mariah's 1997 Chevrolet Camaro and drove to Philly's, arriving around 7:30 p.m. He liked his beer at room temperature, so he ordered three, drinking one while letting the others get warm. He talked with his friends about going boating the next day. Around 9:30 p.m. he called Mariah and asked if he could stay a bit longer.

"I told him that was fine and to call me if he needed a ride. He said he would, and that he loved me," Mariah recalled.

She went to sleep, expecting to hear from Joelle later on. But it wasn't until after midnight that he left Philly's.

At 12:36 a.m. Virginia State Trooper Wendell K. Cosenza pulled his cruiser behind a concrete Jersey barrier used to separate an under-construction carpool lane from the fast lane on westbound Interstate 64. His rearward-facing radar measured the speed of cars approaching from behind. He sat there quietly watching the flickering numbers.

Five minutes later Mariah awoke in fear, thinking someone was in the hallway. She woke her two dogs, a rottweiler and a husky-shepherd mix, and called out in the darkness—but the house was silent. And Joelle was not home.

At the same moment, 12:41 a.m., Cosenza's radio suddenly crackled. The dispatcher's message shook him—a motorist had reported a wrong-way driver in the fast lane. Cosenza immediately pulled from behind the barrier into the fast lane.

Three miles separated the trooper from

the wrong-way driver—Joelle. Confused and thinking Joelle was across the highway in the eastbound lane, Cosenza raced to catch up with him. Perhaps he could flash his lights across the median or run his siren to somehow alert Joelle. As he raced down the highway he remembered how a wrong-way drunk driver hit another car earlier that year on I-64, killing its pregnant driver and two of her three passengers. Cosenza could see it all happening again.

But as he sped down I-64, something was terribly wrong. In an instant, he realized his horrifying mistake. The glare of oncoming headlights flashed through his windshield.

"Oh my God … he's a couple hundred yards away and he's coming right at me!" jolted through his mind.

He had nowhere to go. A tractor-trailer blocked him on the right and a line of Jersey barriers blocked his lane on the left. He realized there was only one choice. Reacting quickly, he stopped his cruiser in the fast lane just past where the Jersey barriers ended. He'd use his vehicle as a collision barrier, taking the head-on impact to protect the drivers behind him. He fully expected to die.

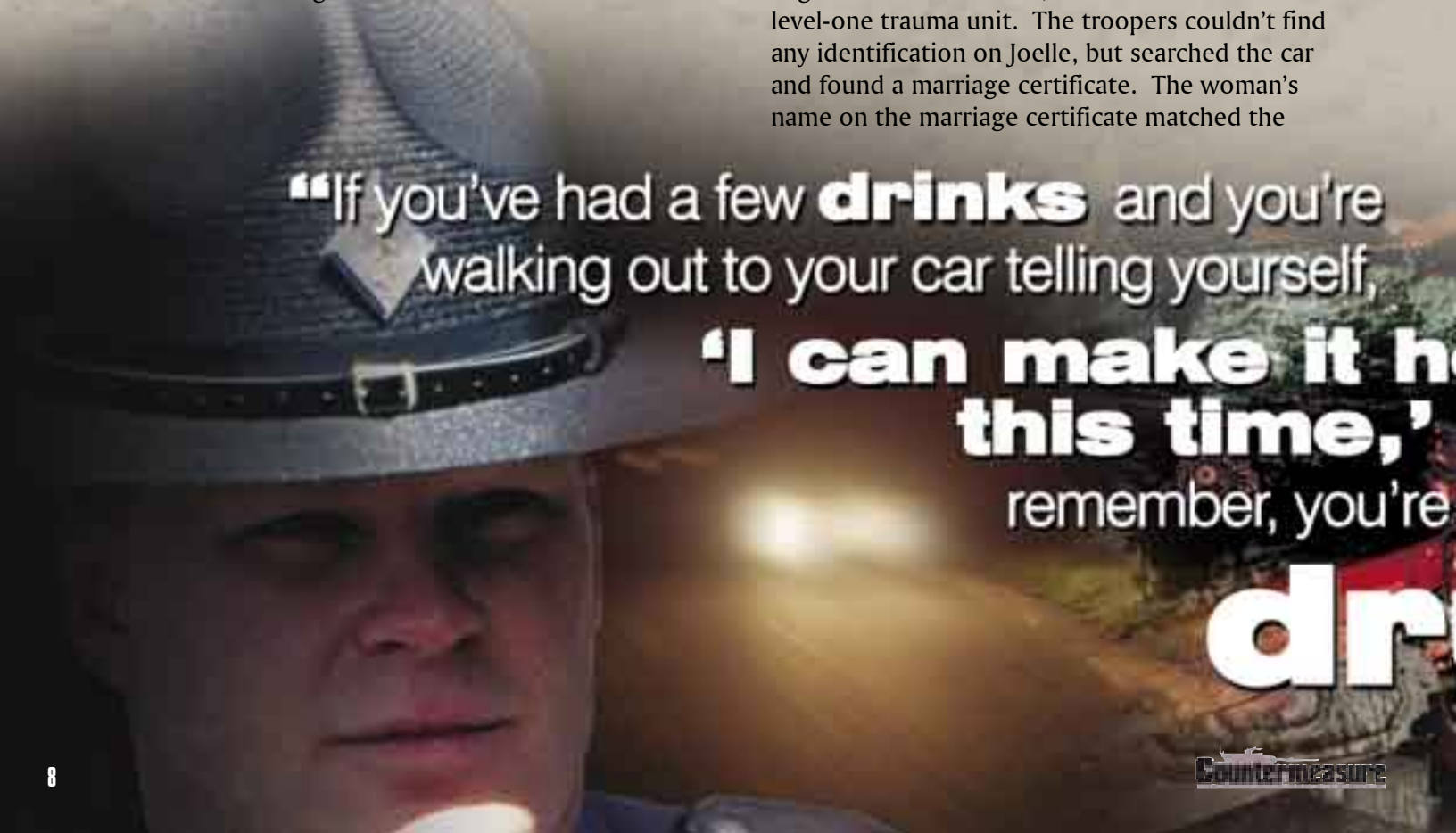
The cruiser's dash video recorded the events. A driver in the fast lane ahead of Cosenza saw the oncoming Camaro and braked and swerved to the right. Cosenza turned on his siren—his last hope for alerting Joelle. As the Camaro approached, Cosenza realized it would not hit him head on—it was in the uncompleted carpool lane to his left. As Joelle's headlights flashed by on the left, Cosenza watched in his rearview mirror. Going almost 80 mph, the Camaro hit the end of a Jersey barrier, spun 180 degrees, and wound up against the median. The impact toppled the Jersey barrier onto its side and pushed it part way into the fast lane. Parts of the Camaro were strewn across the highway. Cosenza began grabbing flares from his trunk and throwing them onto the highway to warn approaching drivers. He then turned his attention to Joelle.

"Hey buddy, are you awake? Hey, hey, talk to me!"

The driver's side door was open. Joelle hadn't worn his seatbelt and was lying partly outside the vehicle. He was unconscious and barely breathing.

Cosenza keyed his radio, "Chesapeake—1050 PI (accident with personal injuries)—call Hampton and tell them to expedite!"

Ambulances from Newport News and Hampton got there quickly. Fortunately, the crash happened near the exit for the Riverside Regional Medical Center, which had the closest level-one trauma unit. The troopers couldn't find any identification on Joelle, but searched the car and found a marriage certificate. The woman's name on the marriage certificate matched the



name on the vehicle registration, so the troopers assumed she was Joelle's wife. But there was only one way to be certain—someone had to go and talk to her. At 3 a.m., Trooper Vernon Smith knocked on Mariah's door.

She recalled, "When I first heard it, I thought it was Joelle ... I couldn't figure out why he was banging on the door, unless someone brought him home and he didn't have his keys, so I went to the door and opened it. A state trooper was standing there. He told me they thought my husband had been in an accident and that I needed to go to the hospital. He asked me if I was OK to take myself and I said I was, and he left."

When Mariah arrived she saw a man lying on a gurney with his back toward her. His hair was about the same color as Joelle's, and she desperately wanted talk to him. It took a few minutes before the hospital staff convinced her it wasn't Joelle. "Finally, they sat me down and explained he was in the trauma unit. They said he'd been in a very bad accident," Mariah said.

Cosenza had arrived at the hospital and met Mariah. A doctor took them both to the family room, a small room next to the emergency room. The news he gave Mariah was crushing.

"He told me Joelle's brain no longer worked to tell him to breathe—there was no way he was ever going to wake up," she said.

Mariah and Cosenza walked to Joelle's room. The trooper had to be sure of Joelle's identification and also knew Mariah needed someone with her at that moment. In the room Mariah met the trauma nurse who'd taken care of Joelle since he'd arrived. "She told me I could talk to him and hold his hand, and then explained the doctors would be coming soon to talk to me," Mariah explained.

Mariah now had a very difficult phone call to make. She and Joelle had married in secret—not even Joelle's parents knew. Tragically, the first time she would talk to her mother-in-law was to tell her the horrible news of what had happened. Joelle's unit also needed to be notified, so Cosenza called security forces at Langley AFB. Within minutes, Joelle's supervisors were getting calls at home. Senior Master Sergeant Ryan Petersen awoke to his ringing phone. On the other end was Joelle's direct supervisor, Technical Sergeant Victor Overton.

"Vic' told me Joelle had been in a bad accident and was on life support. He said he wasn't sure what the outcome was going to be," Petersen said.

Petersen quickly dressed and drove to the hospital. There he met Mariah and found out she was Joelle's wife. He also met Joelle's commander and first sergeant. The three of them stayed with Mariah throughout the night. The next morning, Petersen drove to Joelle's unit to tell them what had happened.

"I don't think anyone said a word," Petersen said. "It was tough. We had a couple of females who worked in the office and they cried when they realized how serious it was."

Joelle's commander released the members of his unit so they could go to the hospital and see their friend. Mariah was touched by their response.

"The flood of people that came in that Friday was just incredible," she said. "He was in the cardiac intensive care unit, and the hospital broke all the rules for us. There was no such thing as 'visiting hours.' Anybody that wanted to see him could."

As the day wore on, it became apparent Joelle would never recover. At 6:30 p.m.—23 hours after he'd shown up for happy hour—he was declared brain dead. Joelle was a registered organ donor, but the decision to approve the organ-harvesting surgeries—to accept her husband's life was over—was one Mariah would not make alone. Joelle's mother arrived at the hospital that evening and met Mariah. They both felt Joelle would want his death to bring hope to others. Together, they signed the paperwork

"Alcohol not only steals the lives of its victims, it steals the dreams and hopes of those who are **left behind."**

to approve the surgeries. Later, Mariah went to Joelle's room to be alone with him—to lie next to him one last time and hold him. Words cannot describe what she felt in those empty, agonizing moments.

Joelle was taken into surgery at 9 a.m. the next day. There was nothing more Mariah could do, so she went home. "They called me about noon to let me know it was done," she said.

Joelle's friends remembered him during the days that followed. On Monday they held a wake at a local funeral home. The next day there was a memorial service at the Langley AFB chapel, followed by a full honor guard at Airpower Park. On Wednesday, Mariah flew to Milwaukee to give Joelle's family the urn holding his ashes.

After Joelle's death, his friends often met with Mariah, retelling his jokes, remembering his sense of humor, and holding onto memories of a friend they'd lost.

But in the end is the awful question—why did someone who had a plan to get home safely never make it? Was it because he was a habitual drunk driver? Those who knew him best said he knew better than that.

Was it because his friends at Philly's failed to look out for him? That's a question they've asked themselves countless times. However, when they left Philly's they had no reason to believe he wouldn't call Mariah for a ride. He'd always done that before.

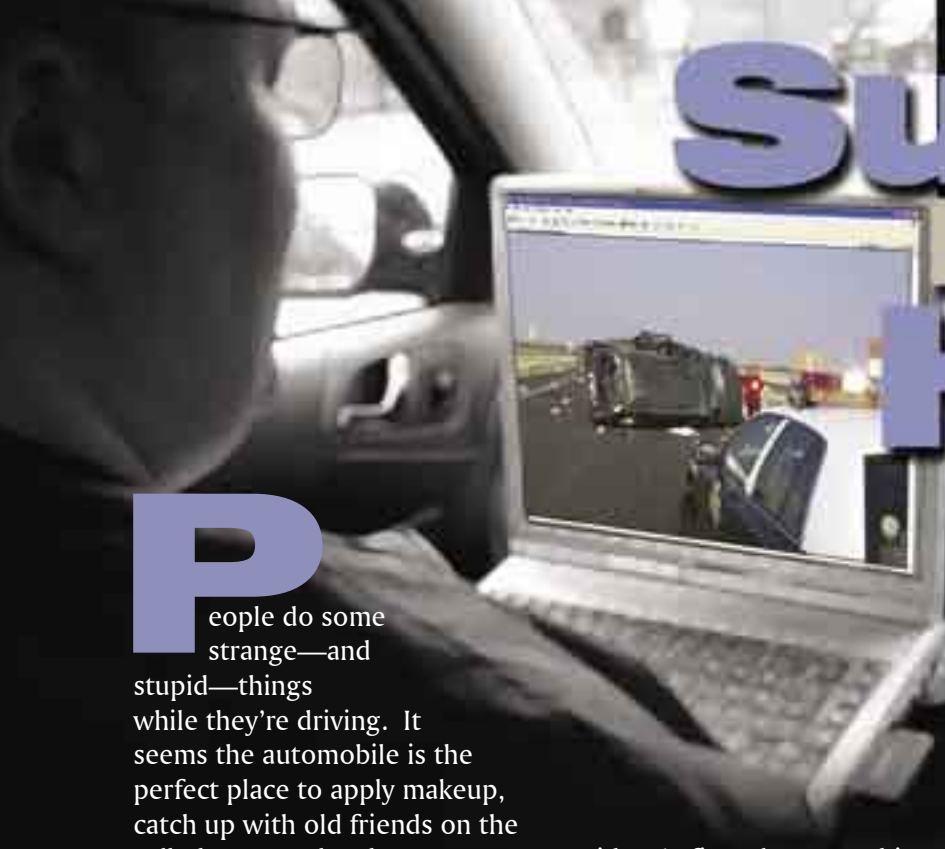
Was it because Philly's served him alcohol when he was already intoxicated? According to Cosenza, Joelle's blood-alcohol content was .23 that night—nearly three times the legal limit for intoxication. A hearing following the accident led to a temporary suspension of Philly's liquor license.

Yet, in the end, Joelle didn't die because of what other people did or didn't do. He died because he had a plan to be safe, but chose to ignore it. Alcohol, Cosenza believes, played the key role in that fatal decision.

He explained, "Before alcohol changes your ability to drive—your physical hand-eye coordination—it affects your reasoning and your thought process. If you've had a few drinks and you're walking out to your car telling yourself, 'I can make it home this time,' remember, you're talking to a drunk … you'll talk yourself into risking it by saying, 'It'll never be me—I'll make it home. It's always someone else.'"

Joelle's story ended much too soon. He was outgoing and had a personality that drew others like a magnet. He was an exceptionally talented NCO, and his unit was grooming him for promotion and greater responsibility. His story should have gone on—he should have enjoyed a full life with Mariah. But Joelle's story is ended, and in the shadow of that night Mariah lives with a reality so many other families have learned through tragedy: Alcohol not only steals the lives of its victims, it steals the dreams and hopes of those who are left behind.

This article was revised from one written by the author for the Summer 2002 edition of *Road & Rec* magazine. Contact the author at (334) 255-2688, DSN 558-2688, or e-mail robert.vanelsberg@safetycenter.army.mil



Surfing Down the Highway

JULIE SHELLEY
Staff Editor

People do some strange—and stupid—things while they're driving. It seems the automobile is the perfect place to apply makeup, catch up with old friends on the cell phone, eat lunch, or even perform personal hygiene. I spend about as much time in my car as I do in my house, so I'm guilty of a few roadway sins too. However, I recently witnessed a highway juggling act that easily could make any "stupid human trick" look like child's play.

My family and I were on our way home from Panama City Beach, FL, where we had spent a relaxing weekend full of sunshine and good food. Our route back home was a major four-lane highway that winds through several small towns. The speed limit goes from 65 mph to 45, then 35, in only a few hundred feet in these cities. There are also stoplights and medians with traffic crossing the highway in all directions. This route is used by spring breakers and families all over the nation, because no interstate runs directly to the beaches in and around Panama City.

We were about halfway home when a minivan with out-of-state license plates pulled up to our side. At first glance, nothing seemed out of the ordinary—just a nice family on their way home from the beach. There were two or three kids in the back, Mom was sleeping up front, and Dad was driving. Dad was also working on his laptop computer.

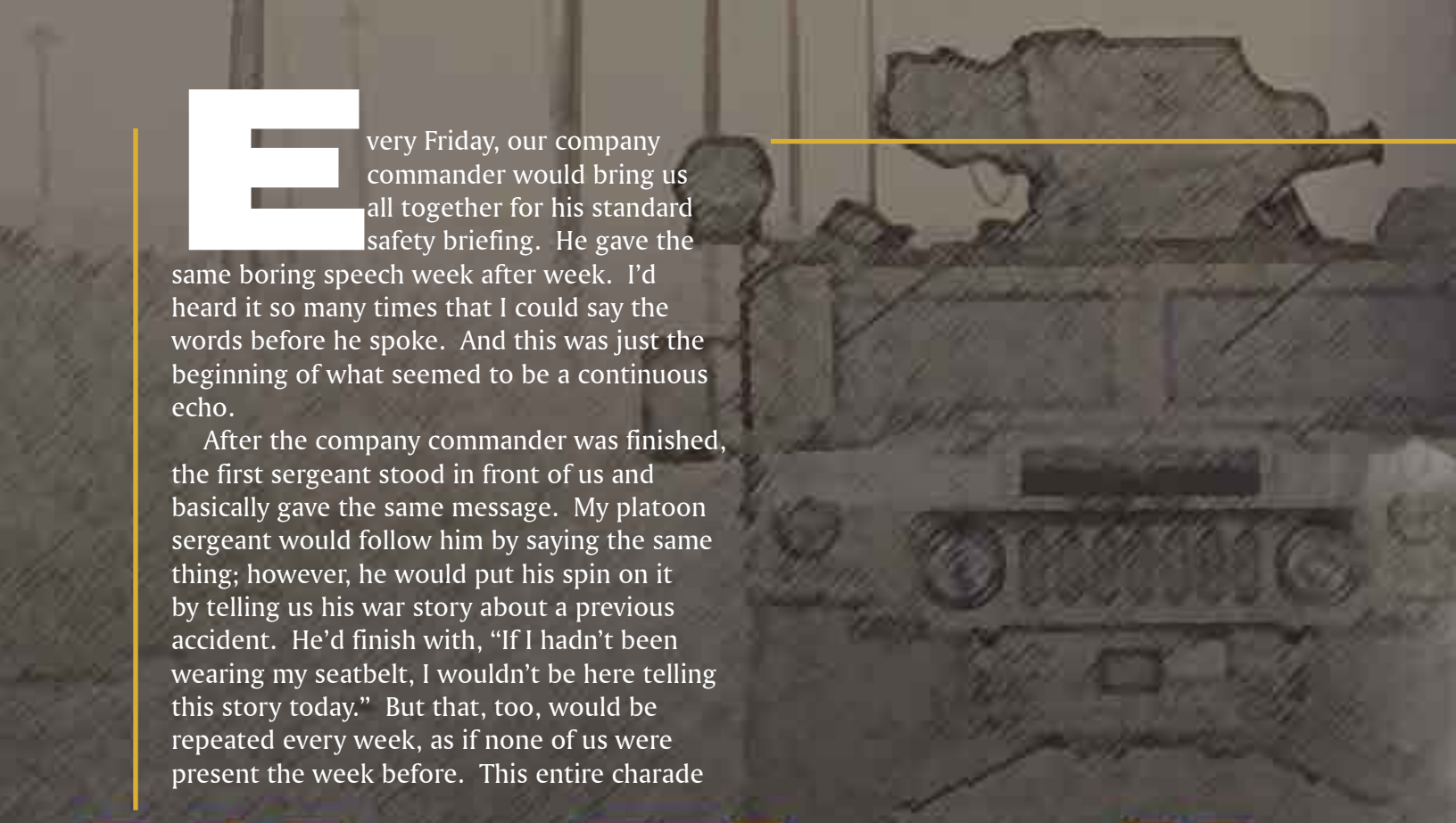
That's right. This man, whose wife and kids trusted him to get them home in one piece, was typing on his laptop while hurtling down the road at more than 70 mph. His computer was propped up on his lap, with the screen resting on the steering wheel. I watched with a mixture of fascination and horror as Dad continued through town after town, speed zone after speed zone, still working on the laptop.

Dad finally put the computer away about 45 minutes later. Mom was still asleep in the front seat. The kids were still playing in the back. And they were still in one piece. They were lucky.

The highway is full of dangers that are hard enough to tackle when you're fully aware of your surroundings, much less checking your e-mail or stock performance. What would that man have done if someone had pulled out in front of him or stopped suddenly? What would he have done if all the traffic lights weren't green? Would he have even noticed until the crash? Probably not, but he'd be sure to feel the pain of harming his wife and kids. And I'm sure his laptop—which seemed to be the most precious thing in the world to him at the time—would've been smashed to pieces by the airbag had he crashed.

Distracted driving contributes to tens of thousands of vehicle accidents and hundreds of fatalities every year. These needless deaths could have been prevented if someone had just paid attention to the task at hand—DRIVING. The CD player, lunch, a phone call, and yes, even e-mail can wait until you're stopped safely. That family probably was going to stop for lunch or a bathroom break within a couple of hours, but Dad couldn't wait. Be smarter than him—pay attention and drive safe. Your family and your Army are counting on you.

Contact the author at (334) 255-1218, DSN 558-1218, or e-mail shelleyj@safetycenter.army.mil



We Finally

Every Friday, our company commander would bring us all together for his standard safety briefing. He gave the same boring speech week after week. I'd heard it so many times that I could say the words before he spoke. And this was just the beginning of what seemed to be a continuous echo.

After the company commander was finished, the first sergeant stood in front of us and basically gave the same message. My platoon sergeant would follow him by saying the same thing; however, he would put his spin on it by telling us his war story about a previous accident. He'd finish with, "If I hadn't been wearing my seatbelt, I wouldn't be here telling this story today." But that, too, would be repeated every week, as if none of us were present the week before. This entire charade took about 45 minutes to complete. I can remember thinking those safety briefs were a huge waste of time.

One week the brief was a little different, though. Our unit was conducting a training exercise at East Range, the Army's primary training spot at Schofield Barracks, HI. Our commander called for an informal formation while we were eating dinner and started to reprimand us for not wearing our Kevlar helmets in military vehicles. He said he was concerned because he didn't seem to be reaching us with his safety messages.

Some Soldiers replied that the helmets hurt their heads. At that point, we'd been wearing them for four days. They also complained that the helmets were always falling down into their eyes, obstructing their vision.

Undeterred by this testimony, the commander reinforced his previous position and promised to punish anyone caught without their Kevlar. I was really confused because, at that time, our company had a pretty good safety record. We hadn't experienced any major accidents or injuries during the entire year I was there. No one was caught without their Kevlar during the last week of that field problem.

Our next training exercise was a few months later. We'd been in the field for about two weeks, and everyone was looking forward to returning back to the garrison environment. Even though we still had a week to go, you could feel the complacency creeping in. Everyone seemed to have a careless attitude.

The company set up a racetrack formation and made evenly spaced laps around it for a night smoke mission. This was a routine mission that we'd practiced numerous times during this and previous field exercises. About an hour into the mission, I saw a smoke vehicle veer off the track and head aimlessly across a

Got It

ERIC A. WASHINGTON
CP-12 Safety Intern
Fort Riley, KS

field. I didn't think it was a big deal. We finished the mission and headed back to our camp.

The relaxation and rest didn't last long, however. Later that night we learned a Soldier in our platoon had died in that runaway vehicle. A subsequent accident investigation revealed that he'd struck his head on the smoke control panel, causing the fatal injury. Stunned, we were briefed that if he'd worn his Kevlar, it would have saved his life.

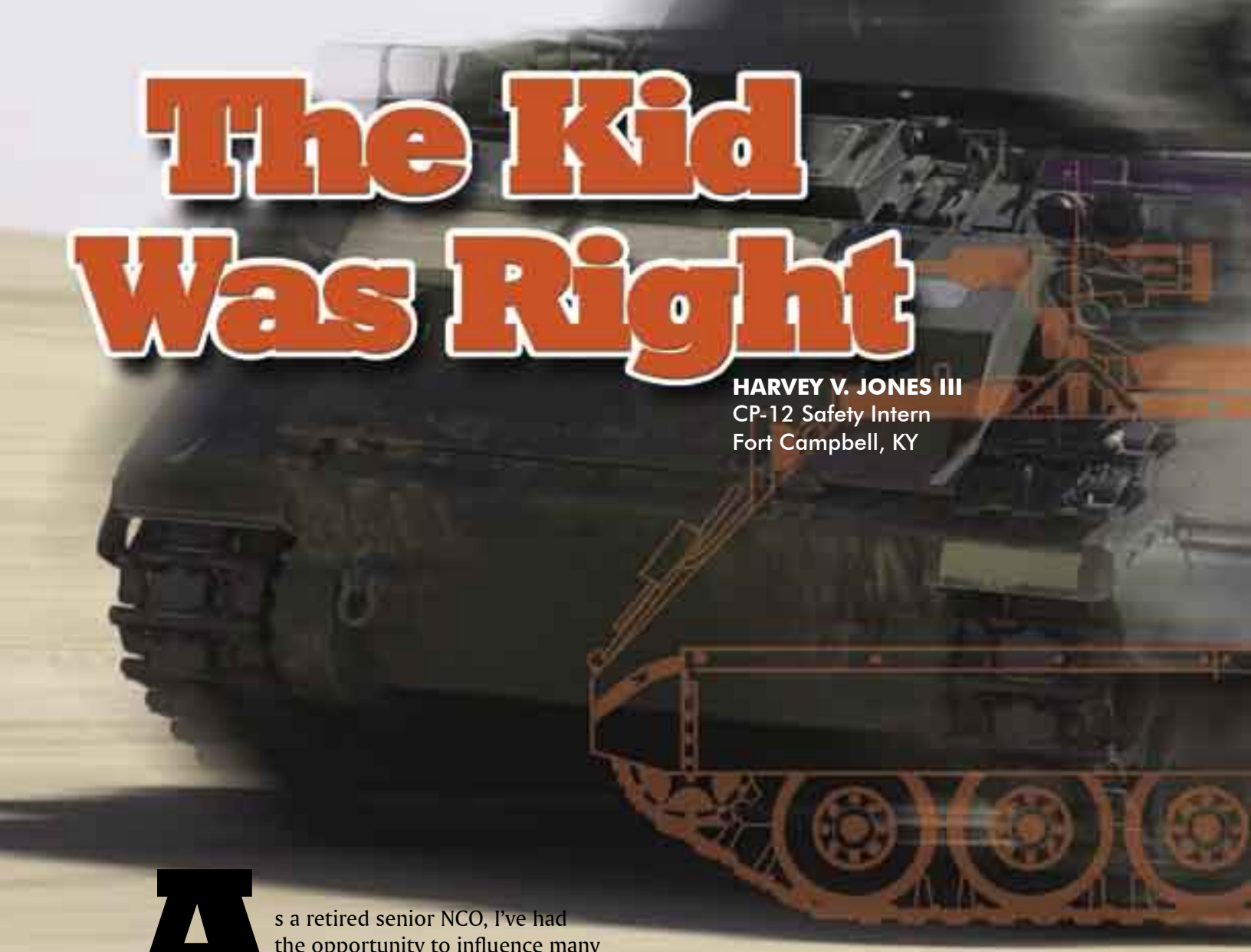
I don't know why it took such a tragedy to confirm what our superiors had been telling us about wearing our Kevlars and seatbelts. That accident changed the unit's whole attitude—our sergeant's old war stories were now our reality. We finally got it, but we learned our lesson the hard way.

Soldiers today aren't wearing their helmets or seatbelts in Iraq because they're afraid they won't be able to exit their vehicles quickly if they come under fire. Yet, too many of our Soldiers are dying in rollover accidents in theater—deaths that could have been prevented if they'd only worn their seatbelt or helmet. Pay attention when your commander and other leaders give their safety brief. You'd rather be that platoon sergeant telling your war story years down the road than in the grave with nobody to listen.

Contact the author at DSN 856-3321 or e-mail eric.washington1@us.army.mil

The Kid Was Right

HARVEY V. JONES III
CP-12 Safety Intern
Fort Campbell, KY



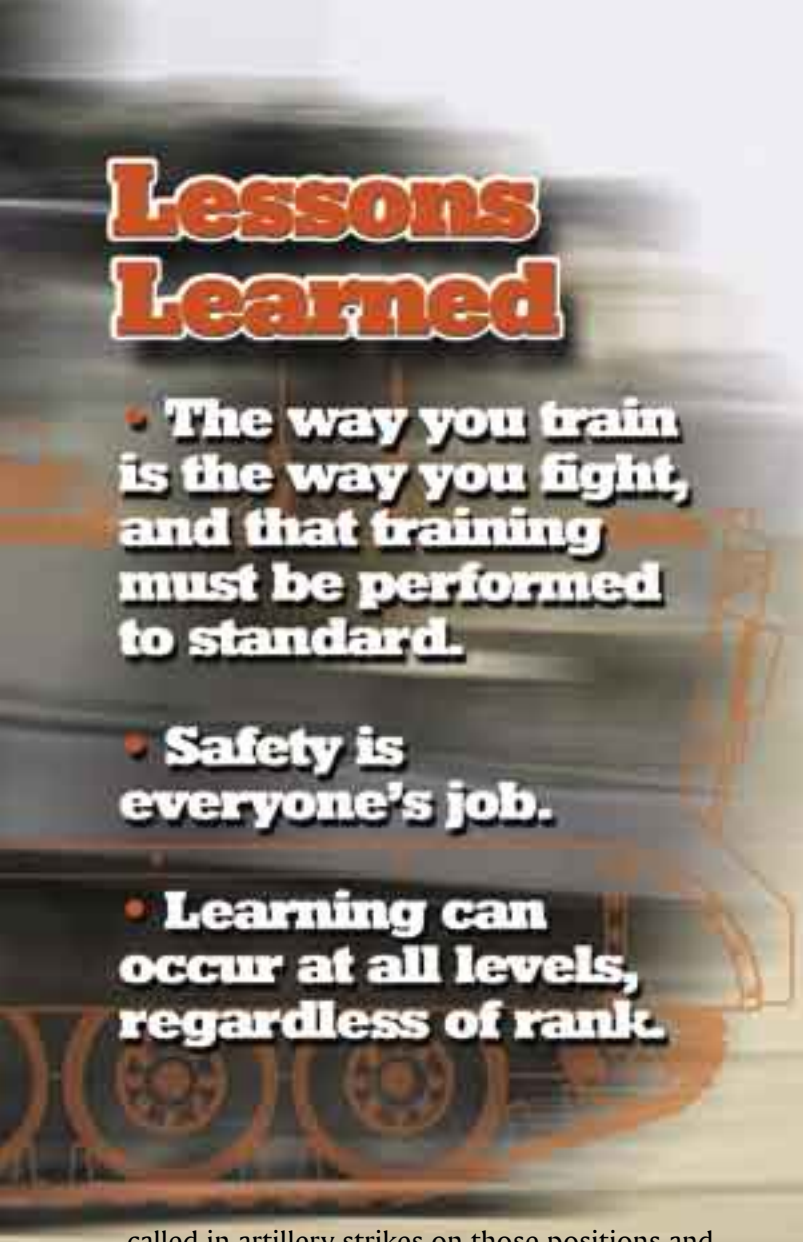
As a retired senior NCO, I've had the opportunity to influence many Soldiers over the years. Sometimes, however, my junior Soldiers impressed me instead of the other way around. One young Soldier affected the rest of my career and saved my life by insisting on rehearsing rollover battle drills.

I don't remember his name, but I do know he was a private first class that went by the call sign "Fatcat." Even though PFC Fatcat was subordinate in rank to me, he had the courage to tell me I was wrong. He insisted that we rehearse rollover battle drills, and I didn't want to. I really didn't see the significance in what he said; after all, he was just a kid! Grudgingly we rehearsed the drills, but I thought all the while, "Will we ever really use this?"

First, you must understand that I was raised in the Light Infantry. I was stationed at the Combat Maneuver Training Center in Hohenfels, Germany, which was my first (and only) assignment to a mechanized unit. Our "opposing forces" (OPFOR) mission was to replicate the tactics, techniques, and procedures used by threat forces against "U.S. forces" in a tactical war-playing scenario where real equipment was used.

As the scout platoon sergeant, I was responsible for the maintenance and tactical replication of a combat reconnaissance platoon. Our primary task was to gather intelligence information to support the regiment's mission, which was accomplished by entering the area of operations two to four days before the motorized rifle regiments.

At first, this particular mission showed signs of success. The scout platoon identified several key "high-payoff" targets from the commander's critical information requirements. We identified items such as wire-mined obstacles, first-line shooters (one company of M1A1 tanks), and one mortar platoon. Once the targets were identified, we



called in artillery strikes on those positions and sought other targets of opportunity.

Once the attack was underway, our regiment was wreaking havoc on the U.S. forces. Our follow-on mission was to reconnoiter three separate routes and identify the route of least resistance. We piled into our M113 Armored Personnel Carriers (APCs), and I decided to take a northerly route that tended to be difficult during adverse weather conditions. Weather over the previous two days had produced rain mixed with snow.

It wasn't long before we spotted two M1A1 tanks and a platoon of M2 Bradley Fighting Vehicles (BFVs). We were trying to call in an artillery strike on their positions when we were spotted by two more BFVs. So we did the only thing OPFOR could do in that situation—we tried to get the hell out of there!

Since it had rained and snowed over the last couple of days, the terrain was basically mush. The BFVs immediately engaged us as we were attempting to elude them. Outrunning them was not an option; however, I thought that if we took some of the more difficult terrain, we could possibly out-maneuver them.

We spotted a trail off to the right and took it, with the BFVs in hot pursuit. I told my driver to keep going along the trail, which curved to the right after about 300 meters, until we lost them. I realized we were moving too fast to negotiate the curve safely, but our only alternative was to pile head-first into some very thick vegetation. The driver also knew we were going too fast and attempted to slow down, but it was too late.

I felt the vehicle sway first to the left and then to the right just before we flipped on our side. As the vehicle started to roll, I heard the driver yelling at me through the intercom to use the quick release button on the track commander's (TC) seat so I wouldn't be crushed. I pressed it and in a split second I was inside the vehicle, which skidded to a stop 300 meters down the trail.

Our APC's main gun was torn from the turret, the TC's hatch was broken, two of four MILES detection belts were ripped off, and the track belts and a sprocket were broken. But we were alive! The driver had a few bumps and bruises, and my leg was pretty banged up. But considering what could have happened, we were very fortunate!

The kid was right. I never would've found that quick release button in time if we hadn't rehearsed those rollover battle drills. It's been 17 years, but I still remember the valuable lessons I learned that day:

- **The way you train is the way you fight, and that training must be performed to standard.**
- **Safety is everyone's job.**
- **Learning can occur at all levels, regardless of rank.**

Knowledge is a two-way street—it was my responsibility to learn from my Soldiers, and theirs to learn from me. I often wonder if some of the recent vehicle fatalities in Operation Iraqi Freedom could've been prevented if those Soldiers had rehearsed rollover battle drills. "Train as we fight" must be more than just words.

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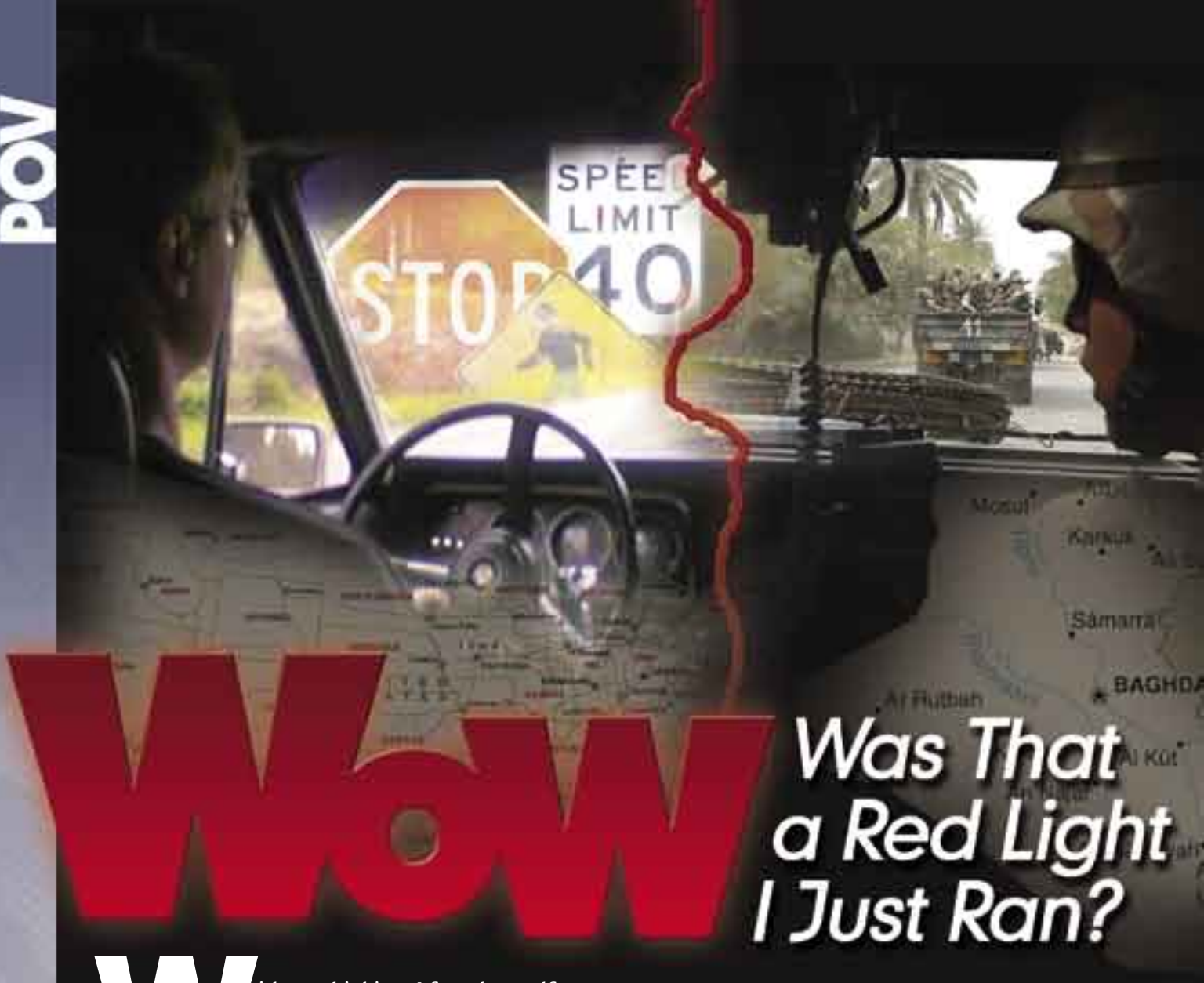

WoW Was That a Red Light I Just Ran?

RALPH A. STUCK
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Without thinking, I found myself about to run a red light. For a moment, I thought I was back in Iraq. It took me a second to remember I wasn't—that I was back in the states. My wife, who was sitting next to me, calmly said, "What are you doing? Are you nuts? You're about to cause an accident!" Looking in my rearview mirror, I also noticed a police car. I'd only been back from Iraq for 24 hours and I was about to cause an accident and also get a ticket. I had "cleared" the intersection and was going to roll through.

What had happened? Without thinking, I was still using the bad driving habits I'd adopted while in Iraq. You see, in Iraq you're constantly concerned about the dangers posed by snipers, rocket-propelled grenades, and improvised explosive devices. While driving in Iraq I ignored red lights, speed limits, yield signs, and road caution signs. And you can only imagine that my traffic skills had gotten a bit rusty. When I got back, I'd forgotten that these bad driving habits would earn me a traffic ticket from local law enforcement. In Iraq getting a ticket wasn't so bad, at least not compared to having someone sniping at you or detonating an improvised explosive device (IED) next to your vehicle.

For example, when a convoy of vehicles entered an intersection in Iraq—whether or not there were traffic lights—nobody stopped. One vehicle would block traffic so the convoy could keep rolling through. Drivers would never allow

themselves to be boxed in and trapped in a line of vehicles stopped at an intersection.

And speed limits?—there weren't any. Convoy speeds were based upon the threat and weather conditions. Convoys simply passed slower-moving traffic and kept the mission rolling. A swift-moving convoy was safer than a slowed or stopped one.

Getting back to my experience with the red light, it scared me to realize that I, of all people, had made this mistake. After all, wasn't I the one who'd talked to brigade leadership about Soldiers driving safely when they left Iraq and convoyed into Kuwait?

Before any movement into Kuwait, convoy commanders talked to their Soldiers about the bad driving habits they'd formed in Iraq. Leaders stressed that Soldiers would be held accountable for their actions while driving. It was no longer a matter of driving to survive, but rather driving defensively and being safe.

Well there I was, breaking my own rules—and I was the safety guy! I'd sold brigade leaders on the importance of breaking bad driving habits by using the example of the Soldier who returned from Europe and picks up his car at the port. You know what happens next. He gets on the interstate and goes 95 mph because he still thinks he's driving on the autobahn in Germany. Often the wake-up call is a police car's flashing lights and siren. As the Soldier sits in his car the officer looks at him and asks, "What race do you think you're in?" Now I was the one with the flashing lights in the rearview mirror. It was the old embarrassing situation of "physician, heal thyself."

And the lesson learned? As Soldiers redeploy, it's critical they receive classes on POV driving safety and accident prevention. They need to be reacquainted with traffic laws and safe driving skills so they can break the bad habits they acquired in Iraq. Time and mission permitting, having Soldiers review a copy of their state's driving handbook can help them identify any bad driving habits they've formed in Iraq. To keep their Soldiers safe, leaders should cover—as a minimum—the following topics:

- **Identifying bad driving habits**
- **Safe driving skills**
- **Dealing with road rage**
- **DUI prevention**
- **Traffic laws and fines**
- **Vehicle insurance and the increased costs for unsafe drivers**
- **Soldiers' accountability to commanders for traffic law violations**

Turning off bad habits is hard to do, but leaders can help. By providing safe-driving briefings, and identifying high-risk Soldiers and helping them break their bad driving habits, leaders can help prevent accidents. After all, why bring Soldiers home from combat in Iraq only to lose them to needless, avoidable vehicle accidents?

Be safe, and keep our Army strong and ready.

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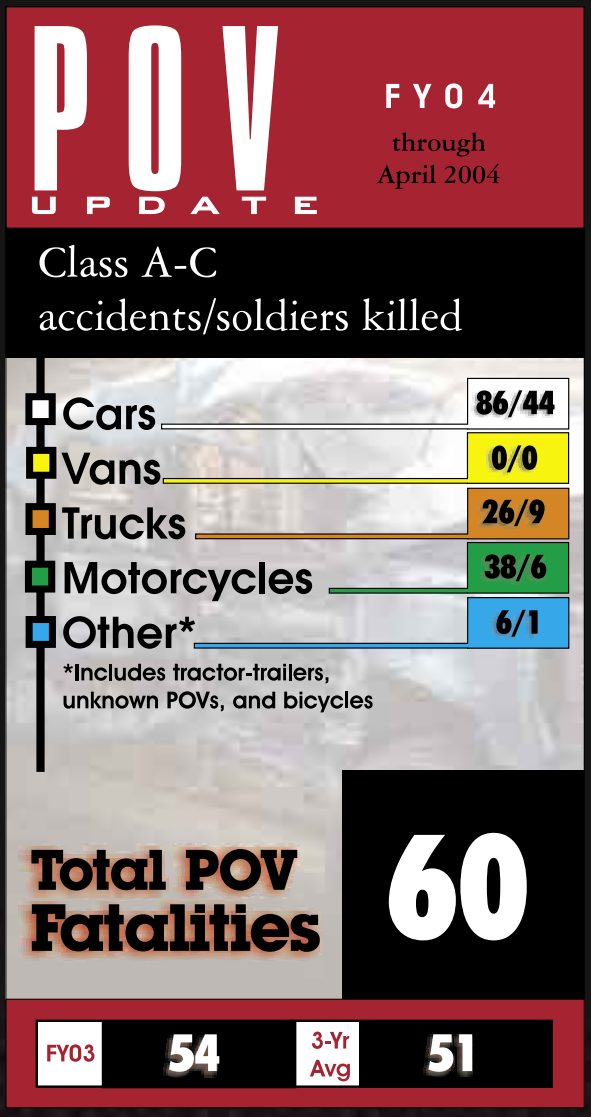

Dust in t

A dead man's bed—I stood and stared at it. A couple of feet to my left, the duty NCO methodically emptied the man's locker. I turned and silently watched. Letters, pictures, uniforms, civilian clothes and shoes—little bits and pieces of a man I never met. You see, he died that night on the dock not far from where the ship was tied up. We missed meeting each other in this life by less than 90 minutes.

No one—least of all this man—expected anything but a few seagulls to be moving on the dock at 10:30 p.m. He rode his motorcycle to one end of the dock, turned around, then grabbed a fistful of throttle and let out the clutch. The quarterdeck watch (the NCO who allows people to leave or board the ship) heard the engine racing and ran to the gangway—but it was too late. The motorcycle streaked by.

For the rider, the lights along the dock must have flashed by in a blur. It was dark to his left where a line of flatbed trailers were parked. As far as he could tell there were no obstructions—nothing to keep him from squeezing every ounce of horsepower from the motorcycle's screaming engine. That is, until a late-working truck driver suddenly backed one of those flatbed trailers into his path. There wasn't time to brake, and he wasn't wearing his helmet. After all, he wasn't expecting trouble.

he Wind

BOB VAN ELSBERG
Managing Editor

The ambulance crew came and took him away before I reported for duty. I didn't see his body, but other crewmembers did. They said you couldn't recognize his face or head as human.

His parents asked that he be cremated and buried at sea, and we honored that request. I stood at attention with the rest of the crew on the deck of our ship as the urn containing his ashes was opened. I watched the faint grey cloud drift into the breeze, then settle onto the water. I wondered, "Is this all that's left of a man—just a little dust?"

During the 33 years that have passed since that night, countless other military men and women have died in needless accidents. CW4 Gregg C. Dunham, an Army National Guard aviator, wrote about a special mission he flew as a Boeing 747 freighter pilot supporting the U.S. Air Force Civilian Reserve Augmentation Fleet (CRAF). Below is an excerpt from his article, "Dispatched to Dover," published in the November 2003 issue of *ARMY*...

"Because it is not unusual for the Air Force to change a [CRAF mission] pattern for its needs, we didn't think much of it until we saw the weight of our cargo. It was such a light load. What's the deal? We decided to give the dispatcher a call to check the accuracy of the load.

"We called the World-Wide Control Center, as they like to be called, and found the rerouting to be correct, with one annotation. The annotation was "HR," which meant "human remains." The only cargo we were to carry on this flight would be the remains of a U.S. Army captain killed in Iraq and his personal property.

"As we climbed the stairs to reach the main deck of our airplane, we noticed how much higher it stood compared to the usual configuration. As we entered the main deck, we were all soberly choked with emotion at the sight of our cargo. We looked into the cavernous interior of our Boeing 747 freighter to see a U.S. flag-draped casket and a crated box of personal property as our only cargo. All three of us stood there silently for a moment, taken aback at what we saw."

The captain died in Iraq when he grabbed an overhead wire to clear his vehicle. Because the electricity was out in most of the city, he assumed the wire was dead—but it wasn't. He paid the last full measure, not meeting the enemy on the battlefield, but through a terrible, fatal mistake.

In the Bible it says that man was taken from the dust and to it he will someday return. But in between should be a lot of good years—not a life shortened by an accident and reduced to a lonely casket, or just a cloud of dust in the wind.

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In Just an Insta

For the majority of Americans, the world changed forever on 11 September 2001. For my 6-year-old grandson Eli, his tragedy began five days earlier. What was supposed to be a fun afternoon turned into a nightmare for Eli and all who loved him.

That afternoon Eli was riding with his grandpa on the back of grandpa's lawn and garden tractor. They were laughing and talking, having a big time as grandpa cut the grass. When grandpa put the mower in reverse, the machine jerked. In a split second Eli was thrown off the back, onto the ground, and under the mower's blade.

Grandpa immediately stopped the machine and got off to help Eli. The blade had mutilated most of his right foot and calf. The doctors said it was a miracle he didn't bleed to death. Two days later I flew back from Germany, landed in Atlanta, GA, and then drove to Erlanger Children's Hospital in Chattanooga, TN. I was immediately informed that Eli's right foot would have to be amputated above his ankle, and his right calf would have to be reconstructed through additional surgeries and skin grafts.

On 11 September 2001 at 7:30 a.m., Eli was taken to surgery for his amputation and the first of six reconstructive surgeries. His parents and our entire family were in the waiting room praying for him. While waiting to hear about Eli's condition, we were told of the attacks on the Twin Towers and the Pentagon, and about the four hijacked planes. As we listened, we were simultaneously torn by the horrible tragedy of the terrorist attacks and our deep concern for our grandson.

After his amputation, Eli went to the Shriners Hospital in Lexington, KY. Over a 4-month period he underwent five additional reconstructive surgeries and physical therapy before receiving his first prosthesis. All Eli wished for was a new foot by Christmas. Fortunately, his wish came true.

Eli is now 9 years old and adjusting considerably better than the adults in his family. He is still the same "fireball" he always was. He is extremely intelligent, funny, and mischievous, and loves performing magic tricks. He plays soccer, swims, roller skates, and rides his bicycle and motorcycle. In June 2003 at Cookeville, TN, Eli became the first known child amputee in the area to race in a Soap Box Derby. He won 8 out of 9 races. These days, Eli tells everyone he is going to be a bull rider when he grows up.

However, we all know he has a lifetime of challenges and battles ahead. He must face these difficulties alone, no matter how much his family wants to protect and shield him. As Eli grows, he will continue to return to the Shriners Hospital every 4 to 6 months to have modifications done to his prosthesis. This will be the easiest and simplest task he will have to endure. It's harder for him when other children make cruel remarks about him not having a foot, but the wisdom he shows in handling that makes me believe he will become much more than a bull rider.

Eli's life is not the only one that has been changed forever and scarred by this accident. Years later, Eli's grandpa is still a broken man. The accident caught him totally by surprise. He said, "I didn't see any harm. We were just having fun."

So many lives in our family have been changed forever since that one horrific moment. We learned it doesn't take a deliberate act of negligence to cause an accident, just ignorance of safety combined with an "it will never happen to me" attitude. We learned the hard way to never think or say "it can't happen to me," because it can. And sometimes "it" happens in just an instant.

Editor's Note: Nearly 20,000 people are injured annually by riding mowers, including nearly 5,000 children age 16 and younger. Riding mowers should never be used to carry passengers, especially small children. Also, children should never be allowed in an area where a riding mower is being used. During the early 1980s, a young dependent child was run over and killed in Germany when a local national mowing grass in the military housing area backed up without looking. The tragedy shook the military community and the family received a compassionate reassignment. The local national suffered a mental breakdown and ultimately went insane.

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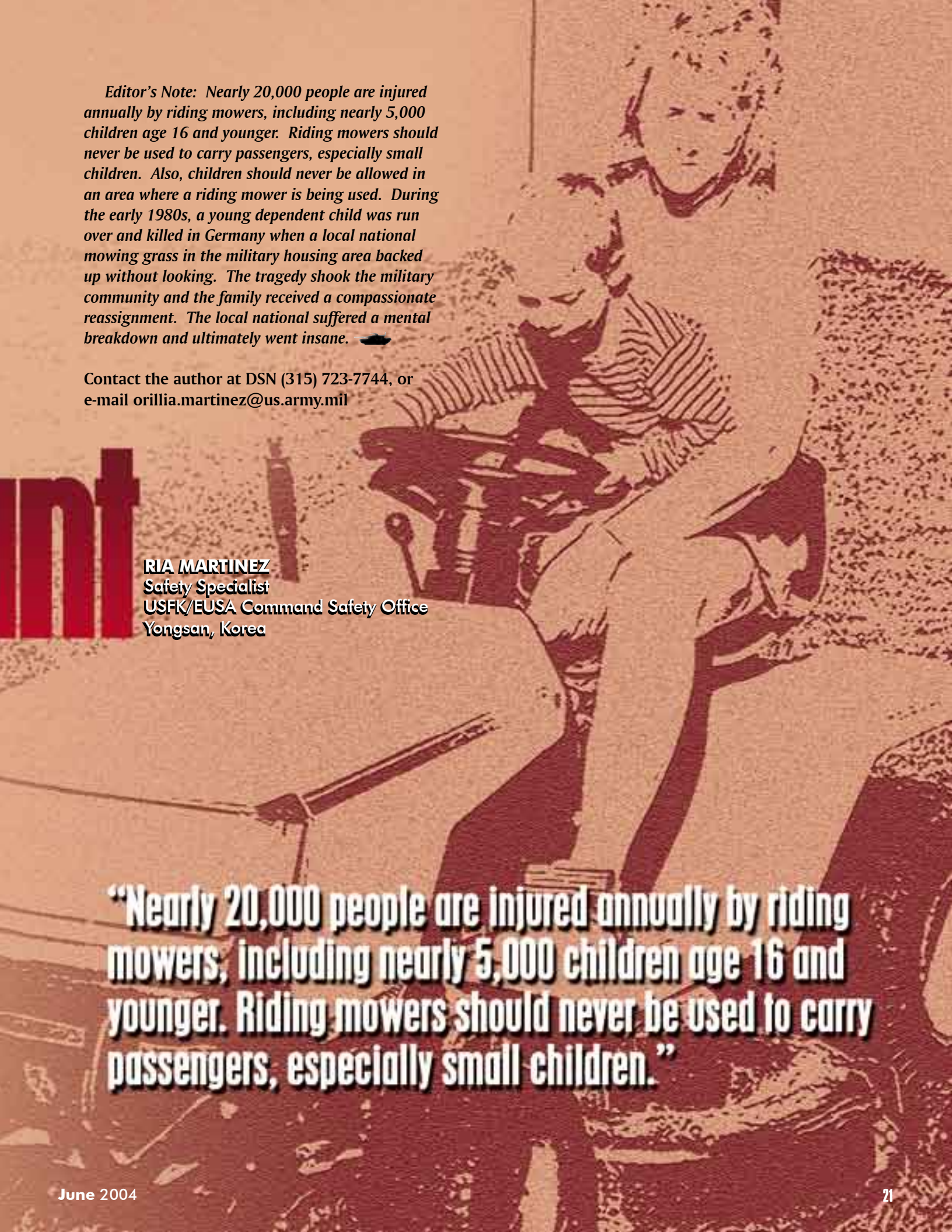

More on CamelBaks

Back in January, we published an article titled "CamelBaks Need Care Too!" That article spurred some discussion regarding the use of the CamelBak personal hydration system (PHS) in Operation Iraqi Freedom (OIF). The primary concern was whether or not Soldiers were permitted to use the CamelBak in a location where they might encounter a chemically contaminated environment. An author's note at the conclusion of our original article said, "The CamelBak system is not safe for use in a nuclear, biological, chemical (NBC) environment. In an NBC threat, the standard 1-and 2-quart canteens should be used."

From the e-mails we've received, we felt it would be worthwhile to flesh out this topic, especially as regards NBC-contaminated environments. We asked MAJ Eugene Thurman, an industrial hygienist who serves here at the U.S. Army Safety Center as the Chief, Plans and Programs, to weigh in on this topic.

"There currently are research initiatives on two fronts—the U.S. Army Soldier and Biological Chemical Command (SBCCOM), and commercial industry—to provide adequate protection to allow the use of a PHS while in Military Oriented Protective Posture (MOPP) Level 4. This would provide Soldiers with hands-free, on-the-move hydration capability during operations in Chemical, Biological, Radiological, and Nuclear (CBRN) environments.

"CamelBak offers a protective mask adapter kit, which includes a valve and protective mask connector to connect their chemical-resistant reservoir to the mask. The (CamelBak) reservoir's ability as a barrier to NBC contamination has not been thoroughly tested by the Army. The research, or perhaps lack of research, is why CamelBaks are not being allowed in chemical threat areas. They have not been certified as safe for use in a chemical environment."

Mea Culpa—We Goofed!

Despite our attempts to be 100 percent accurate in our stories, we're only 99.9 percent perfect. That .1 percent occasionally bites us, and we have two examples from recent issues.

First, in our lightning safety article titled "Zapped and Zinged" (February 2004 *Countermeasure*), we stated, "If you're outside and feel your hair standing on end, you might be about to be struck. Fall to your knees, bend forward, and place your hands on your knees. Avoid lying flat on the ground."

One of our readers, Guy Tewksbury of Fort Jackson, SC, let us know the information we published has been superceded. He wrote, "It's not recommended that you fall to your knees. The new, approved method is to squat in a crouching position with your hands over your ears."

We researched this point and found his correction to our story was right on the mark. We wanted to share it before any of you had any "spine-tingling" experiences!

Second, in the article titled "In Danger's Lane" (March 2004 *Countermeasure*), the author stated, "If high loads block your vision, drive backwards or use ground guides or lane marking pylons. Travel with the load within 4 to 6 feet from the floor whenever possible."

That recommendation was a "slight" exaggeration. The recommended height is not 4 to 6 feet, but 4 to 6 inches.

News Flash!

Plan for the FY04 Army Safety Conference, 31 August to 2 September 2004. Stay tuned to the July 2004 *Countermeasure* for location and agenda details.

ACCIDENT BRIEFS

Information based on preliminary reports of ground accidents.

ACV

Class A (Damage)

■ A BFV was destroyed by fire. The fire is suspected to have started in the BFV's turret. All crewmembers evacuated the vehicle without injury.

Class A

■ Soldier drowned after his BFV fell about 60 feet down an embankment and landed upside down in a river. The Soldier was a passenger in the BFV, which was performing reconnaissance when the road embankment gave way, causing the vehicle to fall.

■ Soldier died after being shot by a BFV coax gun during test-firing. The Soldier suffered wounds to his chest and head.

AMV

Class A

■ A HMMWV carrying two Soldiers and a civilian interpreter swerved and overturned, killing the truck commander (TC). The TC was manning the mounted M60 and was pinned beneath the vehicle.

■ Soldier suffered fatal injuries when the HMMWV he was riding in slid into a canal during a reconnaissance patrol. The cause of death was not reported.

■ Soldier died when the HMMWV he was riding in overturned. The HMMWV's driver had swerved to avoid a civilian vehicle and crossed into oncoming traffic, causing the vehicle to roll. The deceased Soldier was acting as the vehicle's gunner.

Personnel Injury

Class A

■ A civilian foreign national was killed when a 120 mm mortar round fired by a Soldier fell short of its target. The round instead struck a residential dwelling, killing one civilian and injuring another.

■ Soldier collapsed and died during a physical training run. No other details were provided.

■ Soldier collapsed during the cool-down period following physical training and later died at a local hospital. No other details were provided.

■ Soldier died after reporting chest pain and trouble breathing. The Soldier was playing football during physical training. He later died at a local hospital.

■ Soldier was electrocuted when he climbed a metal ladder that made contact with a live wire. The Soldier was laying wire for a telephone line at the time of the accident. He was pronounced dead at a local hospital.

■ Soldier died while performing combat diving training. The Soldier was discovered completely submerged and face-down in the water. His flotation device was not activated. The cause of death is unknown.

POV

Class A

■ Soldier struck and killed a pedestrian on his way back to post. The Soldier, who was on official duty, was driving his POV when he hit the pedestrian, who was walking in the Soldier's lane.

■ Soldier was killed when he failed to negotiate a curve and his vehicle struck two poles and a house. The vehicle then caught fire. The Soldier died at the scene.

■ Soldier suffered fatal injuries when the vehicle he was riding in contacted black ice, causing the driver to lose control. The vehicle hit a tractor-trailer. The Soldier was not wearing his seatbelt.

■ Soldier suffered a permanent total disability when his vehicle struck another vehicle head on. The Soldier was on his way home from weekend drill and fell asleep at the wheel.

■ Soldier died when the vehicle he was riding in ran off the roadway's shoulder and overturned. The vehicle's driver, also a Soldier, overcorrected the vehicle, causing it to roll. The driver suffered fractures to his wrist. Both Soldiers were wearing their seatbelts.

■ Soldier was killed when his motorcycle ran off the roadway and struck a mailbox and a tree. No other details were provided.

■ Soldier suffered fatal injuries when the vehicle he was riding in was broadsided by a pickup truck. The Soldier, who was on leave, was ejected from the vehicle.

■ Soldier died when his motorcycle struck the rear of an SUV. The motorcycle crossed the roadway's centerline when the Soldier attempted to make a right-hand turn.


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ARMY GROUND RISK-MANAGEMENT INFORMATION

Countermeasure

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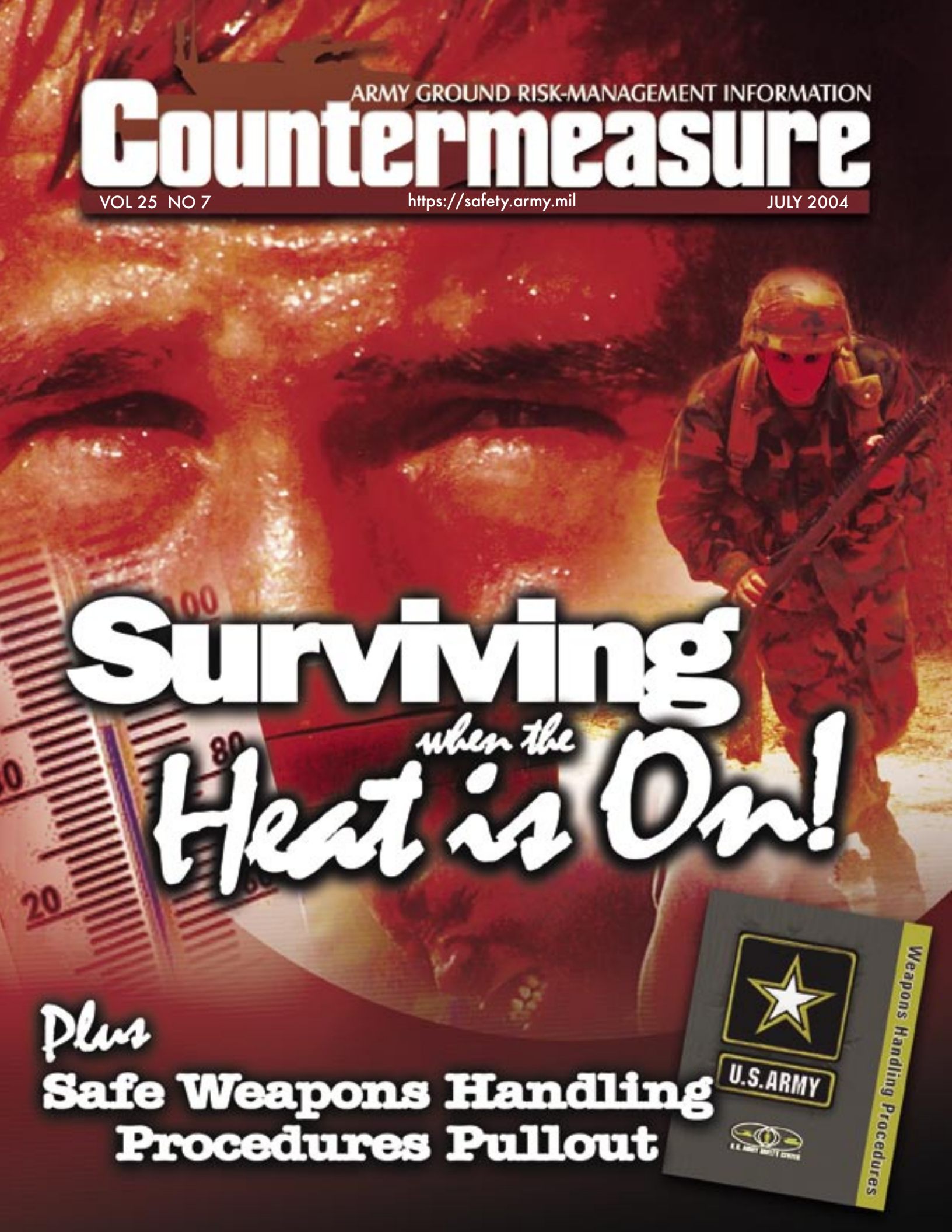

Surviving when the Heat is On!

Plus

Safe Weapons Handling Procedures Pullout

Countermeasure
ARMY GROUND RISK-MANAGEMENT INFORMATION

CONTENTS

features

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DASAF'S CORNER
From the Director of Army Safety

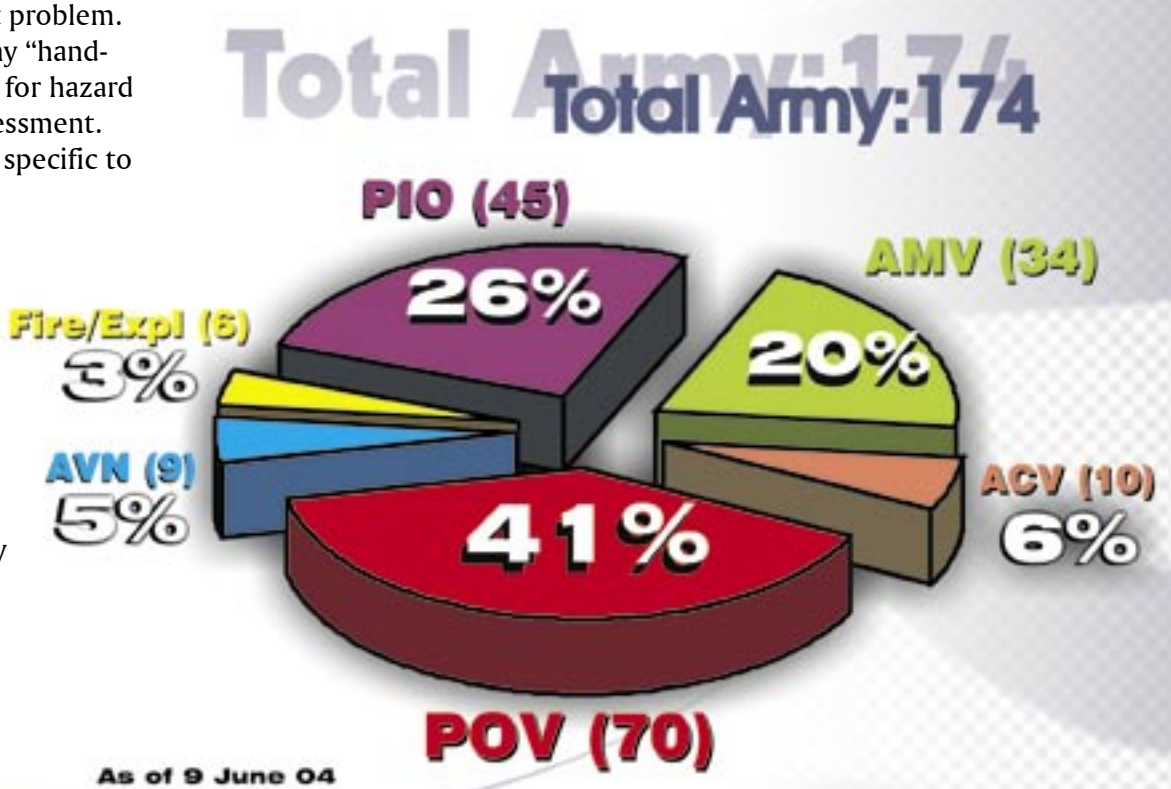
Where Are You at Risk?

In my 30 years of service I have never seen the Army as busy as it is right now. This spring we completed a series of rotations in the Central Command (CENTCOM) Area of Responsibility (AOR) that totaled over 250,000 Soldiers coming in and out of theater–the highest number since World War II. The challenges of the Global War on Terrorism, especially those in Iraq, have gripped the attention of our Army and our Nation.

Whether in theater or at home, our Soldiers and leaders stay focused on accomplishing their part of the mission. We train, we deploy, we fight, we redeploy, and we prepare to repeat the cycle in 12 to 18 months. Our leadership at all levels understands that safety is important to their unit's welfare and combat readiness. But do we truly understand what our leading hazards are each day, or are we blinded by the hazards that may face us in theater? Do we know what is going to get us hurt or killed today, and do we put the appropriate amount of time and resources toward preventing those accidents from happening? Do you?

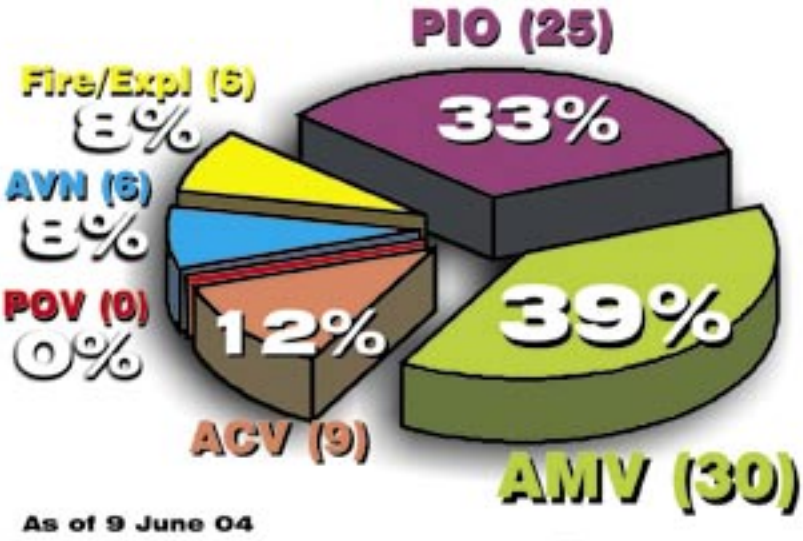
Accidents always have been a significant concern. Since World War I, 55 percent of the Americans killed during combat died because of accidents. Of course, that percentage is much higher during non-combat operations. Therefore, risk management is always an important part of the mission-success puzzle. The first steps of the risk management process are hazard identification and hazard assessment. You ask yourself, "What is going to prevent me from coming home to my family today?" Take a moment to look at the accompanying pie charts and think about where you are right now. As an Army, we have a pretty even distribution of fatal accident causes. Privately owned vehicle (POV) accidents account for the highest number. This is true every year. Personal injury/other (PIO)—which includes accidental discharges, drownings, and heat injuries—are close behind. Army motor vehicle (AMV) accident fatalities, which are often caused by speeding and failure to wear seatbelts, also represent a significant problem. However, that big Army "hand-wipe" is not sufficient for hazard identification and assessment. Why? Because it isn't specific to you and your mission. The Army is doing too many things to compare one unit's mission to another. So the question is: Where are you?

If you are in the CENTCOM AOR, the hazards lie in two major categories: AMV and PIO. If you are in a Stryker or HMMWV driving too fast for



DASAF'S CORNER

From the Director of Army Safety

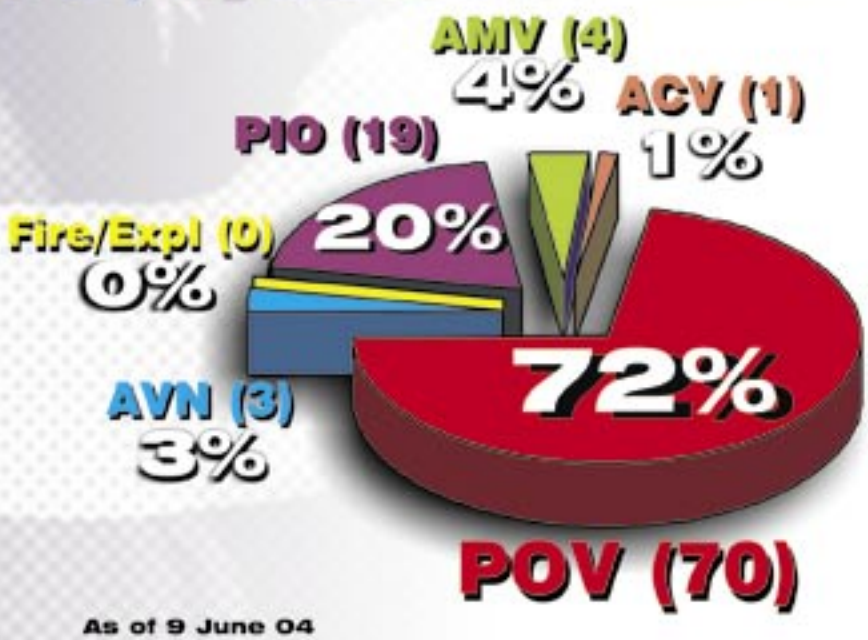


the road conditions or riding without a seatbelt, you just became your own worst enemy—more dangerous than any terrorist or improvised explosive device (IED). If you don't effectively enforce proper weapons clearing procedures and muzzle awareness in your squad or platoon, your own teammates will be more of a danger to you than any terrorist. Most leaders in theater know these problems and are focused on them, and the same can be said about leaders of units preparing to deploy. But what about when you are not deployed?

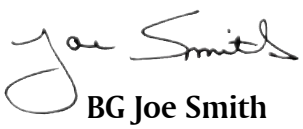
Seventy-two percent of the accidental fatalities this year for Soldiers at home were caused by automobile or motorcycle accidents. This is simply tragic. There is honor in facing death while fighting for your country. There is no honor in dying on a three-day pass because you were too stubborn to wear your seatbelt, pull off to the side of the road when you were tired, or wear your motorcycle helmet. So now that you know where the hazards lie, I ask again: Do we spend the appropriate time and resources to ensure our Soldiers and battle buddies drive defensively on America's roadways? We must train hard to be ready to fight, but all of that training is wasted if Soldiers don't make it to the fight.

This is just the beginning of the hazards identification process. The Safety Center has provided two Internet tools to help you identify and assess hazards specific to your mission, whether you are at home or in theater. The Risk Management Information System (http://rmis1.army.mil) can tell you the leading accident causes for a specific piece of Army equipment, installation, or type of mission. The ASMIS-1 POV Risk Assessment Tool, available on the Safety Web page (https://safety.army.mil), will assess a Soldier's travel plans and simultaneously inform the first-line supervisor what the greatest risks are for any driving trip.

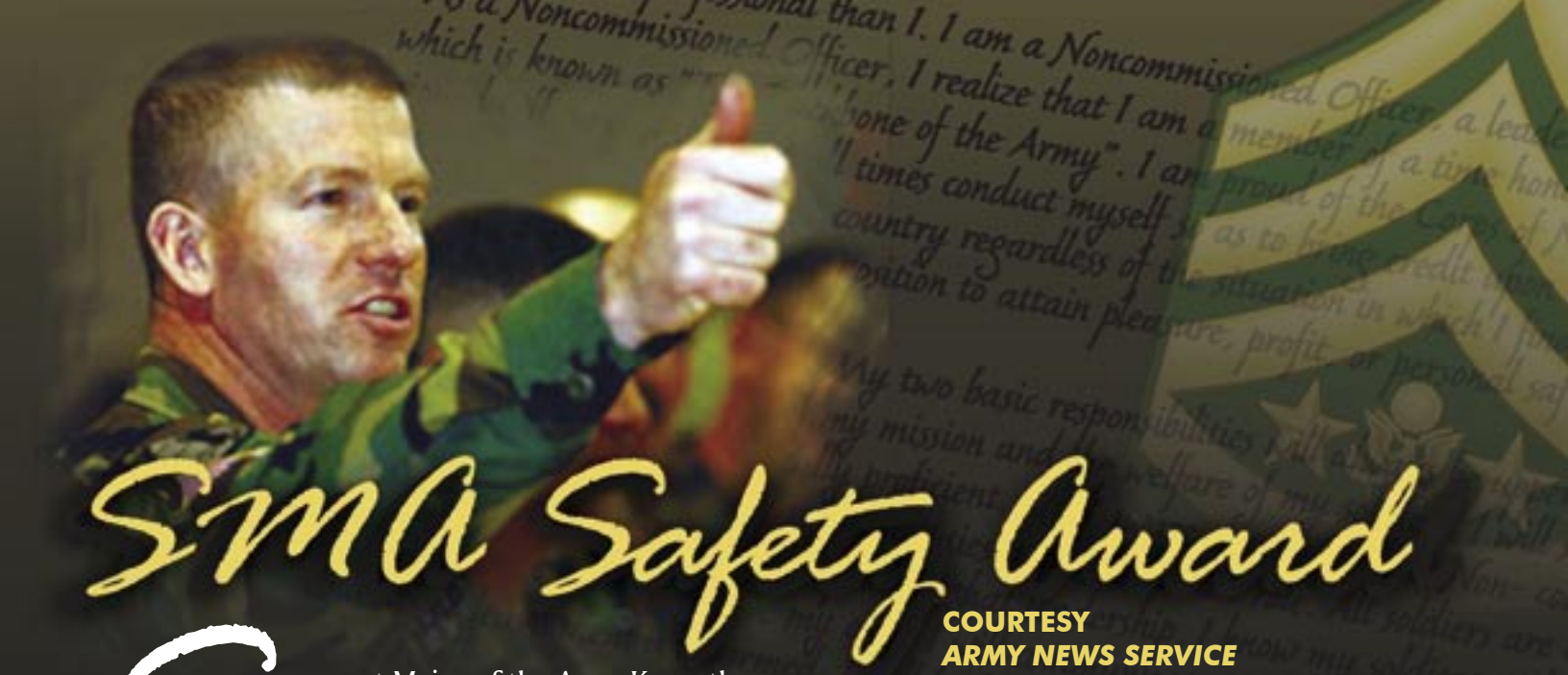
Internet and multimedia tools enhance the risk management process, but they are no substitute for good leadership. We need our leaders to understand where they are in time and place, correctly identify their unit's risks, and take appropriate action to reduce those risks. For those units at home station, the risks of deployment may be "over there," but the risks of America's roadways are present every day and are just as deadly—the statistics prove it. Tough, caring leadership is not always popular, but our Soldiers count on their first-line leaders to make the tough calls and ensure they make it home, every day. ★



Our Army at War:
Be Safe and Make It Home!



BG Joe Smith



SMA Safety Award

COURTESY
ARMY NEWS SERVICE

Sergeant Major of the Army Kenneth O. Preston presented, for the first time, two Army safety awards bearing his name.

SSG Edward D. Mills, a master driver, and SFC Charles R. Ryan, the safety noncommissioned officer for his command, received the Sergeant Major of the Army Safety Award for their efforts in creating initiatives that stress the importance of safety to Soldiers.

"The award program was designed to showcase unit leaders who have established a program and made a difference in curbing the number of deaths and accidents that occur Army-wide," said SMA Preston during a visit to Korea April 17-24. "I want to recognize those leaders who have made extraordinary efforts to make a difference and set their unit apart."

SSG Mills, who has been assigned to the 2d Infantry Division since September, has led a weekly Master Driver Program, training more than 1,100 Soldiers in a multitude of safe driving practices from operating their vehicles to practicing rollover drills.

"His unit recognized him because of the large number of Soldiers he has impacted in a short period of time," said SMA Preston. "This program has had a significant impact on his unit and is now being shared throughout the division."

The master driver is quick to deflect the focus of the award from him to those who helped facilitate the program.

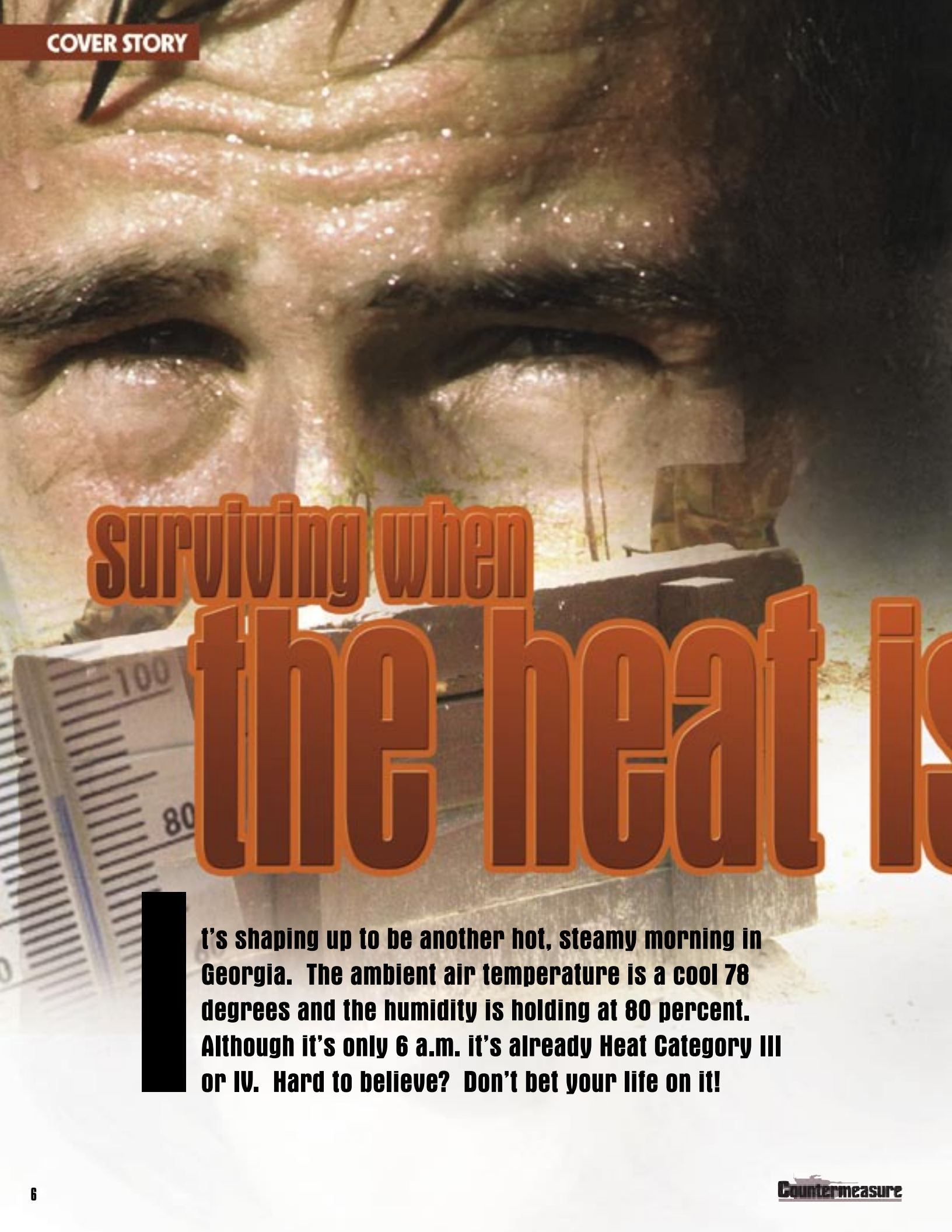
"I may have received this award on an individual basis, but it was earned as a group," SSG Mills said.

SFC Ryan serves as the safety NCO in charge for the 19th Theater Support Command. Although he has held the position for only six months, he has instituted numerous safety programs impacting units throughout the command. He has created monthly public service announcements, new safety vests, and an off-duty risk assessment plan used by leaders to counsel their Soldiers.

"For individuals to embrace safety, it has to be a very personal matter," said the sergeant major of the Army. "Only through our continued aggressive actions as leaders will we reduce the incidence of accidents and negligence. It is up to our leaders to support programs by making the resources available."

Nominations for the Sergeant Major of the Army Safety Award can only come through the major commands' sergeant's major offices.

Point of contact for information on the SMA Safety Awards program is MSG Richard Puckett, Public Affairs Adviser to the Sergeant Major of the Army, (703) 693-8367, or e-mail richard.puckett@hqda.army.mil



surviving when the heat is

It's shaping up to be another hot, steamy morning in Georgia. The ambient air temperature is a cool 78 degrees and the humidity is holding at 80 percent. Although it's only 6 a.m. it's already Heat Category III or IV. Hard to believe? Don't bet your life on it!

S ON!

JIM WIEHE
Brigade Safety Specialist
Ranger Training Brigade
Fort Benning, Ga

Obviously, summer is the most dangerous time when it comes to heat injuries and casualties. We've learned the hard way that we can do more to keep Soldiers safe in the heat without lowering the Army's training standards. Sometimes all that's necessary is to change the way we look at things.

For instance, during the summer of 2002 the Ranger Training Brigade was visited by members of the U.S. Army Research Institute of Environmental Medicine (USARIEM), located at Natick Laboratory, Mass. Their goal was to help us reduce heat injuries during stressful physical training, and fitness and skills tests. We had been using what we called "RAP" or "Zero" Week to help acclimate Soldiers to the heat here. However, this was an unofficial week and was removed for budgetary concerns.

Unfortunately, the elimination of Zero Week was followed by a marked increase in the number and severity of heat injuries among the students. During Zero Week in June 2002, eight Soldiers suffered heat exhaustion and one suffered heat stroke. In July, the first month where Zero Week was eliminated, 21 students suffered heat exhaustion and five others suffered heat stroke. During August 2002, 18 students suffered heat exhaustion and four suffered heat stroke. The injury statistics were spiking in the wrong direction. (Note: Most, if not all, of the Soldiers were returned to duty. The injury numbers were obtained from the United States Army Center for Health Promotion and Preventive Medicine as reported by Fort Benning's Martin Community Hospital.)

What did we find as we looked at these injuries? We began to see that heat injuries are not normally caused by a single event. Instead, heat injuries tend to be cumulative (see the Editor's Note at the end of this article). Our students most often suffered heat injuries after completing several events in succession over a three-day period. These events typically included the Army Physical Fitness Test (APFT), five-mile run; and the 2 1/2-mile Buddy Run, which included the Malvesti Obstacle Course. The APFT test standard is set for Soldiers 17 to 21 years of age, and the five-mile run is conducted at an eight-minute pace. The 2 1/2-mile Buddy Run is done with students wearing boots, battle dress uniforms, load bearing equipment, and maintaining at least a

10-minute pace. All this was coupled with days that stretched 18 to 20 hours, during which the students only ate two meals.

The Primary Instructor (PI) was following the set rules and standards. He was doing the daily risk assessment to determine the risk level. He also ensured the students followed the hydration policy of drinking one quart of water each hour. In addition, the students were checked by medical personnel for heat injury symptoms before each event. Still, the events were breaking out at a "Moderate" risk level. The only exceptions were the events on the first day and the APFT.

Looking at these problems, the folks visiting from Natick offered some solutions to help reduce our heat injury problems. Based upon those, we chose to make the following training changes.

- We opened up our formation during the five-mile run to allow more air to move between the students and better cool them.
- We had the students take soaking, cold showers after the five-mile run and at the end of each day. Cold showers are an effective way to dissipate body heat and help students recover after heavy exercise.
- We provided more shade and made better use of existing shade to limit the students' exposure to radiant heat.
- We lowered the temperature in the barracks and provided better air circulation in the sleeping huts.
- We modified the students' nutrition program to ensure they were properly hydrated and also maintained the right electrolyte balance. We gave them more time to eat so they could finish their Meal, Ready-To-Eat. We also provided them a sports drink during the morning and sometimes at night to ensure full hydration, electrolyte replacement, and reduce the potential for hypoglycemia.

"We began to see that heat injuries are not normally caused by a single event. Instead, heat injuries tend to be cumulative."

We cannot avoid training in the heat—that's something Rangers must do. We can, however, make that training safer—and that's something WE must do!

Editor's Note: For more information on the cumulative nature of heat injuries, see the April 2003 issue of Countermeasure*, available on the Army Safety Center Web site: https://safety.army.mil/home.html, under "Media."*

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Beat the Heat!

BOB VAN ELSBERG
Managing Editor

It was a hot day on the lake and I couldn't believe my father-in-law was pouring himself a cup of steaming coffee. It was the middle of the afternoon. I'd been under the sun so long I was ready for someone to stick a fork in me—I was definitely well-done!

I watched my father-in-law drink his coffee. I thought he was nuts, but finally asked him the "why" question. His answer surprised me. He said drinking hot coffee cooled him off. I wasn't quite sure I believed him, but I tried it and found that it worked—in a fashion. In just a few minutes I was absolutely soaked in sweat, but at least the breeze coming across the lake felt cooler. However, going from being broiled to being boiled wasn't all that great a solution. I also learned more than I ever wanted to know about what it feels like to be a "human" swamp cooler.

Contrary to my father-in-law's normally sound advice, drinking hot caffeinated beverages is NOT the way to go on a sweltering summer day. Here are some better ideas that may help keep you out of trouble when you're in the heat.

• Drink more fluids (nonalcoholic), regardless of your level of activity. Also, don't wait until you're thirsty to drink. Being thirsty is your body's way of telling you that you're already dehydrated. Warning: If your doctor has limited your fluid intake or has you on water pills, seek his or her advice on how much you should drink when the weather is hot.

• Don't drink liquids that contain caffeine (like coffee or sodas), alcohol, or large amounts of sugar. These beverages can cause you to lose more fluid than you take in. Also, avoid very cold drinks because they can cause stomach cramps.

• Take advantage of the shade. When possible, stay in an air-conditioned place. If your home does not have air-conditioning, take a trip to the Post Exchange, library, local mall, theater or other location where you can enjoy the cooled air. Department stores and theaters were two of the earliest places where air-conditioning was offered in America. Even a few hours spent in an air-conditioned location can help you survive when you have to go back into the heat.

• Electric fans can help cool you. However, when the thermometer hits the high 90s, fans will not cool you enough to prevent heat injuries. If you can't get to an air-conditioned location, taking a cool shower or bath will help provide relief from the heat.

If you must be out in the heat

• As much as possible, limit your outdoor activities to the early morning and evening hours.

• Drink two to four glasses of cool, nonalcoholic fluids each hour. However, don't drink more than 1 ½ quarts of water an hour or exceed 12 quarts a day or you may suffer bloating and nausea or worse, hyponatremia—a condition that can be fatal.

• Try to rest often in a shady area.

• Protect yourself by wearing a wide-brimmed hat and a good pair of sunglasses. "Good sunglasses" aren't just the ones that look "cool"—they need to block the sun's harmful ultraviolet (UV) radiation. According to the American Optometric Association,

"Take advantage of the shade."

good sunglasses should block 99 percent of both UVA and UVB radiation. Also, protect your skin by wearing sunscreen with a sun protection factor (SPF) of 15 or higher.

• Wear lightweight, light-colored, and loose-fitting clothing.

• Blondes—especially those who are blue-eyed, redheads, and others with fair skin are especially vulnerable to sunburns.

• Some medications can make you more vulnerable to sunburn and other heat-related illnesses. Among those are antibiotics; and seizure, heart, and high blood pressure medications. If you're taking any kind of medication, find out if it puts you at greater risk when working in the sun and heat. This includes over-the-counter cold remedies and antihistamines.

Editor's Note: Much of the information for this article was provided courtesy of the 104th Area Support Group, Hanau, Germany.

Contact the author at (334) 255-2688, DSN 558-2688, or e-mail robert.vanelsberg@safetycenter.army.mil

Are Captured Weapons Safe to Shoot?

I am an ammunition quality assurance specialist at the Iowa Army Ammunition Plant, Middletown, Iowa. I am also an Army veteran and a collector of "bad guy" weapons. In the next-to-last paragraph of your story "Are Captured Weapons Safe to Shoot?" in the April 2004 issue of ***Countermeasure***, you mention that "… it might be possible to fire a 9x19 mm cartridge in a Makarov …." The Makarov cartridge has an 18 mm-long case and would not chamber (allow the slide to close) on a 9x19 Parabellum round. A more likely case would be someone firing a 9 mm short (.380 ACP) round, which has a 17 mm-long case. In either scenario, headspace would be a problem.

Bill Trusty
Iowa Ammunition Plant

Mr. Trusty brings up a good point. The Russian-designed 9 mm Makarov has an 18 mm-long case versus the 19 mm-long case of the 9 mm Parabellum used in the Beretta M9 handgun. Technically, the 9 mm Parabellum should be too long to go into the chamber of a Makarov pistol. However, the Makarov cartridge fires a bullet that is actually 9.2 mm (.365 versus .355 in the 9 mm Parabellum). As a result, the Makarov's chamber and bore diameter are slightly larger than that of the Beretta M9. Also, the "Pistolet Makarova," as it is designated in Russian parlance, was produced in East Germany, Bulgaria, and China in addition to those built in the former Soviet Union. Tolerances—in particular those relating to the bore diameter—can vary. Add to that the potential for poor bore and chamber maintenance and excessive wear, and who knows for certain what might be possible? The Web site **Makarov.com** has a FAQ section that suggests the 9 mm Parabellum can be chambered in the Makarov. Because I reload my own ammunition—to include both the 9 mm Makarov and 9 mm Parabellum—I am aware of the much-higher chamber pressures of the latter. I've owned four Makarovs but never tried to chamber or fire a 9 mm Parabellum in any of them. Being "mathematically challenged," I still need all 10 fingers.

The Editor

Hurry Up and Get Hurt!

Editor's Note: The following letter refers to an article in our March 2004 issue describing a motor pool accident caused when Soldiers used a forklift to support a HEMTT trailer while doing a tire change. The HEMTT driver got caught between the forklift and the trailer and was injured. We asked readers to tell us what they thought were the contributing factors to this accident.

I have been in the same situation more than once in the past. This story leads me to believe the leaders' insistence on timeliness was not balanced with the caution to follow proven safety procedures. At safety briefings, or at least at leadership meetings the night before (the convoy movement), all leaders should have been reminded to make sure risky procedures were not used. Also, with the entire battalion loading and preparing to convoy, it would have been wise to have the sergeant major in the area watching the troops for any unsafe activity.

Lastly and most importantly, the author made no mention of the Soldiers being briefed on safety and the importance of not taking shortcuts. Soldiers need to be reminded that they're responsible for their own safety and no amount of hurry justifies doing things unsafely.

SFC George Miller
NDARNG

SAFETY SENDS

From the Director of Army Safety

Opening Kudos

I want to give a big congratulation to the North Dakota Army National Guard and their safety programs. The 42nd Engineer Battalion recently returned from a year-long accident-free tour supporting Operation Iraqi Freedom. The 957th Multi-role Bridge Company, despite losing three Soldiers in action, drove 600,000 accident-free miles during their year in Iraq. The 141st Engineer Battalion, currently in Iraq, has suffered no accidents to date. Wow! Well done!

SAFETY SENDS
From the Director of Army Safety

BE SAFE!

We continue to have problems with accidental weapons discharges, and this Safety Sends will focus on that issue. In addition, we are still having a problem with rollover accidents. There also are some clear indications we need to look at speed in large truck fleet operations. The combination of near-empty vehicle weights, environmental conditions, and speed is pushing our truck drivers to the limit of their capabilities.

Between April 30 and May 6, 2004, the Army reported eight Class A ground accidents that resulted in nine fatalities. Below is a brief summary of those accidents.

• **AMV:** There were three rollovers, resulting in six fatalities. Seatbelt use is not known at this time for these accidents. However, in one incident, the driver of a 5-ton truck did not have an assistant driver.

• **Accidental Discharges:** There were two fatalities from accidental weapons discharges. A Soldier had the barrel of his M249 Squad Automatic Weapon (SAW) pointing toward his body while mounting the weapon on a vehicle. Another Soldier shot himself while cleaning his M9 pistol.

• **Recreation:** A Soldier fell from a 300-foot cliff while mountain climbing without safety equipment, resulting in a fatality.

• **Motorcycle:** Two Soldiers suffered permanent total disabilities in separate motorcycle accidents.

A closer look at accidental discharges

During FY03-04 in Operation Iraqi Freedom, weapons handling errors produced more than 96 reported accidental discharges, resulting in 19 fatalities. In theater, the top five branches with reported accidental weapons discharges were: Military Police (14), Infantry (12), Military Intelligence (7), Field Artillery (7), and Armor (7). Others who had accidental discharges were: Engineers (6), Quartermaster (3), Transportation (3), Medical Corps (3), Air Defense (1), Signal (1), and Special Operations Forces (1). Remember, accidental discharges were only recorded in our database if someone was injured and lost at least one workday, suffered some form of disabling injury or was killed, or if there was at least Class C-level damage to equipment. There were hundreds of near misses that were not reported. The Sergeant Major of the Army (SMA) is taking this issue head-on. Here is what we have learned so far:

• Basic Soldier skill—accidental discharges are not limited to junior Soldiers.

• Leaders, normally seen as solutions to human-error accidents, are actually part of the problem.

• Enlisted grades E-5 and above produced 20 incidents. Six others involved officers and warrant officers.

This is clearly an accident area where individual Soldier discipline, individual accountability, and supervision are essential if we are going to put a stop to these deaths.

Vignettes—accidental discharges

• A Soldier fatally shot another Soldier at a checkpoint. The Soldier had his M16A2 rifle pointed at the other Soldier's head and inadvertently discharged his weapon. *Factors—Muzzle Awareness, Supervision*

• An NCO accidentally discharged an M2 machine gun during positioning of the guard, killing a civilian.

Factors—Weapons Handling, Muzzle Awareness, Supervision

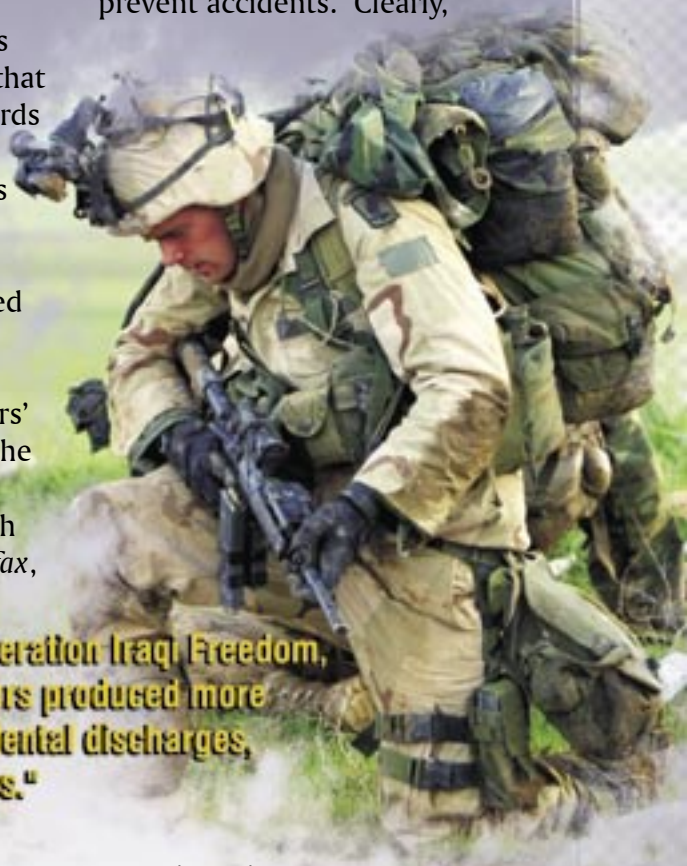
• An NCO was cleaning his M9 9 mm pistol when it accidentally discharged, striking him in the head and killing him. *Factors—Weapons Handling, Muzzle Awareness*

• A Soldier got in front of an M249 SAW while mounting it on a HMMWV. The SAW was loaded and discharged, shooting the Soldier in the abdomen. He later died of the wounds. *Factors—Weapons Handling, Muzzle Awareness, Supervision*

Weapons safety is an important message that must be pushed all the way to the bottom of our formations. Our Soldiers must understand the impact and accountability of an accidental weapons discharge. For example, a Soldier allowed children to play with his unloaded M16. When he retrieved it and reloaded, it discharged and the ricochet killed a child. Not only did the child die, but the Soldier was tried by general courts-martial.

Safe Weapons Handling Procedures:

Unloading a weapon is simply one step in the process of clearing it. While this seems common sense, our manuals have been ambiguous and have contributed to confusion as to where and when to conduct these procedures. The Army is finalizing a set of straightforward, commonsense standards that account for weapons differences to eliminate that ambiguity. Those standards will be distributed as pocket-size leader guides and Soldier cards issued with each weapon. The final draft can be reviewed at https://safety.army.mil in the "Quick View" box and can be used at leaders' discretion. In addition, the SMA has written several articles in magazines such as *Countermeasure*, *Flightfax*, and *The NCO Journal* to emphasize the importance of enforcing clearing procedures. The *Flightfax* and *Countermeasure* articles can be found on our Web site. For your convenience, we have provided a poster version of the pocket-size guide in this issue of *Countermeasure*.



"During FY03-04 in Operation Iraqi Freedom, weapons handling errors produced more than 96 reported accidental discharges, resulting in 19 fatalities."

Final thoughts

Safety Sends is part of the Army Safety Campaign. I hope it is helpful to our leaders. The goal is to share current information about Army trends so we can quickly focus our efforts and prevent accidents. Clearly, there is no intent to poke anyone in the eye. Some information is taken directly from initial field reports, so make sure the right people are involved in the process. I really appreciate the feedback from the field ... keep it coming!

Thanks again to each of you for all you are doing! ★

BG Joe Smith
Director of Army Safety

The Great LT Adve

There I was, a high-speed, all-knowing, super-aviator lieutenant working as a battle captain in a general support aviation battalion during my second National Training Center rotation. It was a nice, sunny morning when the assistant S1—another high-speed, all-knowing, super-aviator lieutenant—told me we were going from our assembly area (AA) back to Bicycle Lake Army Airfield base operations to complete the unit status report.

Being a couple of squared (clueless) lieutenants, we wandered around the AA, which was near the East Gate, until we found a HMMWV that wasn't being used. We "borrowed" (stole) it and checked the fluid levels—this was our version of preventive maintenance checks and services. As far as a detailed plan of our route, the S1 remarked, "I was an observer controller (O/C) here, so I know how to get there." He then checked our computers, water, load bearing equipment, and weapons and said, "All right, let's go!"

We arrived at Bicycle Lake around 8:30 a.m. At 3:30 p.m. I suggested we should start heading back to the AA before it got dark. The S1 said he had a few more items to tie up and then we would leave. At 5 p.m. I put my foot down and said, "We're leaving!" The S1 commented, "Don't worry, I was an O/C here and know this place like the back of my hand." We finally departed a half hour later.

As we were driving out of the cantonment area I had a flash of the obvious—it was already dark! About that time the S1 turned off the HMMWV's white lights, and we were suddenly surrounded by pitch-black darkness. I told the S1, "Turn the #&@! lights back on!" He responded by saying we weren't allowed to drive with our white lights on. I had him stop the vehicle while I retrieved my handy red lens flashlight, and then proceeded to hang out the window and shine it on the ground about 10 feet in front of the HMMWV. As we continued driving I thought, "This is going to work—it'll just take a little longer to get back."

A few minutes later I started noticing we were passing a lot of shrubs, so I had the S1 stop the vehicle again. I discovered we had driven off the road, so I dismounted and tried to find it again, but it was too dark. By lying down on the ground and using the lights from Las Vegas, I was able to silhouette a large hill we called "the Whale" against the sky. We then decided to head for it and got there five hours

enture

Anonymous

later. From the hill we could see convoys driving down the main supply route, so we linked up with one and rolled back into the AA around 4:30 a.m. Needless to say, we received a severe "butt chewing" from the battalion commander!

A few days later when I had some "down time" (a reflective moment in the porta-john), I pondered our "Great LT Adventure" and came upon some startling revelations. The first was that as a pilot in command of a multi-million dollar aircraft, I would have never committed the sins I did in that HMMWV. You know—things such as no route planning, maps, water, food, and night vision goggles (NVGs). Worst of all, we did absolutely NO risk assessment.

The Great LT Adventure did teach me some lessons that I've applied ever since. First, always make a plan—the more detailed the better. Second, always assume you'll have to spend the night someplace other than your AA, so make sure you have enough ammunition, fuel for your vehicle, food for yourself, and good communications. Third, if you leave the AA, make sure you take your NVGs. Finally, do all five steps of risk management for every mission, no matter how simple it seems. You don't want to have a Great LT Adventure yourself!

Having trouble remembering the five steps of Risk Management? Well, here they are just in case you're a bit "rusty":

1. Identify hazards
2. Assess hazards
3. Develop controls and make decisions
4. Implement controls
5. Supervise and evaluate

Here's a little tongue-in-cheek memory tool:

I—(Identify hazards)
Always—(Assess hazards)
Did—(Develop controls and make decisions)
Insane—(Implement controls)
Stuff—(Supervise and evaluate)

I'll Never Drive that Tired A

CW3 KIMBERLY R. NOE
Aircraft Armament Officer

We heard it during every holiday weekend safety briefing—"If you're going to drive more than 200 miles away for the weekend, allow yourself plenty of time and get plenty of rest. Don't try to make a 12-hour drive in eight hours."

We all knew what "could" go wrong, but nothing was going to happen to me. I was 21 years old and immortal. I was "Airborne!" I was invincible.

It was 1988 and I'd been stationed at Fort Bragg, N.C., for just over a year. It was a 12-hour drive to my hometown in the Florida panhandle. I'd made that drive every long weekend since arriving at Fort Bragg. The Fourth of July weekend would be no different, except this time I wouldn't be making the trip back alone.

For several months I'd been trying to convince my mother to move to North Carolina. She, and my sister who was 12—the youngest of six siblings, could live with me until mom could get settled in. She'd finally agreed.

I'd planned the trip pretty well. I was going to drive down on Friday (it was a four-day weekend), celebrate the holiday with my family on Saturday, and then we'd drive back to North Carolina on Sunday. That would give us Monday to recover, and I also could familiarize my mother with the area. That was the plan—but plans change.

"Saturday night" didn't end until 2 a.m. Sunday, so the "plenty of rest" plan was out. We got up at 6 a.m. to get ready for our planned departure time of 9 a.m. But the family good-byes took longer than anticipated—seven hours longer, to be exact. So we didn't get on the road until 4 p.m. But I thought nothing of it. I'd made the trip many times after getting off work at 5 p.m. and nothing

had happened. This time would be no different.

We'd been on the road for about eight hours. We'd stopped only twice and were now outside of Savannah, Ga. My sister was asleep in the backseat and my mother was drifting in and out of sleep in the front passenger seat. I was starting to feel tired, so I decided to make a rest stop at the South Carolina Welcome Center, located one mile across the state line. The welcome center was just five miles—10 minutes—from Savannah. All I had to do was make it through town and across the Savannah River Bridge. I knew I could do that.

I remember leaving Savannah and thinking, "Just five more miles and I'll stop and stretch." However, the next thing I remember was seeing the exit sign for the welcome center. I couldn't remember driving the five miles I had driven from Savannah or even crossing the Savannah River Bridge—which is about a quarter-mile long.

When I saw the exit sign, I instinctively hit the brakes and quickly turned onto the exit ramp. The sudden movement woke my mom. Startled, she asked if I was OK. I said "yes," and that I'd stopped to use the restroom and stretch for a few minutes. Luckily it was dark and she couldn't tell that my hands were shaking and my heart was about to pound out of my chest.

I walked around the parking lot for 15 minutes or so, trying to calm down and thinking about what I had just done. It was bad enough that I'd put myself in danger—but on that night I endangered the lives of my mother and sister. What if something had happened and they'd been injured, or worse? If I'd survived, I couldn't have lived with myself knowing that my decision to drive tired had caused them harm.

I still had four more hours of driving, so I decided to stay at the welcome center until daybreak. Some would say that was dangerous, but it was not nearly as dangerous as me getting back on the road again.

Even though nothing happened, that night changed me. I started looking at life differently. I realized I wasn't invincible or immortal, and from then on I decided not to act like I was.

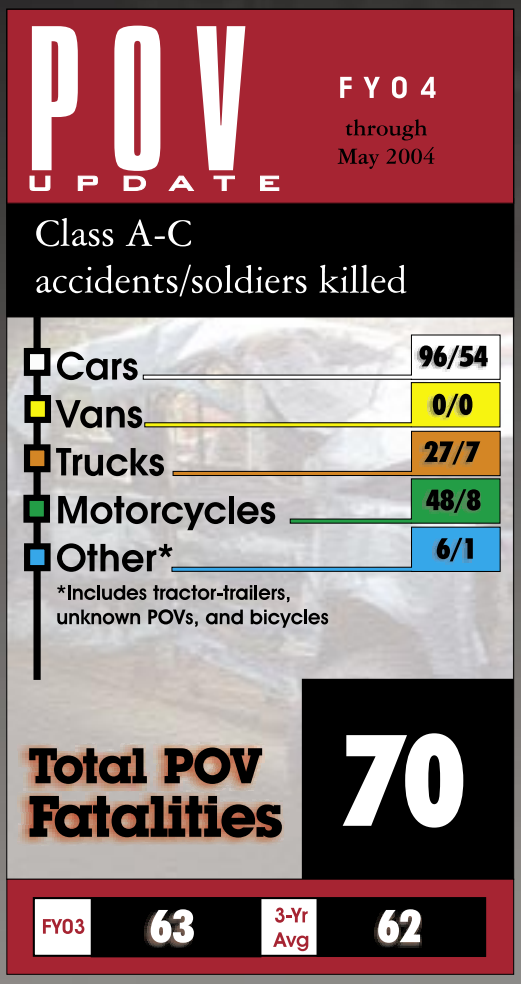
My grandmother used to say, "God takes care of fools and little children." That night He was looking over both. It's not hard to guess which one I was.

I don't know how I avoided having an accident that night. Some might call it luck, others, the grace of God. Either way, I made a promise that I would never drive tired again. To this day I've kept that promise and I'm thankful I'm still here to tell you about it.

Contact the author at (910) 286-1869, or e-mail kim.noe@us.army.mil

About the author:

CW3 Noe enlisted in the Army in 1986 as an AH-64 Apache attack helicopter repairer. After nine years of enlisted service, during which she served as a squad leader, technical inspector, and platoon sergeant, she applied for warrant officer selection as an aviation maintenance technician. A warrant officer since 1995, she has served as an armament platoon leader and a production control officer at the Aviation Intermediate Maintenance level. She also has served as an armament officer and shops platoon leader in an AH-64A battalion. She has three years' experience as a company aviation safety officer and collateral duty safety officer.



A Little Hell on Wheels

MSG (RET) JONATHAN W. PIERCE
Senior Logistics Management Writer
PS Magazine

I was 21 before I drove a manual transmission vehicle. My fiancée had a Volkswagen Beetle with a stick shift. She taught me how to drive it in a high school parking lot a few weeks before I graduated from advanced individual training.

At our first post, Fort Hood, Texas, I was introduced to the M151 Jeep. Within a few weeks of being assigned to the 2d Armored Division's Public Affairs Office, I'd been to the motor pool and introduced to the vehicle's technical manuals and preventive maintenance checks and services. I'd been shown how to drive on level ground and how to shift into four-wheel drive. I'd even graduated to driving up and down the "steep" inclines of our outdoor wash racks.

Not long afterwards, the "Hell on Wheels" division held a field training exercise (FTX) against the 1st Cavalry Division. The assistant public affairs officer, a brand new "butterbar," decided we needed to gather photos and articles for the local news media. I was his designated driver.

Anyone familiar with central Texas—and Fort Hood in particular—can visualize the steep-sided hills that look like eroded buttes.

The unit my lieutenant wanted to visit was at the top of one such hill. I became aware of that fact when we drove to the hill and the lieutenant pointed at a tank trail that seemed to go straight up.

I declined the idea of driving up that trail because I knew I wasn't skilled enough to handle it. The lieutenant then flexed his authority and demanded that I overcome my fear. He was, I'm sure, trying to give me experience and self-confidence. I was just an inexperienced private faced with the dilemma of disobeying an order or ignoring common sense and doing something for which I was not prepared.

So up we went.

The problem was the top of the hill was now in "enemy" hands. An armored personnel carrier rolled up in front of me, and a Vulcan track pulled up behind. We weren't going anywhere. Only when the unit vacated the hill were we allowed to move. But now the problem was how to safely descend and negotiate the steep, rutted tank trail without getting run over by the Vulcan track rapidly catching up to us.

We made it somehow. Maybe it was dumb luck or heaven's will, but I'm still here. However, I can still see that trail, feel the bumps, and almost taste the dust and the bile that churned in my stomach.

What was the underlying problem here?—Leadership.

- Why didn't my public affairs officer and company commander ensure I received proper driver's training before sending me out?
- Why was my first drive into a training area conducted during an FTX without a qualified instructor?
- Why wouldn't a junior officer accept his driver's warning that his training hadn't prepared him for the situation?
- Why did the Vulcan track commander allow his track to start its descent before my jeep was even a quarter of the way down the hill?

Is there a difference between assumptions and risk assessment?

- The lieutenant assumed my reluctance was based upon fear—which it was, given my lack of training.
- The lieutenant assumed his leadership would be weakened if he backed down on his command. (What if we'd had an accident? What would his leadership style have looked like then?)
- The Vulcan track commander and his driver assumed that if I could get up the hill, I could get down it safely.
- The Vulcan track commander assumed his track wouldn't run away from his driver and crush my jeep.

Leadership and assumptions, when misused, can create needless hazards—which is just what the Army Safety Campaign is trying to avoid. Risk assessment is needed at every level, every day, by everyone, and all the time.

Contact the author at DSN 645-0798, or e-mail jonathan.pierce@us.army.mil

ACCIDENT BRIEFS

Information based on preliminary reports of ground accidents.

AMV

Class A

- Soldier was killed when the LMTV he was riding in ran off the roadway and overturned. The LMTV's driver apparently fell asleep at the wheel, causing the accident.

- Two local national civilians died when their vehicle was rear-ended by an M915A1 HEMTT. The HEMTT's driver switched lanes to avoid hitting another convoy vehicle just before the accident.

- Soldier suffered fatal injuries when the HMMWV he was riding in overturned. The HMMWV's driver swerved for unknown reasons and overcorrected the vehicle, causing it to roll. Two other Soldiers were injured.

- Soldier was killed when the M1074 PLS truck he was driving rear-ended a HEMTT to its front. The two vehicles were traveling in the same convoy, and the HEMTT had stopped to let a civilian vehicle pass just before the collision.

- Soldier drowned after falling from his HMMWV. The HMMWV was rear-ended by a civilian truck, pushing it partially off a bridge. The deceased Soldier, who was driving the HMMWV, attempted to climb out of the vehicle but fell into the river below.

- Soldier died after his HMMWV overturned and pinned him during a convoy operation in limited visibility conditions. The Soldier reportedly swerved to avoid the lead vehicle just before the accident.

Personnel Injury

Class A

- Soldier suffered a permanent total disability when he missed his target during an airborne proficiency jump and was dragged 50 feet. No other details were provided.

- Soldier died when a round from his 9 mm weapon accidentally discharged and struck him in the head. The Soldier was cleaning the weapon when it fired.

- Soldier was killed after he fell 300 feet from a ledge while mountain climbing. The Soldier, who was climbing with another Soldier, reportedly was not using safety equipment.

- Soldier collapsed during an APFT and was pronounced dead at a local hospital. No other details were provided.

- Soldier reportedly was electrocuted and died while performing maintenance on a generator. The Soldier was found with two electrical wires stretched across his body.

POV

Class A

- Soldier was killed when his motorcycle collided head-on with a pickup truck. The Soldier was trying to pass another vehicle on a curve in a no-passing zone.

- Two Soldiers died when their vehicle ran off the roadway and struck a tree. The vehicle was consumed in flames shortly after the crash, and both Soldiers were burned beyond recognition.

- Soldier suffered fatal injuries when his vehicle struck another vehicle head-on. No other details were provided.

- Soldier was killed when the vehicle he was riding in overturned. One of the vehicle's tires reportedly blew, causing the driver to lose control and roll the vehicle.

- Soldier suffered a permanent total disability when he was thrown from his motorcycle and struck a concrete barrier. The motorcycle's rear tire began to wobble just before the accident, causing the Soldier to lose control of the bike.

- Soldier died after being broadsided by a sport utility vehicle. No other details were provided.

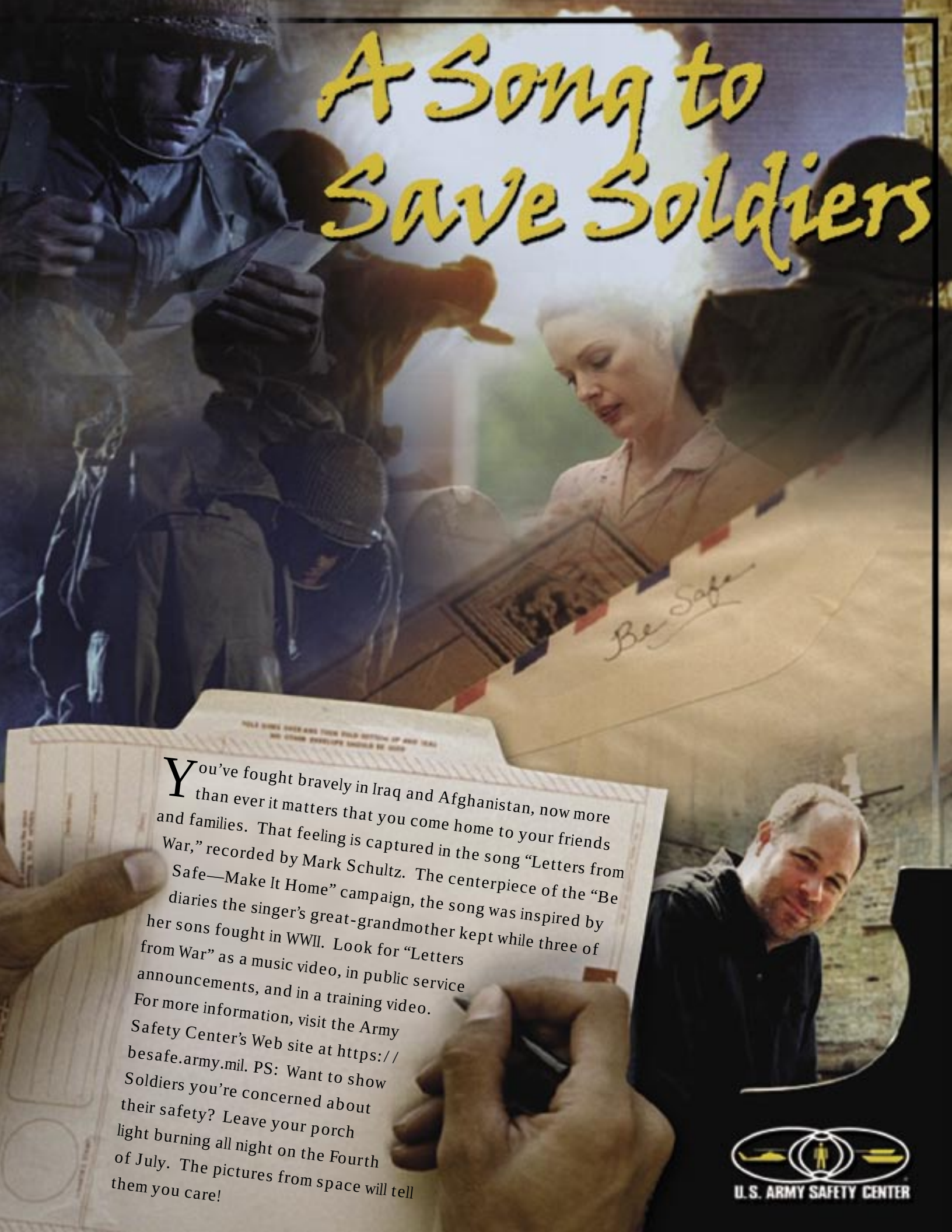
- Soldier suffered a permanent total disability when his POV struck another vehicle and rolled several times. The Soldier was ejected from the vehicle and suffered a severe head injury.

- Soldier suffered a permanent total disability when his vehicle struck another vehicle head-on. The other vehicle, driven by a civilian, was traveling in the wrong lane at the time of the accident. The Soldier was wearing his seatbelt.

- Soldier was killed when his motorcycle overturned. The Soldier rolled the bike and was thrown from it after he swerved to avoid a deer in the road.

- Soldier died after his vehicle ran off the roadway and struck a tree. Three other Soldiers riding in the vehicle were injured.

A Song to Save Soldiers



You've fought bravely in Iraq and Afghanistan, now more than ever it matters that you come home to your friends and families. That feeling is captured in the song "Letters from War," recorded by Mark Schultz. The centerpiece of the "Be Safe—Make It Home" campaign, the song was inspired by diaries the singer's great-grandmother kept while three of her sons fought in WWII. Look for "Letters from War" as a music video, in public service announcements, and in a training video.

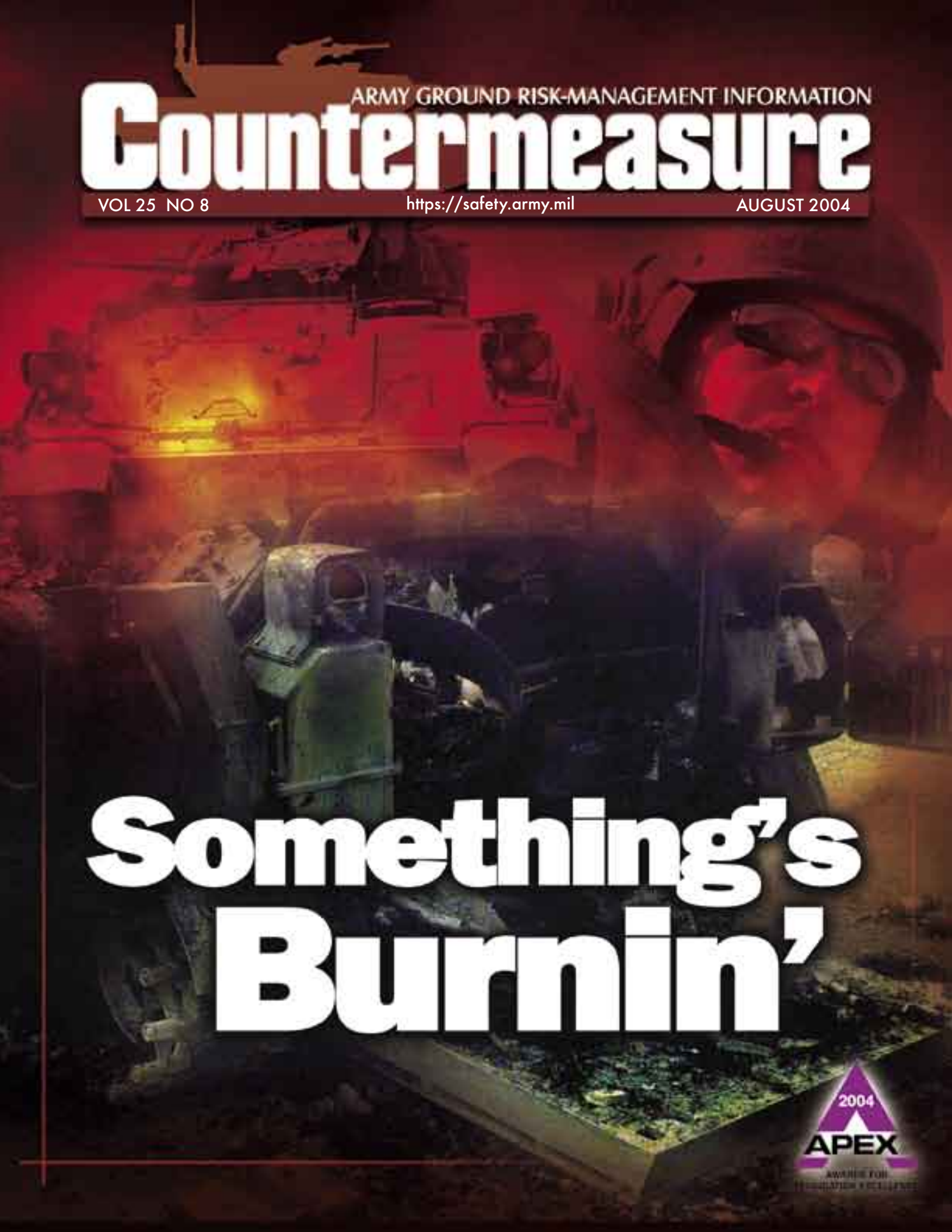
For more information, visit the Army Safety Center's Web site at https://besafe.army.mil. PS: Want to show Soldiers you're concerned about their safety? Leave your porch light burning all night on the Fourth of July. The pictures from space will tell them you care!

U.S. ARMY SAFETY CENTER

ARMY GROUND RISK-MANAGEMENT INFORMATION

Countermeasure

VOL 25 NO 8 https://safety.army.mil AUGUST 2004



Something's Burnin'

2004 APEX AWARDS FOR PUBLICATION EXCELLENCE

Countermeasure

ARMY GROUND RISK-MANAGEMENT INFORMATION

CONTENTS

features

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DASAF'S CORNER

From the Director of Army Safety

Make It Personal—Because It Is!

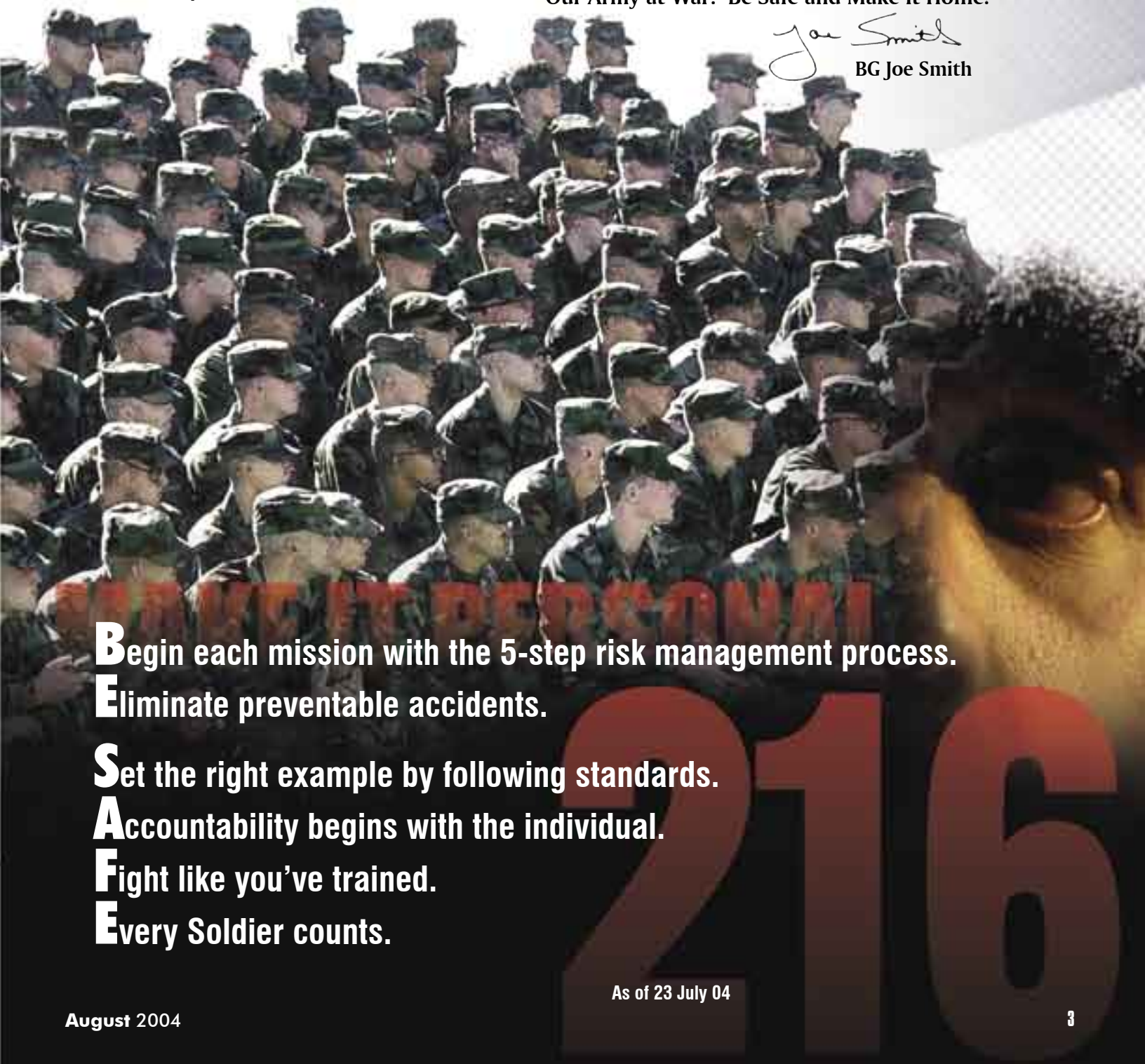
A picture is worth a thousand words. The image below represents the blank faces of the 216 Soldiers we've already lost to accidents this year, most of them preventable. These men and women—America's sons and daughters—were once in our formations serving our great Nation. Now they're gone. Over the last 90 days, a name has been added to this growing list of needless deaths every 34 hours. Was one of the 216 Soldiers a personal loss to you? IF not, then these numbers are just statistics ... blank faces; not lessons learned, just lessons noted.

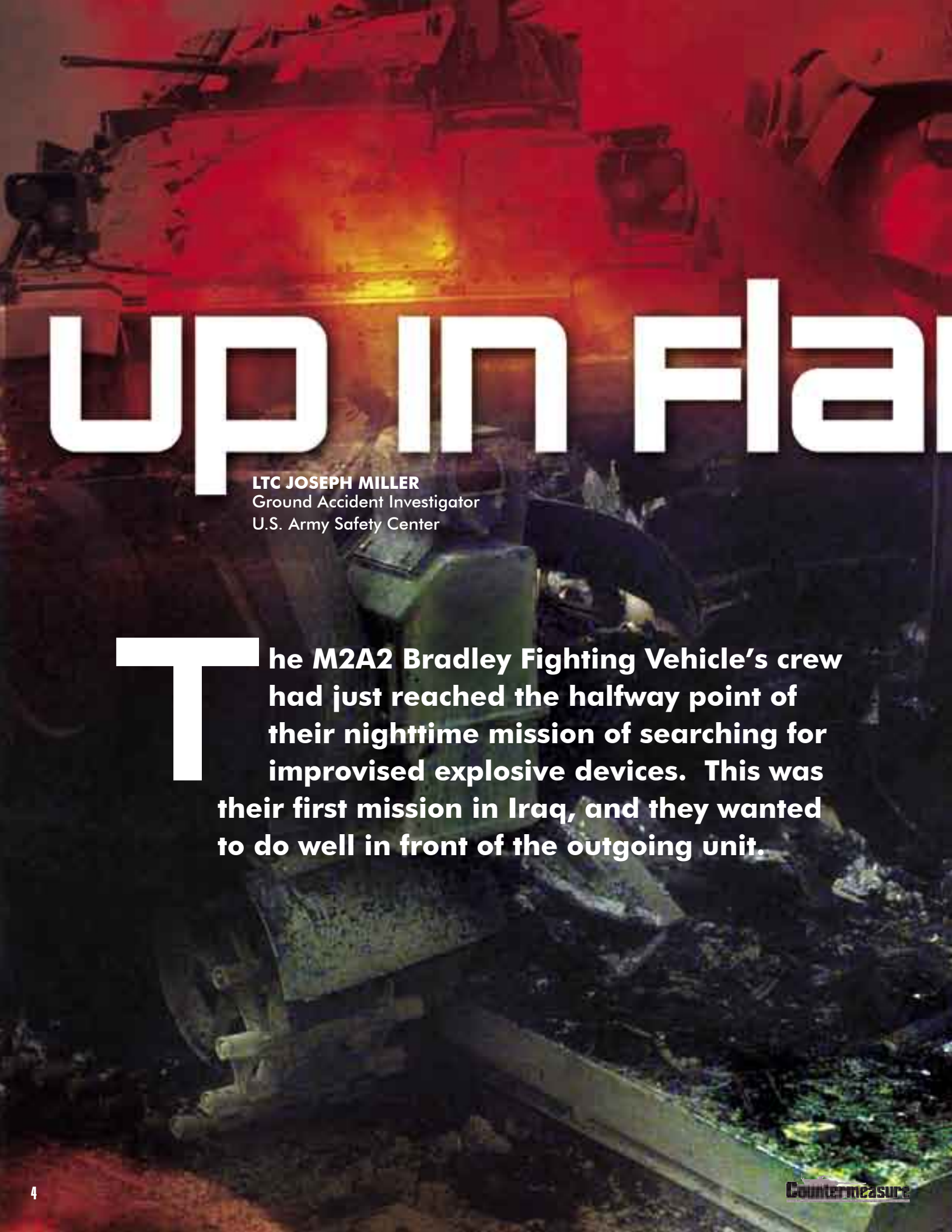
Don't add your name to this roll call. The same goes for your battle buddies—they're irreplaceable. When leaders are in charge, they take charge. Do the harder right, make a difference, and BE SAFE! Make it personal—because it is! ★

Our Army at War: Be Safe and Make It Home!

Joe Smith

BG Joe Smith

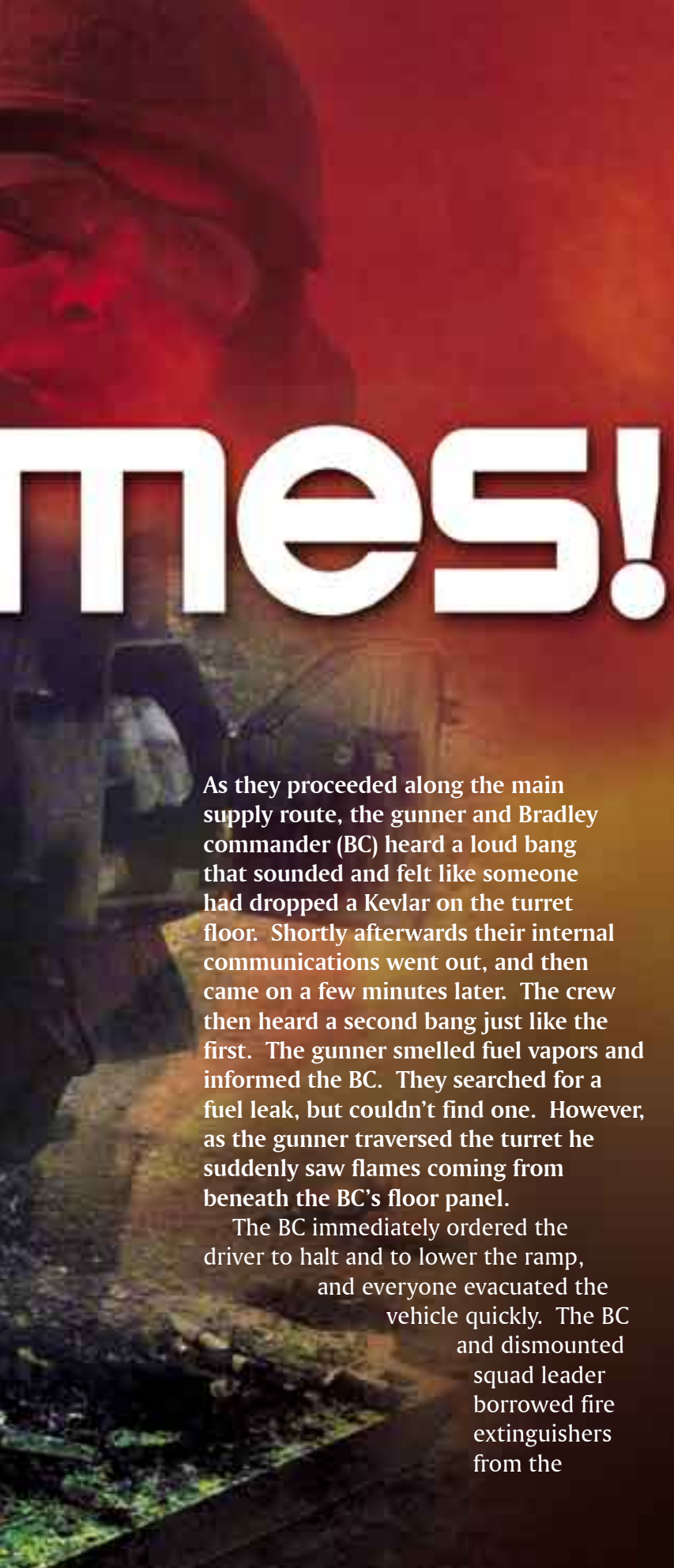




up in fla

LTC JOSEPH MILLER
Ground Accident Investigator
U.S. Army Safety Center

The M2A2 Bradley Fighting Vehicle's crew had just reached the halfway point of their nighttime mission of searching for improvised explosive devices. This was their first mission in Iraq, and they wanted to do well in front of the outgoing unit.



mes!

As they proceeded along the main supply route, the gunner and Bradley commander (BC) heard a loud bang that sounded and felt like someone had dropped a Kevlar on the turret floor. Shortly afterwards their internal communications went out, and then came on a few minutes later. The crew then heard a second bang just like the first. The gunner smelled fuel vapors and informed the BC. They searched for a fuel leak, but couldn't find one. However, as the gunner traversed the turret he suddenly saw flames coming from beneath the BC's floor panel.

The BC immediately ordered the driver to halt and to lower the ramp, and everyone evacuated the vehicle quickly. The BC and dismounted squad leader borrowed fire extinguishers from the HMMWVs behind them and tried to put out the fire. They were standing on the ramp and spraying the flames beneath the turret when the fire suppression system went off, hitting the squad leader on the side of his face and knocking him down. As the BC pulled the squad leader off the ramp, the fire spread to the ammunition boxes. The platoon sergeant immediately ordered his Soldiers to set up a perimeter 300 feet from the burning vehicle to keep anyone from approaching. The fire consumed the Bradley as 25 mm rounds, TOW missiles, and AT4 (anti-tank) rockets exploded inside. Ten hours later, the vehicle had melted down to a shell.

Why did the accident happen?

- Eight months before the accident, the vehicle rolled over during maneuvers. No one was injured because the crewmembers successfully conducted their rollover drill. However, since that incident the vehicle had experienced recurring electrical problems.
- Although the Bradley had been serviced five months before the accident, maintenance didn't steam clean the engine compartment. Steam cleaning flushes out debris that might clog the openings between the ballasts inside the hull and removes built-up grease and oil from the engine compartment.
- The crew rehearsed the emergency crew fire drill only once and failed to execute it when faced with a real fire.
- Two weeks before the accident, the driver drained condensation from the fuel filter directly into the hull instead of a suitable container. He continued to perform other preventive maintenance checks and services (PMCS) tasks, but forgot about the draining fuel filter. The BC came by later and saw the fuel draining

"All leaders must rehearse emergency crew fire drills until the crew becomes proficient."

into the hull. He shut off the toggle valve, and then he and his driver put the Bradley on an incline. They drained approximately 10 gallons of fuel from the hull.

Why the severity of the damage?

The crew had previously rehearsed the fire drill by evacuating the vehicle, closing all the hatches, and simulating pulling the outside fire suppression handles. In an actual fire, the Halon would have deprived oxygen from the fire and extinguished it. However, the crew only rehearsed this drill once and failed to execute the drill when faced with a real fire. Instead they evacuated the Bradley—leaving all of the hatches open—and tried to extinguish the fire with HMMWV fire extinguishers, but these proved inadequate.

The crew also believed setting the fire suppression switch in the driver's compartment to AUTO would cause all the Bradley's fire extinguisher bottles to go off during a fire. However, that assumption was wrong. When the driver's toggle switch is placed in the AUTO mode, it only activates the two extinguisher bottles mounted inside the crew compartment. For engine fires, the driver can either turn a knob under the instrument panel or pull a handle located outside his hatch.

Recommendations

- All leaders (NCOs and officers) must ensure maintenance personnel repair ongoing electrical or mechanical problems and conduct services to standard.
- All leaders must supervise PMCS to ensure it is done to standard in accordance with the appropriate technical manual.
- All leaders must rehearse emergency crew fire drills until the crew becomes proficient.

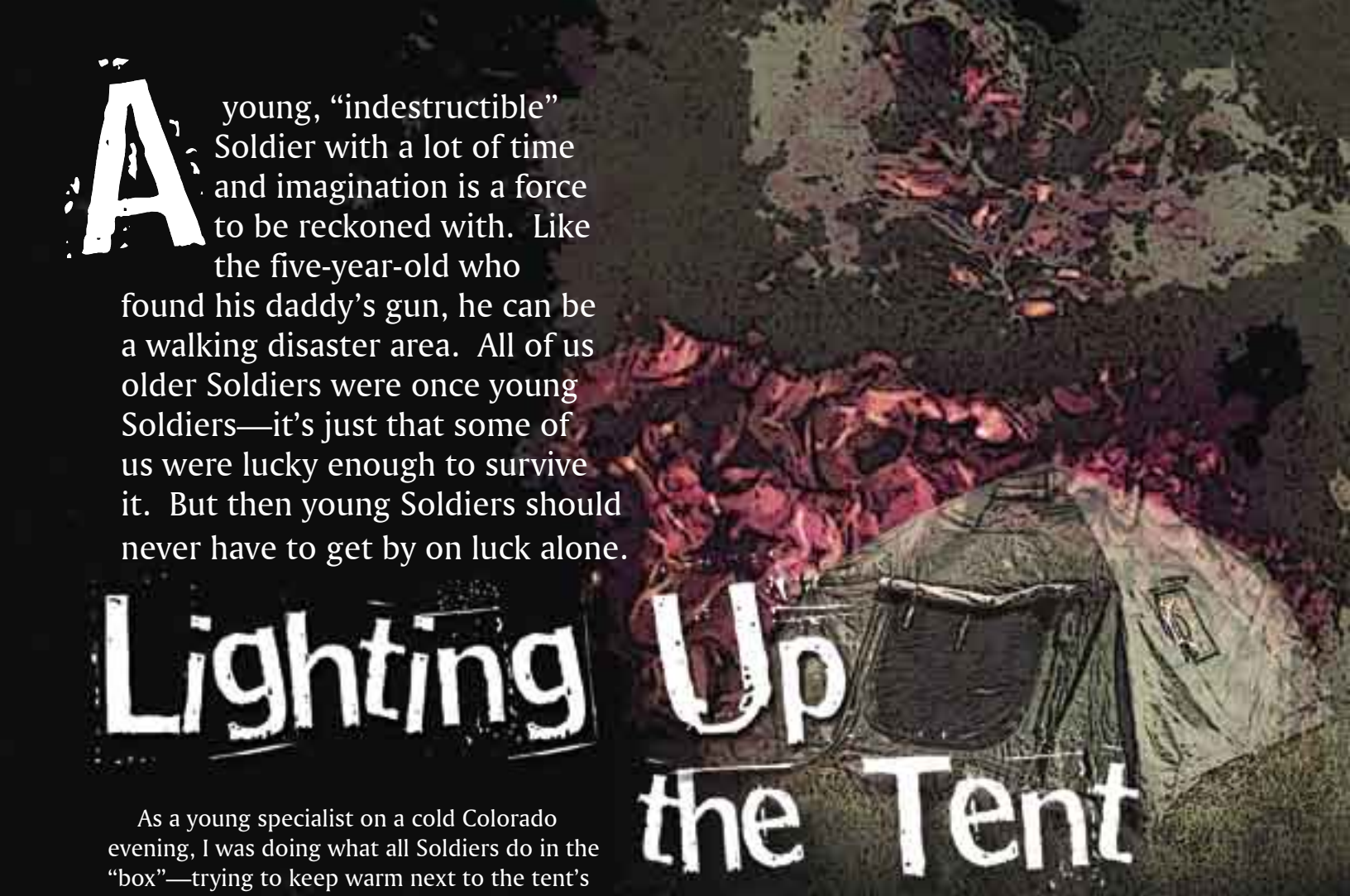
Results

- Estimated cost of damages: $1 million.
- The platoon lost one-fourth of its mounted combat power while in a combat zone.

Contact the author at (334) 255-3261, DSN 558-3261, or e-mail joseph.miller@safetycenter.army.mil

A young, "indestructible" Soldier with a lot of time and imagination is a force to be reckoned with. Like the five-year-old who found his daddy's gun, he can be a walking disaster area. All of us older Soldiers were once young Soldiers—it's just that some of us were lucky enough to survive it. But then young Soldiers should never have to get by on luck alone.

Lighting Up the Tent



CW2 COREY L. COWLEY
Aviation Safety Officer
C Co., 2-25 Aviation
Fort Drum, N.Y.

As a young specialist on a cold Colorado evening, I was doing what all Soldiers do in the "box"—trying to keep warm next to the tent's propane heater. I was bored and sitting with two other Soldiers in my section examining a box of chemical lights. We noticed the box said the chemical lights were non-toxic and nonflammable. We already knew they were non-toxic from Soldiers rubbing the fluid on their teeth and scaring people at night. However, we decided to see if the chemical lights really were nonflammable, so I held one over the heater until it began to boil.

We didn't believe we were in any danger. After all, the information on the chemical light's box SAID it was nonflammable. We were just checking it—you know, making sure it passed the "Soldier" test. We were mighty surprised when the pressurized fluid exploded all over the inside of the tent and almost set it ablaze! Luckily, we were able to put out the fire before the tent burned.

Of course, as any young Soldier could tell you, the "real" culprit was the writing on the box—it had lied! In fact, all three of us said, "The box lied!" in unison. Never mind that it was our Soldier test that almost set the tent on fire. After further thought, we decided to keep our little experiment a secret from our sergeant. We didn't want him to be worried about us or anything.

Leaders, when you're doing risk management and assessing hazards, remember there are young Soldiers for whom the word "impossible" only represents an irresistible challenge. They don't always know what can harm them, and there is not enough luck in the world to save them all. That's why it's important to look at the hazards and develop a plan to protect young Soldiers from themselves. It's called risk management and takes only five steps:

1. Identify hazards
2. Assess hazards
3. Develop controls and make decisions
4. Implement controls
5. Supervise and evaluate

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A Live But

Five M2 Bradleys from the unit's third platoon pulled up at a large wadi near their forward operating base and prepared to test fire their crew-served and individual weapons into the wadi. Following that, they'd planned to mount their vehicles, cross the line of departure (LD), and conduct a combat mission in a nearby town. The unit had test fired their weapons into the wadi on several occasions, following the example of the unit they'd replaced. Everyone was focused on the impending combat mission of finding weapons caches, improvised explosive devices, and snipers.

The Bradleys dropped off their dismounted squads, and four of the vehicles moved to the firing line at the edge of the wadi. However, the fifth Bradley—located on the far right—stopped about 10 feet further back than the others. As the crews began firing their 7.62 mm M240C machine guns, the fifth Bradley's M240C jammed three times. The Bradley commander (BC) raised the gun and dropped down inside the turret to conduct clearing procedures.

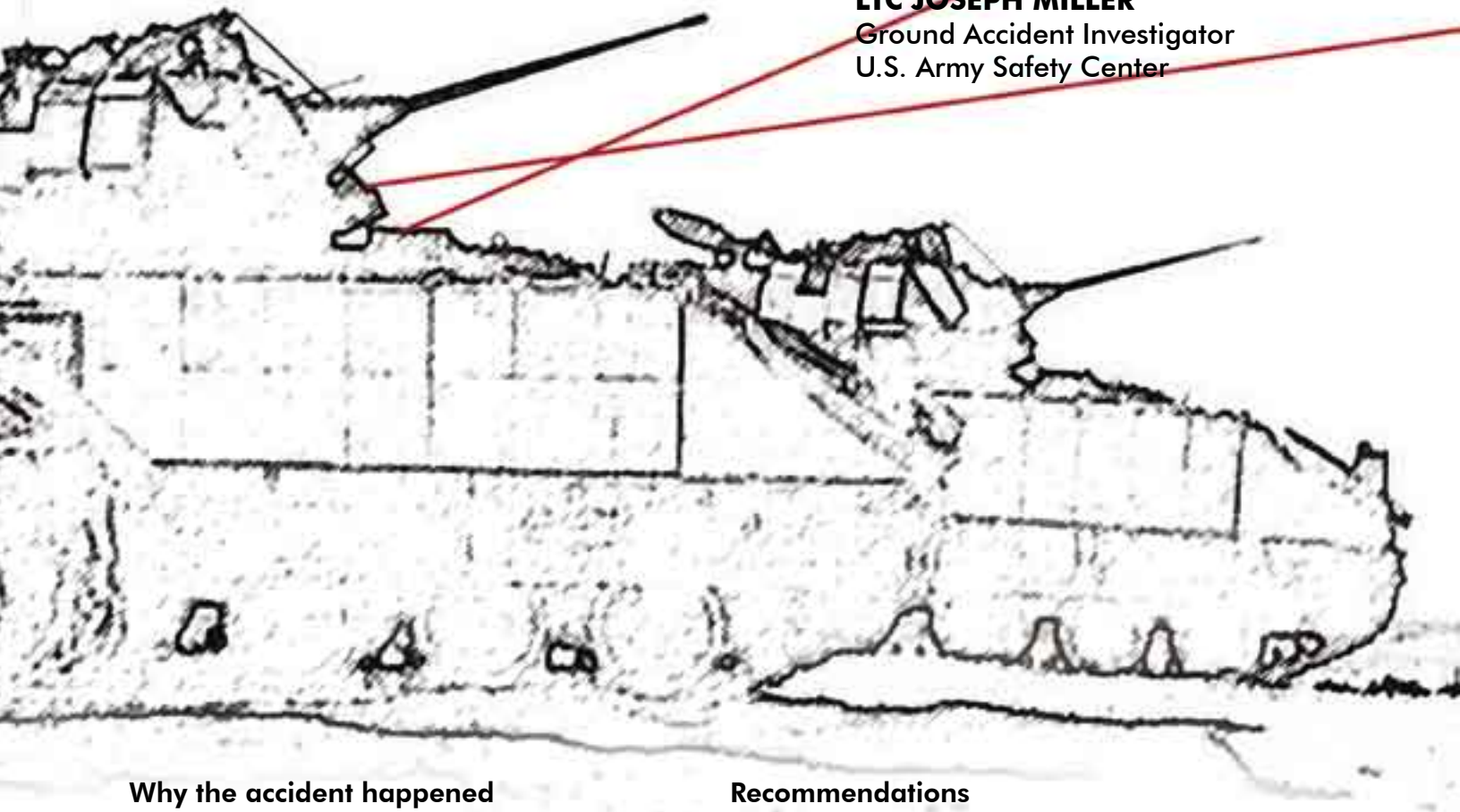
The third platoon's dismounted squads normally waited for their Bradleys to finish firing before moving to the firing line. However, while they were waiting, they were joined by dismounted squads from the second platoon, whose Soldiers were accustomed to test firing their weapons next to their vehicles. A second platoon squad leader led his Soldiers forward through the third platoon and positioned his Soldiers on the firing line to the right of the Bradleys. The rest of the dismounted squads from both platoons soon moved forward and began firing into the bottom of the wadi.

Because they were conducting combat operations, no one considered the test fire area a range. As a result, no one saw a need for a risk assessment or to have an officer in charge, range safety officer, surface danger area diagram, or range overlay as prescribed in Army Regulation 385-63, *Range Safety*, and Field Manual 3-22.1, *Bradley Gunnery*. No one asked if higher headquarters had any requirements for conducting test fire operations in the theater of operations. Everyone's focus was on crossing the LD and conducting the subsequent combat mission.

The BC removed the jam—caused by uneven links in the ammunition belt—and then directed his gunner to continue test firing the M240C into the wadi. Before the weapon jammed, the gunner had set his optics on high magnification and left them on that setting. When he aimed again into the wadi, his now tunnel-like field of view made it hard for him to see anything near the vehicle. As he prepared to continue firing, he lowered the Bradley's weapons and turned the turret slightly to the right. At just that moment a third platoon Soldier walked to a point about 20 feet ahead and five feet to the right of the Bradley. Neither he nor anyone else noticed the M240C's muzzle aiming in his direction. The BC gave the command to fire before rising from the turret to ensure the firing area was still clear. The M240C fired, hitting the Soldier and killing him.

DEADLY FIRE

LTC JOSEPH MILLER
Ground Accident Investigator
U.S. Army Safety Center



Why the accident happened

- Test firing weapons en route to crossing the LD had become routine. As a result, leaders were focused on the combat mission and had become complacent about the test fires.
- The previous unit had successfully performed their mission during their more than year-long assignment in a combat zone, so the new unit simply followed their example. As a result, the new unit didn't question whether the test fire operation was safe, or ask if there was a higher headquarters requirement to validate the area.
- No one in the chain of command considered the area a range, and so no centralized command and control measures were in place to ensure safety. In addition, the battalion master gunner hadn't provided adequate guidance to the battalion commander to ensure the dismounted squads were safe when the Bradleys fired.

Recommendations

- Commanders and leaders must conduct the risk management process before each mission. Risk assessment is much more than just another form to fill out. Risk management is a thought process that enables leaders to identify dangers and establish control measures to successfully and safely execute their mission. It's extremely important to conduct this process before beginning a combat operation.
- Leaders must maintain command and control of their Soldiers while conducting live-fire operations.
- Vehicle commanders must ensure a clear field of fire before ordering gunners to test fire their weapons.

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It's Not Just

Soldiers serving in Iraq and other regions in Southwest Asia already have a lot to worry about. A hostile enemy, improvised explosive devices, and the oppressive desert heat are just a few of the many challenges. And, for those that aren't careful, "weeping, painful sores" might be added to that list.

Since the beginning of Operation Iraqi Freedom, several Soldiers and other service members have been diagnosed with cutaneous leishmaniasis, or "Baghdad Boil." The disease, spread by sand flies, causes mild to severe skin lesions that take months to heal and can be disfiguring. Like malaria and other insect-borne afflictions, leishmaniasis has been around for a long time and is found all over the world. There isn't a vaccine to thwart it, but leishmaniasis is treatable and, most importantly, preventable.

Prevention begins with awareness, and Soldiers should be aware of the sand fly's habits. Only one-third the size of mosquitoes, these silent flies are most active from dusk to dawn, but frequently feed during daylight hours. They easily can fit through the mesh of bed nets and are nuisance biters, meaning they bite repeatedly—some Soldiers have reported being bitten more than 100 times!

a Bite

JULIE SHELLEY
Staff Editor

Once infected, it may take several months for a Soldier to exhibit the sores typical of leishmaniasis. These single or multiple ulcers can be extremely painful and don't get better on their own. Over a few weeks, the sores enlarge, crust over, and break down into slow-growing ulcers up to several centimeters in diameter. Soldiers with suspicious sores should seek medical attention immediately for accurate diagnosis and treatment.

It's important to remember that if you take the proper steps, you won't have to wait for the doc to come around. The DoD Insect Repellent System—properly worn BDUs treated with permethrin and DEET on exposed skin—is the best protection against insect bites and diseases like leishmaniasis and West Nile Virus. The BDU top should be worn with the sleeves down and the undershirt tucked inside the pants, which should be tucked into the boots. Permethrin is available as an aerosol spray (NSN 6840-01-278-1336) or an impregnation kit (NSN 6840-01-345-0237). To protect exposed skin, apply a thin, even layer of DEET-containing product to uncovered areas such as your hands, neck, and face. A long-lasting, 12-hour lotion containing 33 percent DEET is available under NSN 6840-01-284-3982.

> **"Prevention begins with awareness, and Soldiers should be aware of the sand fly's habits."**

Don't forget to protect yourself while you sleep. Always use a permethrin-treated bed net (NSN 7210-00-266-9736 for netting, NSN 7210-00-267-5641 for poles) in your sleeping quarters or tent. There is enough product in a single can of aerosol permethrin to treat one uniform and one bed net.

For more information on leishmaniasis, visit the U.S. Army Center for Health Promotion and Preventive Medicine Web site at **http://chppm-www.apgea.army.mil**. An educated Army is one that's ready for the fight. Arm yourself with the facts and make it home!

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McMurphy

CW3 MICHAEL MCMURPHY
A Co., 1-14th Aviation Regiment
Fort Rucker, Ala.

After a summer of temperatures that hovered near the 100-degree mark, the cooler fall days were looking good for my favorite sport—motocross racing. The fall race series was coming and I had to practice for Sunday's competition, so I packed up my dirt bike and headed to the track. When I arrived, I found out the track manager had changed the track layout, so practice was a must.

It was a Friday, and that evening I was going to fly a night system gunnery mission to train two students attending the AH-64 Apache aircraft qualification course. The show time for work was 5 p.m., so I had the whole day to myself. I could have fun and still have time to shower and make dinner before work.

I was the only rider on the track. I'd always told myself never to ride hard unless someone was there to call 911 should I crash and need help. I was getting the track timing and rhythm just fine when a guy drove up to ride with his young boys. I knew it was about time to go but now, with someone there, I thought I'd open it up and try to reduce my lap times. The manager was grooming a section of the track, so I stopped to say hi and told him I'd see him on Sunday. Then I took off on my final lap.

"Murphy's Law" says that if something can go wrong, it will—and usually at the worst possible time. I found this out the hard way as I tried something new. I hit a set of jumps faster than

's Law

normal to see if I could clear all three instead of the usual two. That was a big mistake! My back tire hit the second jump and threw me over the handlebars into the third. I landed hard on my left shoulder and heard a "crunch." I barely had time to think "That hurt!" before my 250-pound bike landed on me, smashing my right side.

I thought I was paralyzed. I moved my toes inside my boots and then I moved my fingertips. I knew I was somewhat OK, but I still couldn't move my torso.

I always wore the proper riding gear, including a chest protector and shin and knee guards. Wearing that gear paid off! The rear tire still had power to it when it landed on my right shoulder and then hit me in the head. The rear axle hit the back of my helmet. Despite all this, I remained conscious.

I went to the hospital in a privately owned vehicle. While I was at the hospital I was given multiple painkillers and X-rayed from head to toe. I found out that I would still be able to walk and was released.

I missed work that evening. I felt really bad because my peers had to pick up the slack. In addition, my students had to fly with another instructor, which interrupted the continuity in their training. My wife had a tough week at work and now she had to take care of me. Luckily, I had all weekend to rest.

This incident ended up being reported as a Class C ground accident. We were in the simulator the following week, which I was only able to do by keeping myself on some serious painkillers. If I'd had to fly, I would've had to ask one of my co-workers to fill in for me. I was grounded for two weeks and, five months later, still hurt and couldn't race.

I learned something from that accident—I call it "McMurphy's Law." No matter what else I am doing, I am still a Soldier. I can't afford to put myself first, not even for my favorite sport, if it means not being there for other Soldiers who rely on me. I owe it to them to show up physically prepared, not injured from an avoidable accident. And as for my hobby, I have to be honest with myself. I'm 37 and can't take falls like that anymore.

Enjoy your hobbies and sports, but choose them carefully. And while you're out there having fun, remember to take your job as a Soldier seriously. Your friends, family, and unit are depending on you.

CW3 McMurphy is an instructor pilot for the AH-64D Apache Longbow. His 15 years of combined Navy and Army active-duty service include 11 as a helicopter pilot. In addition to working as an instructor pilot, CW3 McMurphy also serves as the acting assistant safety officer for his unit. He may be contacted at (334) 255-5058, DSN 558-5058, or via e-mail at michael.j.mcmurphy@us.army.mil.

An Unexpected Maneuv

CW5 WES HEDMAN
U.S. Army Safety Center

Accidents don't always happen to the other guy. The following is a true story from days gone by that is as relevant as ever. You never know what's lurking just around the corner.

There I was, riding my Kawasaki KZ 750 motorcycle on a bright and sunny Thursday afternoon in the summer of 1985. I'd just completed my annual physical at the troop medical clinic, and I was headed back to my unit at the local airfield. I felt good that I'd pulled another one over on the doctors and received a clean bill of health. However, my flight status was about to be jeopardized for good.

I was traveling westbound on a secondary road that led through post toward the airfield. The speed limit was 30 mph, and I was abiding by the law (not unusual, but I've had my moments!). As I approached a bank on my right, a car in the oncoming lane turned immediately in front of me into the bank's driveway.

Added to the driver's abruptness was another problem: He turned into the exit lane, which was directly in my path. This maneuver was completely unexpected. After all, the exit was clearly marked. The bank was open, and all the cars in the drive-

through lanes were pointed toward this exit. I never could have predicted that driver would turn right in front of me into the wrong lane of a busy bank!

My options were limited. With a lane full of oncoming traffic to my left, a rather deep ditch to my right, and the car directly in front of me, I quickly executed the "brake and slide for life" maneuver. I braked and allowed the bike's rear to slide toward my right side as the front forks impacted the car's right-rear quarter panel.

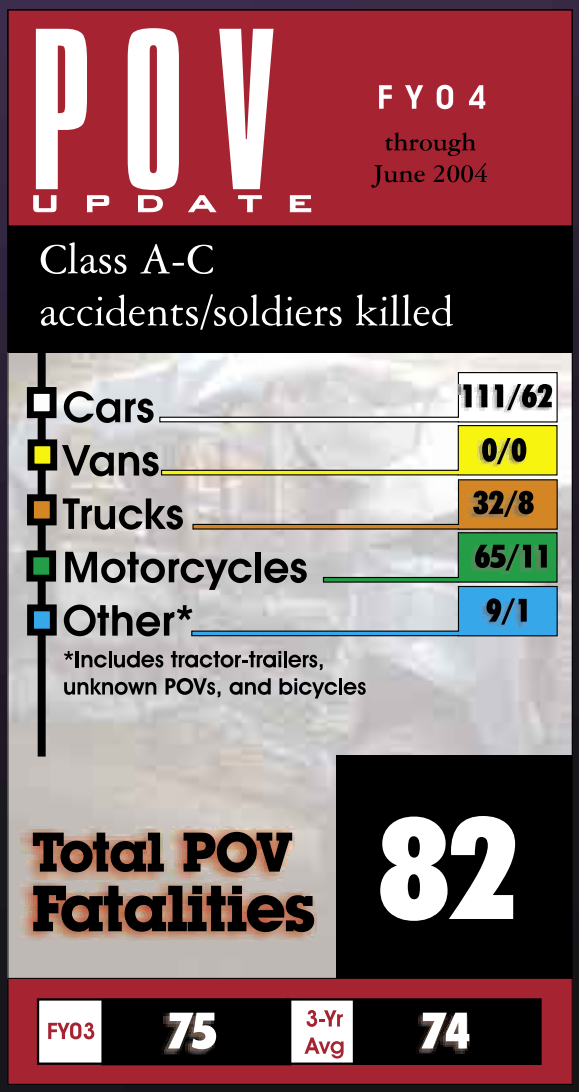
I've never been able to remember all the contortions I went through, but I do know my body's momentum carried me over the top of the handlebars. I flew over the car's trunk and landed flat on my back in the middle of my lane, dazed and seeing stars. Several Soldiers witnessed the accident and came running to pick me up from the road.

The wrong-way driver continued to pull forward and was now blocking the exit. He climbed out of his vehicle and just stood there. Other than being dazed, he didn't seem to be suffering any ill effects from our unfortunate meeting.

I was wearing my helmet and vest, flight suit, and boots, so I didn't suffer any road rash. My injuries—which included the biggest goose eggs I've ever seen on my shins and some significant bruises—were minor compared to the potential effects of such an accident. The next day my right shoulder hurt really bad, and I couldn't raise my right hand above my chest. My bike fared a lot worse and was pretty much totaled. But thankfully, I had walked away.

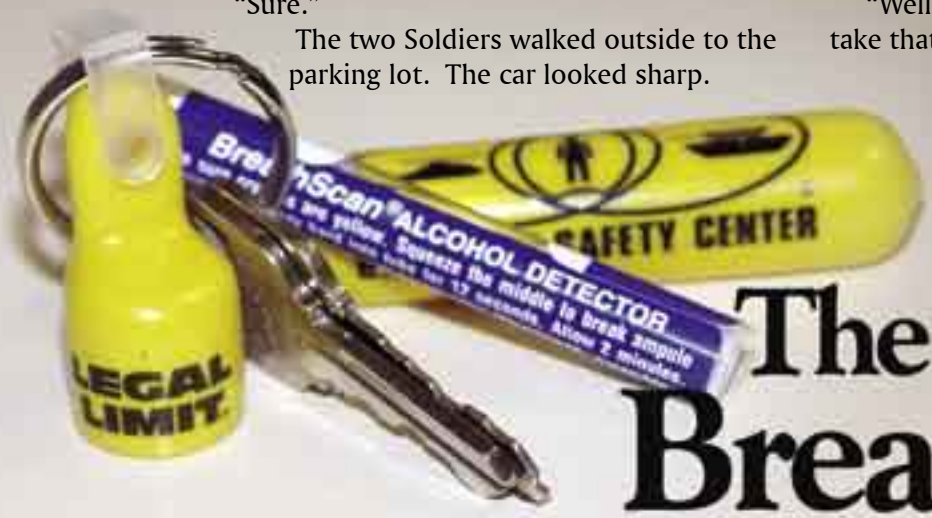
Before the accident, I considered myself a good defensive driver. I had avoided many collisions in the past with cars that did not yield my right of way. However, this incident proved to me that you can never be cautious enough. The other driver couldn't explain his actions or why he entered the exit ramp. I think he just made a wrong turn and, in his haste to reverse course, took the first available ramp. Whatever the circumstances, in the end it was my situational awareness, a quick maneuver (which I knew to do because of my Motorcycle Safety Foundation training), and the protection provided by my helmet, clothing, and boots that saved the day.

CW5 Hedman is Chief, Aviation Safety Training Division, at the Army Safety Center. He may be contacted at (334) 255-2376, DSN 558-2376, or via e-mail at hedmanw@safetycenter.army.mil.



The Breath of Life

BOB VAN ELSBERG
Managing Editor



"Hey Mike, how's it going? Looks like you're partying tonight!"

"Yeah, Jerry—I'm lovin' life. Did you see my new wheels?"

"No, whaddya get?"

"New Chevy Monte Carlo Super Sport."

"Must have been expensive."

"It was—but I used the money I saved while I was in the sandbox. Come on out and see it."

"Sure."

The two Soldiers walked outside to the parking lot. The car looked sharp.

"Wanna go for a ride?" Mike asked.

"I dunno—how many beers you had tonight?"

"A few, but hey—I can handle it."

"Let me see your keychain—you know, the one with the little yellow tube-looking thing on it."

"Huh? Why?"

"Let's see what colors show up when you blow into the breathalyzer."

"Oh man—give me a break!"

"Would you rather be doing this on the side of the road for a cop?"

"Alright—but this is stupid, I'm fine."

Jerry pulled the cap off the Legal Limit BreathScan tube. He pulled out the little plastic bag that held the breathalyzer and the instructions. He read them and then handed the breathalyzer to Mike.

"Here—squeeze the middle of the tube until you feel the glass ampule inside break."

Mike squeezed the tube between his thumb and forefinger. It took a bit of pressure, but he felt the ampule break.

Jerry told him, "OK, blow hard for 12 seconds into the end of the tube."

Mike did as his friend asked but thought the whole thing looked pretty stupid. When he was done, Jerry took the tube, shook it, and waited a couple of minutes.

"Hmm … look at this," Jerry said as he held the tube so Mike could see the crystals inside. They'd been yellow to start with, but now they'd turned blue.

"What does that mean?" Mike asked his friend.

"It means you're blowing positive for alcohol—but you're not legally drunk. If you were, the crystals would be green."

"Well, that's good news! I guess it means we can take that ride!"

"Not so fast! When did you have your last beer?" Jerry asked.

"I just finished it when you walked in."

"It takes 30 to 90 minutes before alcohol's full effect hits you," Jerry said. "A half hour from now, you could be getting a DUI ticket or find yourself wrapped around a tree. I'll tell you what, I'll call a cab. I'll even pay for it."

"OK, you made your point. Can I have my keys back?"

"Not 'till I see you in formation tomorrow. That way I'll know you're alright."

OK, this was a fictional story, but it's one that has played out for many Soldiers in Europe, according to Lawrence Martin, owner of Legal Limit BreathScan, Inc. He explained how the company partnered with U.S. Army Europe (USAREUR) in a successful effort to help curb drinking and driving. Seeing the success in USAREUR and the interest of other DOD agencies, the Army Safety Center purchased 22,000 BreathScan key fobs. They're being provided to Soldiers through installation management agencies and major commands. If the program is successful, the ultimate goal will be to provide one to every Soldier.

For more information on this program contact Mr. Al Brown at (334) 255-3656, DSN 558-3656, or e-mail james.brown@safetycenter.army.mil; or Mr. Mike Evans at (334) 255-2643, DSN 558-2643, or e-mail mike.evans@safetycenter.army.mil.

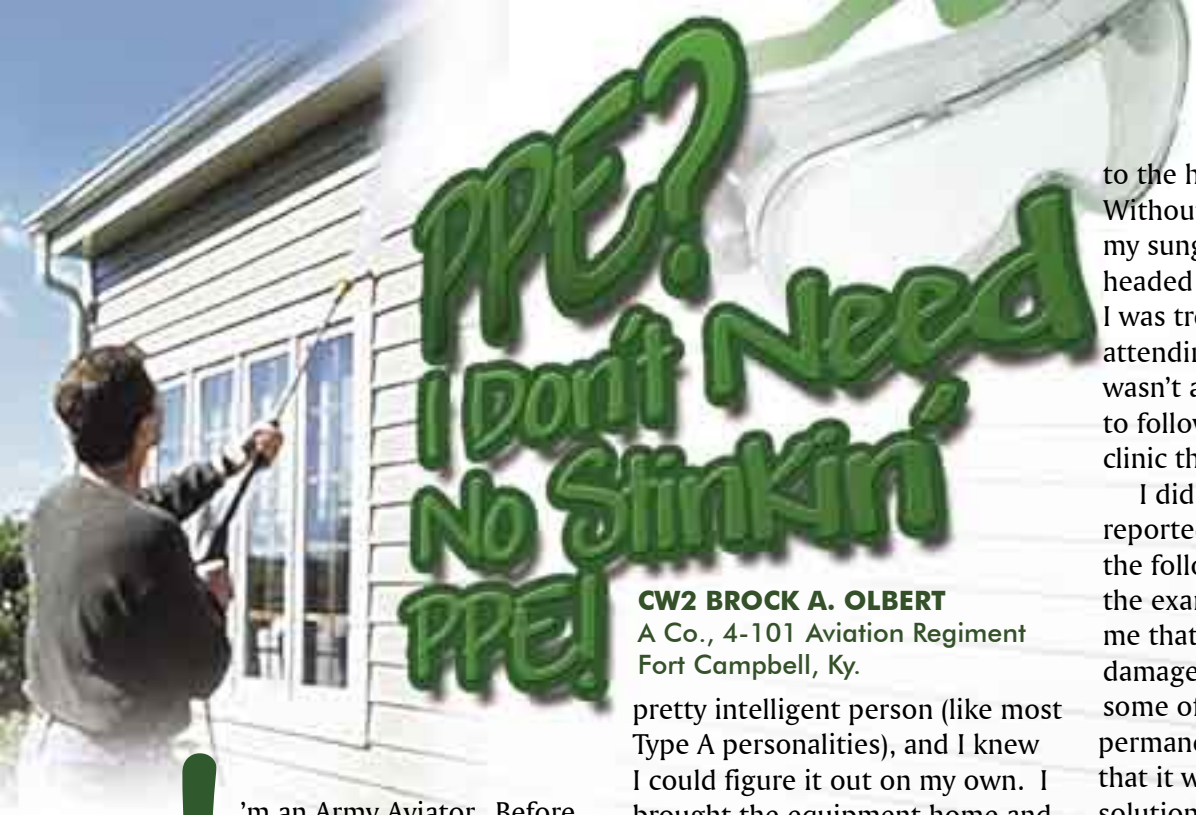
Safety Alert: Electrocution Hazard

During the past five years 12 Soldiers have been electrocuted by accidentally contacting overhead power lines. Most overhead lines are not insulated. Activities conducted near overhead power lines, such as stringing communications wire, erecting antenna masts, climbing into trees and onto buildings, and using metal ladders present a severe hazard to all personnel. Contact with overhead power lines often causes serious or fatal injuries.

Take the following actions to protect yourself and others:

- Survey your area for the presence of overhead power lines.
- Recognize the hazard they present to your operation.
- Consider all power lines energized and dangerous.
- Never throw communications wire over, or suspend it above, overhead power lines.
- Do not use metal ladders where they may contact overhead power lines. Use wood or fiberglass ladders instead.
- Do not erect an antenna mast unless the distance from overhead power lines is at least twice the height of the mast. Technical Bulletin 43-0129 has a lot of useful information on this topic and is available online at **http://www.monmouth.army.mil/cecom/safety/system/spub.htm**.
- Do not drive vehicles under overhead power lines when whip antennas are not tied down.
- Do not operate cranes or other lifting devices beneath overhead power lines.

Editor's Note: This Safety Alert was provided by the Directorate for Safety, Communications Electronics Command, Fort Monmouth, N.J.



PPE? I Don't Need No Stinkin' PPE!

CW2 BROCK A. OLBERT
A Co., 4-101 Aviation Regiment
Fort Campbell, Ky.

I'm an Army Aviator. Before I fly a mission, I do risk management so I can live to fly another day. However, it's funny how I and a lot of other Soldiers leave that mentality on post at the end of the day. While I was home from Korea on mid-tour leave, I learned safety isn't just for when you're on duty—it even works at home!

It was a beautiful day when I learned this lesson. I was down to my last "honey do" project. I was anxious to finish so I could head to the woods for some long-overdue deer hunting.

- The task: Pressure-wash the vinyl siding on my house.
- Conditions and equipment: A rented gas-powered pressure washer, an extension ladder, and a 24-hour time limit.
- Standards: Successfully clean the entire house and pass the "lipstick 06" inspection with zero defects.

I went to the local rental center and got the gas-powered pressure washer. I wasn't given any operational instructions, nor did I ask for any. I consider myself a pretty intelligent person (like most Type A personalities), and I knew I could figure it out on my own. I brought the equipment home and, within minutes, had it running and ready for my task.

The pressure washer was equipped with a hose that could be attached to a cleaning solvent container, but in my haste I failed to ask for one. Instead, I decided to seek an alternate method for applying my cleaning concoction. After all, I had a two-gallon herbicide sprayer. It could be filled with bleach and water, pumped up to maximum capacity, and used to spray the solution on the siding.

"What a super idea," I thought. But like so many super ideas before, it was a great plan with poor execution. Things were going well until the hose came off the container while I was pumping it. Bleach and water came out of the hole where the hose had been and hit me right in the eye. I immediately ran into the house and began flushing my eye with water.

After 20 minutes I still couldn't open my eye. I decided to call the emergency room to get some advice, which was to come to the hospital immediately. Without hesitation I grabbed my sunglasses and car keys and headed off to the ER. Once there I was treated and examined. The attending physician told me there wasn't any significant damage and to follow up at the troop medical clinic the next day.

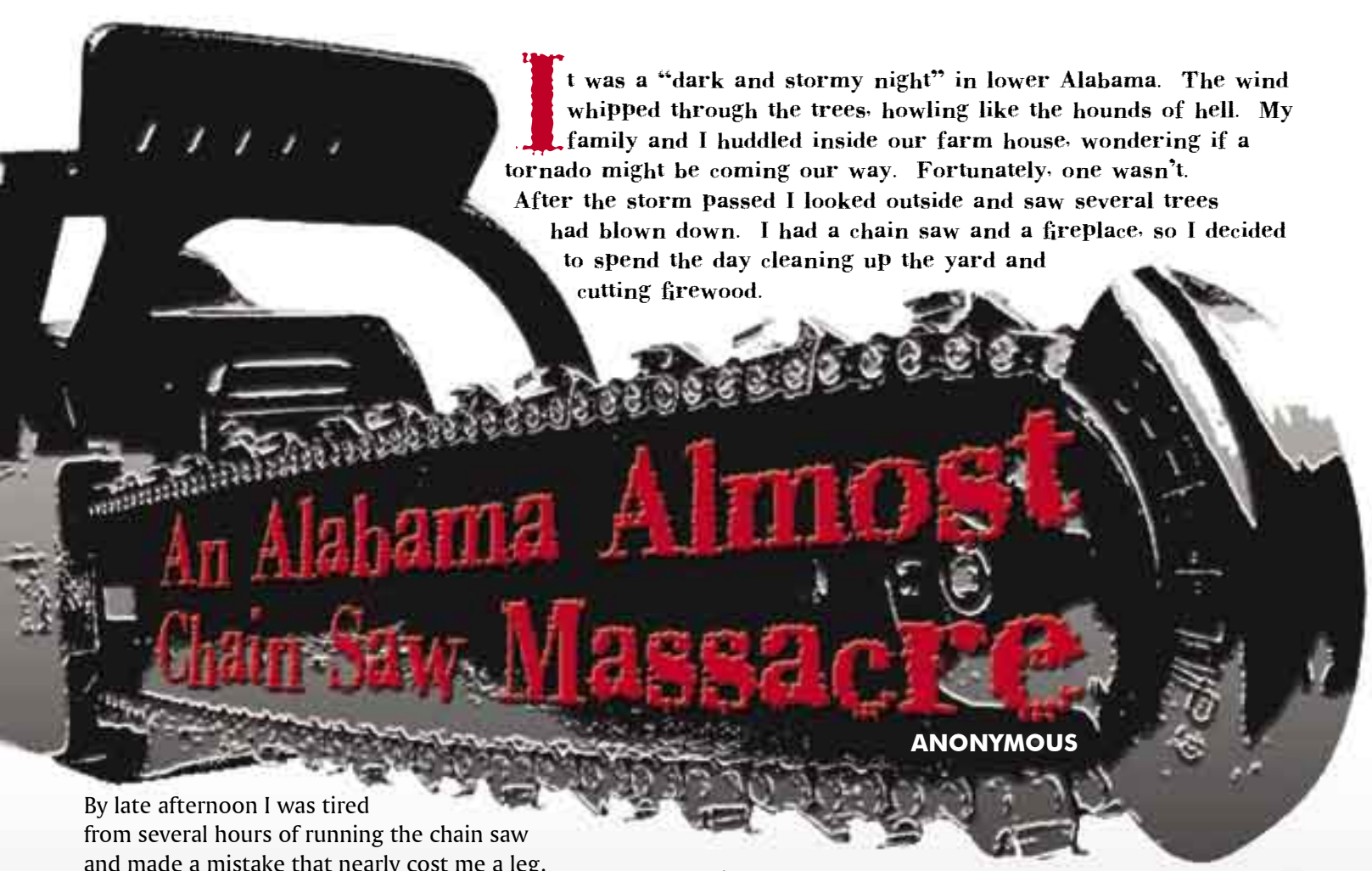
I did as I was told and reported to the optometry clinic the following morning. After the exam, the optometrist told me that I had suffered serious damage to my cornea, and some of that damage could be permanent. The doctor explained that it was the pressure of the solution that injured my eye. I had to return to the clinic every day for treatment and checkups until I left for Korea again.

Fortunately the treatment was effective, and I made a full recovery. I was very lucky and share this story as a means of reinforcement. All I needed to avoid this accident was a pair of protective goggles—and I had a pair hanging on my workbench in the garage. I just didn't take the time to put them on.

Too often Soldiers take shortcuts in their everyday household chores. Something as simple as wearing protective glasses while using power tools can stop a devastating accident. Safety doesn't apply only to your on-duty time. It should be taken into consideration and applied in every aspect of your life.

The Army executes the big missions well—it's the little things that get overlooked and cause accidents. Pay attention to those little details and be safe!

Contact the author via e-mail at brock.olbert@us.army.mil.



An Alabama Almost Chain Saw Massacre

ANONYMOUS

It was a "dark and stormy night" in lower Alabama. The wind whipped through the trees, howling like the hounds of hell. My family and I huddled inside our farm house, wondering if a tornado might be coming our way. Fortunately, one wasn't. After the storm passed I looked outside and saw several trees had blown down. I had a chain saw and a fireplace, so I decided to spend the day cleaning up the yard and cutting firewood.

By late afternoon I was tired from several hours of running the chain saw and made a mistake that nearly cost me a leg.

As I was cutting some small limbs, I turned the chain saw trigger grip loose to grab a small limb that was in the way. While I was reaching for the limb—which was no bigger around than my thumb—the tip of the chain saw's blade hit the limb. The saw kicked back and twisted in my hand. The still-turning blade swung around and hit the back of my leg hard enough to cut through my jeans. Fortunately, the saw missed cutting the back of my leg by a fraction of an inch.

That day I learned how important it is to always read and follow the safety instructions when using a saw. The manual warned users to always keep both hands on the saw to maintain control. Obviously, I hadn't followed that rule. I also learned that fatigue can set you up to make simple mistakes—ones that can lead to serious injuries when you're using power tools. Fatigue and ignorance of safety instructions are all it takes to set you up for a nasty accident.

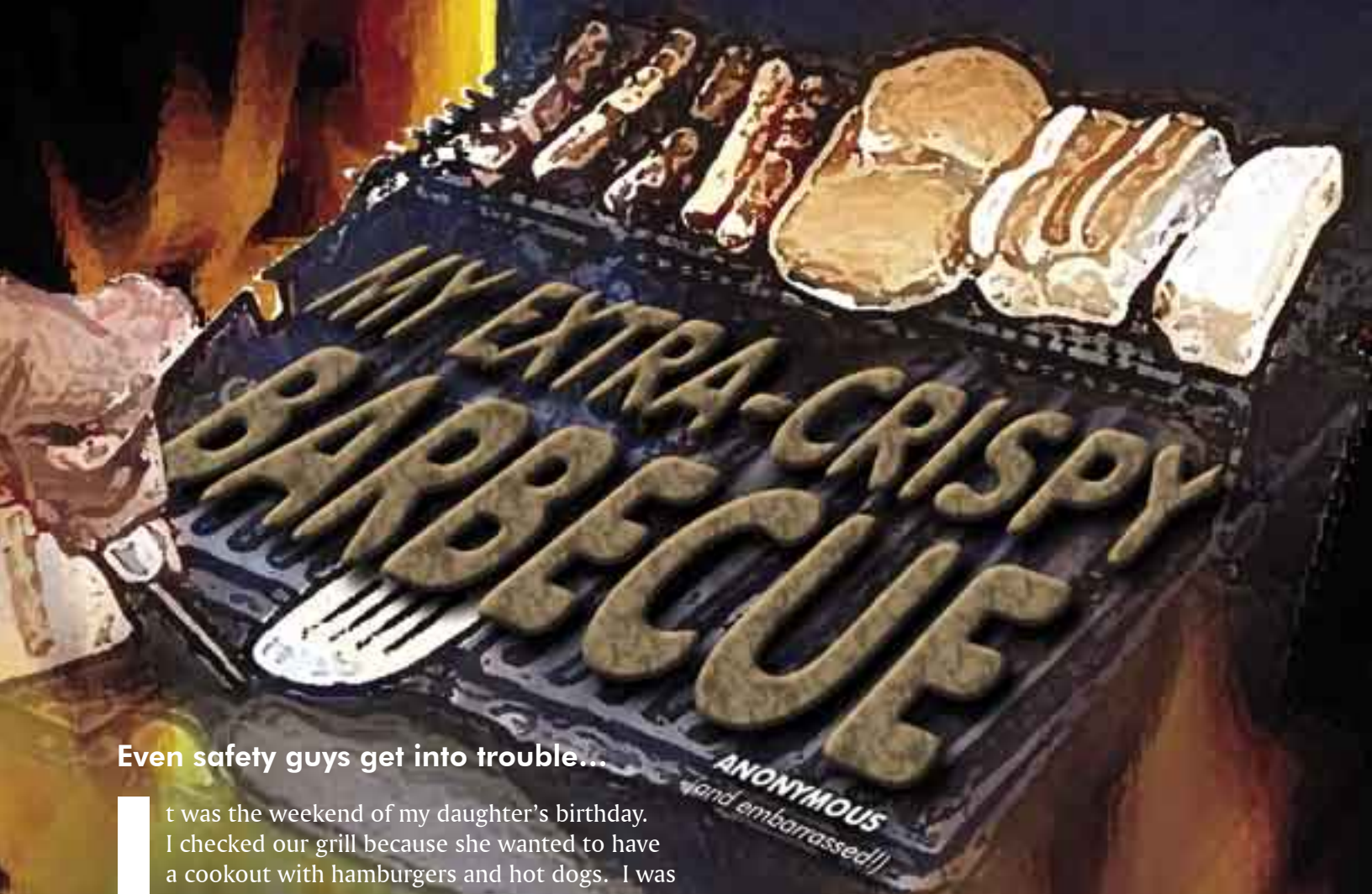
Here are a few safety tips when using chain saws:

- Read the owner's manual carefully before using.
- Wear protective clothing, including a hard hat, safety glasses, gloves, safety shoes, tight-fitting clothing, and hearing protection.
- Cut at full throttle.
- Quit if you get tired.
- When cutting a log on the ground, stand uphill so you're not in the path should the log roll downhill after being cut.
- Be sure your body is clear of the path the saw will follow after completing the cut.
- When carrying the chain saw, stop the engine, put the protective sheath in place, and carry the saw with the guide bar pointed behind you and the muffler away from your body.
- When starting the saw, rest it on the ground—not on your knee or leg.
- Let the saw do the work. Don't try to force the blade through the wood.
- Avoid sawing from a ladder or while standing in a tree.

Kickback is dangerous and occurs when the tip of the blade touches an object, such as a log or branch. To avoid kickback:

- Use a low-kickback chain. Replacement chains are available.
- Don't touch the tip of the blade to any object while the saw is running.
- Always hold the saw firmly with both hands.
- Employ the proper grip: Grasp the forward handle with your left palm down and your fingers tightly wrapped around the handlebar. Hold the rear handle firmly with your right hand.

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



Even safety guys get into trouble...

It was the weekend of my daughter's birthday. I checked our grill because she wanted to have a cookout with hamburgers and hot dogs. I was getting low on propane so I said, "Hmm … I'd better get my other propane bottles refilled." I grabbed the two empty cylinders and took them down to the shop, where I had them checked out and filled.

I came back and started the cookout. Because the old bottle was so close to being empty, I put the new bottle underneath the grill beside it. That way it would be ready when the old bottle ran out.

We cranked up the grill, threw on the hot dogs and hamburgers, and started having a good old time. While I was happily cooking on top of the grill, the full bottle of propane was getting steadily hotter underneath it. The next thing I knew, flames were boiling out from underneath my grill. I thought, "Oh no! Maybe my old grill has finally given up the ghost and the gas is escaping somewhere." But when I looked underneath the grill I saw the problem—the second bottle was on fire!

Propane bottles have a pressure relief valve that is used to eliminate air from the bottle when it's being refilled. Well, there that valve was, shooting out flames! The new bottle underneath my grill had gotten so hot the propane, which was expanding under the heat, was venting through the pressure relief valve. And lucky me, just inches away was an ignition source—my flaming burners.

This was really nice, what with me having about 20 or 30 people sitting around the house. I ran inside, grabbed the fire extinguisher, and came back out and began fighting the fire on the bottle, which was still spouting flames. The grill's wooden frame caught fire and the flames burned and melted everything else—including the cooking temperature controls. I kept spraying the bottle with extinguishers until I knocked the fire down. Knowing the bottle was going to be hot, I put on some insulated gloves, grabbed the bottle, and pulled it out.

The main thing you have to remember is this bottle was still hot. Boyle's Law says the more temperature you put to gas, the more it will expand. So I put the bottle in the middle of the yard, got out the water hose, and sprayed it down to cool it.

What did I learn from all this? Don't think of the space under your grill as a good place to store extra propane bottles. Remember the three legs of the fire triangle: oxygen, fuel, and heat (ignition source). The environment provides the oxygen, the extra propane bottle—when it gets hot enough—provides the fuel, and with your grill's burners just inches away—guess what you've provided?

ACCIDENT BRIEFS

Information based on preliminary reports of ground accidents.

ACV

Class A

■ Soldier died when the M1A2 Abrams he was riding in rolled off a bridge, causing fatal head injuries. The deceased Soldier was the track commander. The tank's driver and gunner were injured. The Soldiers were on a reconnaissance patrol when the tank's track broke, causing the driver to lose control.

AMV

Class A

■ Two foreign national civilians were killed when their vehicle was rear-ended by an M915A1 tractor truck. The truck was part of a convoy, and the driver switched lanes to avoid hitting another convoy vehicle. The driver and truck commander were not injured.

Personnel Injury

Class A

■ Soldier died after collapsing during PT. No other details were reported.

■ Soldier drowned while swimming with three other Soldiers in a local lake. One of the other Soldiers attempted to rescue the deceased Soldier, but was unable to help.

■ Soldier was killed when he was struck by friendly 155 mm stet during a counter-fire mission. The deceased Soldier was part of a ground patrol. One other Soldier was injured.

■ Soldier died after falling from his third-story barracks window. The Soldier suffered a broken neck in the fall. The accident occurred during the early morning hours.

POV

Class A

■ Three Soldiers and one civilian were killed in a three-vehicle collision. The Soldiers were in two separate vehicles when one crashed into the back of a parked flatbed trailer being used for road work. The second vehicle then hit the first. All three Soldiers died from the impact. The truck's driver, who was placing cones along the highway at the time of the accident, also was killed.

■ Soldier died after being ejected from his vehicle during a rollover. The Soldier was trying to avoid another vehicle backing out of a driveway. The vehicle rolled after the Soldier overcorrected and lost control. The Soldier was on terminal leave at the time of the accident.

■ Soldier suffered fatal injuries when his vehicle ran off the roadway and struck a tree. No other details were provided.

■ Soldier suffered a permanent total disability when his motorcycle left the roadway and struck a house. The Soldier's spinal cord was severed, causing paralysis.

■ Soldier was killed when her vehicle ran off the roadway and struck a tree. The Soldier lost control of the vehicle just before the accident.

■ Soldier died after his vehicle hit a tree. The Soldier apparently overcorrected the vehicle after it left the roadway, causing it to cross the highway and hit a culvert before impacting the tree. The Soldier was wearing his seatbelt, but excessive speed is listed as a contributing factor.

■ Soldier suffered fatal injuries after the vehicle he was riding in was struck head-on by another vehicle traveling the wrong way on an interstate. The Soldier was wearing his seatbelt.

■ Soldier was killed when his vehicle crossed the centerline and struck another vehicle head-on. The Soldier, who was not wearing his seatbelt, was on post for morning PT.

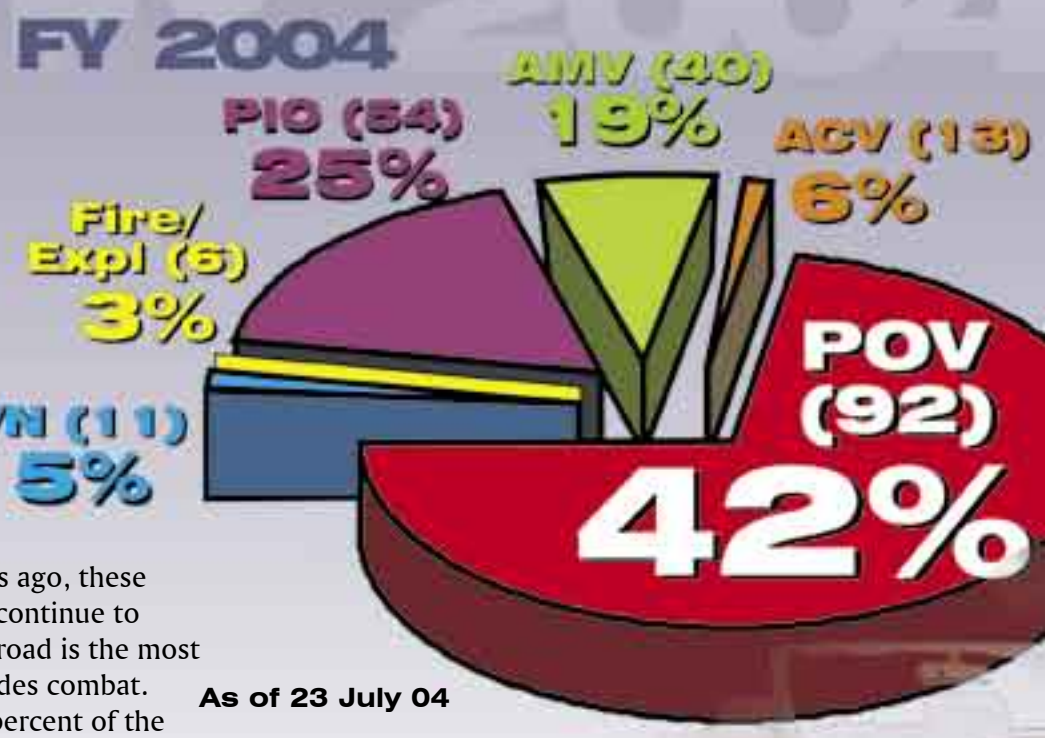
Class B

■ Soldier suffered a permanent partial disability when the POV he was riding in was involved in a head-on collision with another vehicle. Two other Soldiers were in the same vehicle and suffered injuries. The Soldiers were wearing their seatbelts.

Attacking POV Accidents

As an Army at War, we need every trained Soldier for our fight. Roadway accidents continue to take a toll on our formations, and we must do something aggressive about it. The Army Safety Campaign's goal is to make the fight personal and engage Soldiers at all levels to make a difference.

Here are some round numbers to think about: Our Nation lost more than 58,000 service members during a 10-year period in the Vietnam War. By comparison, an average of 54,000 highway deaths was reported each of those 10 years on U.S. highways! That was 30 years ago—so, how are we doing now? The National Highway Traffic Safety Administration reported more than 42,000 deaths in 2002 and about 43,000 in 2003 on America's roadways. While that is better than 30 years ago, these numbers remain staggering and continue to increase. The bottom line: The road is the most dangerous place you can be besides combat.



As of 23 July 04

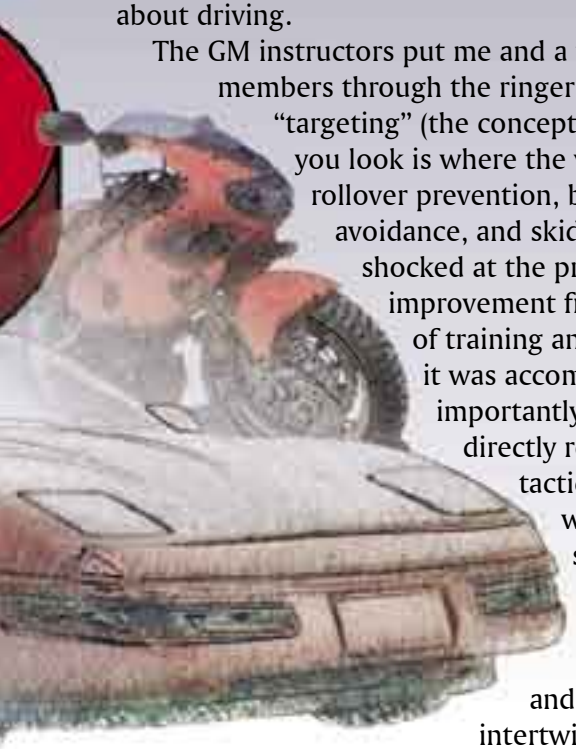
During the past 10 years, 55 percent of the Army's accidental fatalities resulted from POV accidents. Despite strong leader involvement, this rate remained constant through 2003—a clear indication we're not making a difference. It's time for aggressive change. Leaders must remain involved and renew their focus on standards, discipline, accountability, and—most importantly—training.

As an Army, let's take a closer look. During the past two years, 179 Class A POV accidents resulted in 173 fatalities. A breakdown of these accidents shows that 144 involved automobiles (sedans, trucks, vans, or sport utility vehicles), 33 involved motorcycles or all-terrain vehicles, and two involved tractor-trailers or other vehicles. Only 56 of the Soldiers involved in these accidents were passengers—the other 147 were driving the accident vehicle. These Soldiers were listed as "at fault" or made mistakes in 121 (67 percent) of the accidents. Excessive speed was the predominant mistake made by Soldiers (23 percent), followed by failure to use required safety equipment (15 percent), failure to stay alert (15 percent), alcohol use (15 percent), and driving while fatigued (8 percent).

The chart above shows the Fiscal Year 2004 breakdown of POV fatalities for non-deployed units. Central Command Soldiers deployed to operational theaters were not included, since they don't use POVs. This leaves about two-thirds of the Army, where we've already lost 92 of our highly trained Soldiers to POV deaths. That's nearly three-fourths of all non-deployed accidental fatalities!

Historically, POV safety has been a tough area to attack because we perceive there are few control measures and almost no opportunities for supervision. However, hope is not a method for better results. As the Chief of Staff, Army, says, "We need to look at safety from a different perspective." We must apply training, standards, and discipline to this problem. These time-proven control measures will work, but it won't be business as usual.

I just returned from a visit to General Motors (GM), which is now in partnership with the Army to reduce POV accidents. This partnership has nothing to do with products or contracts—just sharing POV safety. For the past 10 years, GM has provided advanced driver skills training to all their employees and family members. This training takes only one day and will completely change the way you think about driving.



The GM instructors put me and a few staff members through the ringer teaching us "targeting" (the concept that where you look is where the vehicle goes), rollover prevention, braking, avoidance, and skids. I was shocked at the proficiency level improvement from one day of training and how safely it was accomplished. Most importantly, this training directly relates to tactical vehicles as well. I drove several vehicles of all types, sizes, and conditions, and the techniques intertwined seamlessly.

Using the GM model, I believe we quickly could set up a driving course in every state at minimal cost. GM will "train the trainers" for free with their equipment at our installations. Initial training takes about three days, and the new instructors can be trained fully in about three weeks by practicing on each other. Training for our Soldiers is all "hands-on" and can be accomplished on a 1000' x 1000' blacktop area. Once fully trained, four instructors can teach approximately 25 drivers per day.

While these new initiatives are being developed, use the "POV Toolbox" link on the Safety Center Web site at **https://safety.army.mil**. Also online, the ASMIS-1 POV module is gaining momentum. This tool gets leaders engaged with their subordinates in trip planning and risk management, and easily can be implemented as a standard for every Soldier on leave or pass. To date, more than 8,000 users have registered for ASMIS-1. Of those users, only one Soldier has been involved in a POV accident, and he wasn't the driver! Also, we're making keychain-size breathalyzers available everywhere to help sober drivers get the keys from their impaired buddies.

"The bottom line: The road is the most dangerous place you can be besides combat."

As a final thought, remember the part motorcycles play in our numbers. Returning Soldiers have money for new vehicles—especially motorcycles. For example, AAFES has nearly 5,000 motorcycles, cars, and trucks awaiting delivery. During the past two years, 34 Soldiers were involved in 33 fatal motorcycle accidents (one Soldier was a passenger). Soldiers driving motorcycles were at fault or made mistakes in 22 accidents (66 percent). Excessive speed (36 percent), failure to use required safety equipment (18 percent), and alcohol use and inadequate planning (9 percent each) were the most common causal factors.

Take a hard look at your formations. Make POV and motorcycle fatalities personal. **Make a difference—we are an Army at War and an Army that cares!** ★

BG Joe Smith
Director of Army Safety

got a story to share?

We're all ears when it comes to hearing your hard-learned lessons on safety. You're out there on the front lines, getting first-hand experience on the safety issues that are important to Soldiers. Don't be a stranger—we need your stories on the following topics:

- Deployment/redeployment lessons learned
- Convoy operations—stateside and overseas
- Safely dealing with IEDs
- Accidental discharges
- Pre-mission trip planning
- Rollovers
- Surviving the weather
- Dealing with critters that bite and sting

If you've got a story to share and have access to e-mail, just fire it off to countermeasure@safetycenter.army.mil. If "snail mail" works best, send your story to:

U.S. Army Safety Center
Countermeasure
Bldg. 4905, 5th Avenue
Fort Rucker, AL 36362-5363

Be Safe!

U.S. ARMY SAFETY CENTER

ARMY GROUND RISK-MANAGEMENT INFORMATION

Countermeasure

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Deployment Safety

Where the Rubber Meets the Road

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Countermeasure
ARMY GROUND RISK-MANAGEMENT INFORMATION

CONTENTS

features

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DASAF'S CORNER
From the Director of Army Safety

The Next Greatest Generation
Grasp the Knowledge, Sharpen the Skills, and Retain the Abilities

On a recent trip to Washington, D.C., the sight of the World War II Memorial brought clarity to a message I've heard in the last several weeks. The World War II Memorial honors the 16 million Americans who served in the armed forces, the more than 400,000 who died, and all who supported the war effort from home. Symbolic of the defining event of the 20th century, the memorial is a monument to the spirit, sacrifice, and commitment of the American people. On May 27, 2004, the public was invited to the unveiling ceremony to view this tribute to America's "Greatest Generation."

As we look to the future, the Global War on Terrorism is demanding that our 21st century Army and its Soldiers embrace the spirit of the Greatest Generation. We are an incredible Army—resourced for success and transforming to meet tomorrow's challenges. Our Soldiers are returning from battle with a degree of knowledge and experience that, at a minimum, would take years of schooling and rigorous training to match. Our duty is to grasp the knowledge, sharpen the skills, and retain the abilities of the Army's newest generation.

Grasp the knowledge of our junior leaders and coach "composite risk." By focusing energy on our current combat leaders, we can simultaneously capture lessons learned and implement control measures that will mandate how warfighting and training will be conducted in the 21st century. Specifically, we must not lose the insight of the leaders who understand tactical risk firsthand, or those who experienced accidental risk personally. We are not there yet. After visiting several units in Iraq last month, it was clear that we still have a "mental barrier" to blending tactical and accidental risks into a "composite" picture. That is, to view the risk of losing combat power holistically. When you are dead, you're dead—regardless of whether a bullet or an accident took you out of play. Our Mission Ready Exercise (MRX), Pre-deployment Site Survey (PDSS), Relief in Place (RIP), and Military Decision-Making-Process (MDMP) must come together in a way that not only captures lessons learned from our junior leaders, but also coaches the art of "composite" risk mitigation.

When I ask new convoy commanders about their biggest threat, most say with great confidence "IEDs!" (Improvised Explosive Devices). When I ask new air mission commanders what their biggest threat is, they say without a doubt it's "MANPADS!" (Man-Portable Air Defense System) and "RPGs!" (Rocket Propelled Grenades). Ask a Soldier in the mess tent, he'll say "rocket attacks in tent city." Sound familiar?

Approaching Soldiers hardened by combat, I often get a different response. The seasoned convoy commander tells me "fatigue" is his number one hazard because he's mitigated the tactical risks with "TTPs" (Tactics, Techniques, and Procedures). The seasoned air mission commander tells me that a "mid-air collision" is his number one hazard for the same reason. **These Soldiers are adequately balancing the composite risk—"they get it!!"** The weathered cook who tells me, "I've heard the rounds go off… and I'm more concerned about getting hit by a negligent discharge (ND) than shrapnel from a rocket attack," also "gets it"—there are far more NDs than rocket attacks.

We must not return home to the same old FTX and common task training (CTT). Our rising leaders are more than capable of training and risk managing with a few simplicities, such as fighter management, solid pre-mission planning, and strong troop leading procedures. These leaders have personal combat experience and will learn to defeat both enemies of composite risk.

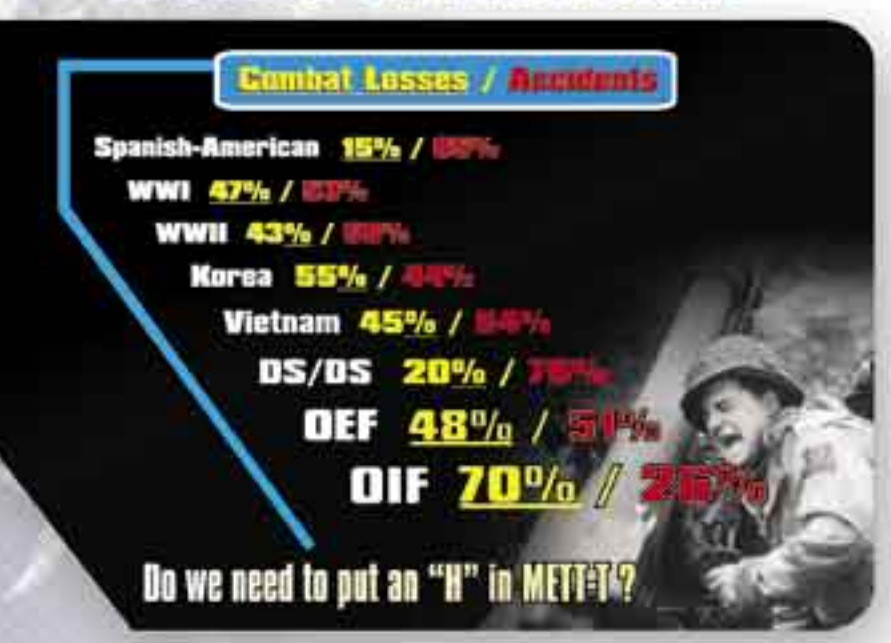
Sharpen the skills of our already highly trained and hardened Soldiers. Let's get the job done and be smart about it by allowing more flexibility to deal with the less-predictable tactical risk. The Chief of Staff, Army, said, "We cannot be risk averse, but we can be smart about managing risk." The best way is to sharpen the skills of our junior leaders and provide them with expert knowledge. They are skilled, seasoned warriors who will get the job done.

We must capture the importance of pre-mission planning for every mission. Nearly all infantrymen can tell me the finer points of actions on the objective or the details of a cordon and search, but when asked about the vehicle lineup at the start point and the movement, I get the "deer in the headlights look." Time constraint is the most common cause

DASAF'S CORNER
From the Director of Army Safety

of not following troop leading procedures. We must institutionalize doing the basics right and make leaders aware of the online Risk Management Information System (RMIS). Refining risk management training prior to deployment will provide more flexibility to deal with the less predictable tactical risk in war. Combat is fluid and requires sharpened leader skills for both air and ground operations. How often have you flown a complex air assault mission only to come home and realize there was little or no planning to get you through the forward arming refuel point (FARP) and parking? Let's get smart about training the basics.

Combat vs. Accidents



I'm not asking you to change focus in combat. On the contrary, I'm asking that you sharpen skills while in training to allow more planning time for actions on the objective. We need standardized battle drills, SOPs, and reporting procedures across our Army. When an organization understands the routine drills, then leadership can focus its energy on addressing variables. Training to standard the routine missions, such as vehicle movement, FARP operations, and formation flight over urban areas at low illumination will allow even more time for focused mission planning. Mission, enemy, terrain, troops and time available (METT-T) then can be focused to your actions on the objective and the variables of composite risk.

Retain the abilities of your "A" student Soldiers.

Soldiers in vehicle accidents account for more than two-thirds of our non-combat losses. Units that "get it" have significantly lower losses. I Corps CSM Barry Wheeler often refers to an "A-B-C" scale of Soldier performance. I submit that the "C" Soldiers will return from deployment and go back to the old ways of driver training and risk management. The "A" NCO will understand that driving a military vehicle has evolved into a basic Soldier skill—an evaluated CTT proficiency. The "A" leaders will train to standard based upon the lessons learned and the composite risk.

The same holds true for weapons qualification/handling and aviation training. The "A" students of modern ground warfare will require the use of Individual Protective Equipment (IPE) and ARMOX® for all qualification courses and convoy live-fire exercises. The "A" student aviators will demand training standards that reflect combat flying. Zero illumination with a hard-deck altitude is common practice in war, and we must implement training at home to retain this ability. We must not return home and allow organizations to return to the old ways. Instead, we must sustain the momentum and build upon the abilities of our returning warriors.

In World War II, America's Army lost 56 percent of its casualties to accidents. When you look at the nearly 235,000 Army Soldiers who died during that conflict, it puts 2004's 26 percent accidental death rate into perspective. However, the current number of combat losses versus accidental deaths is still at an unacceptable rate. I review every reported accident in our Army… all but a handful were preventable.

During my recent travels, a captain asked **"Should there be an H in METT-T?"** He said the H "would singularly examine (H)azards associated with the mission." In 15 months of his deployments, he had seen combat in Afghanistan and Iraq and knew firsthand about tactical risk, and had also felt the personal impact of accidental risk. He gets it!!! We need to retain our young leaders like this and use their experience. The Army depends upon the knowledge, skills, and abilities of its returning warriors. Balancing accidental risk and tactical risk is the future of risk management, a future that is in the hands of our young leaders – our next Greatest Generation.

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Our Army at War: Be Safe and Make It Home!

Joe Smith

BG Joe Smith

Hearing Loss equals Combat Casualty

SGM MICHAEL SIENDA
1st Armored Division
Wiesbaden, Germany

It was shaping up to be just another morning patrol in Baghdad—as normal as could be expected in a war zone. Normal, that is, until KABOOM! An improvised explosive device (IED) exploded just in front of our HMMWV on the driver's side, rocking it and sending shrapnel and debris flying at us.

The concussion and noise caused ringing in my ears, and the smoke disoriented me. Then everything appeared to move in slow motion as we realized we were caught in a well-coordinated ambush. Small arms fire from about 150 meters ahead began hitting our HMMWV. Although our vehicle was disabled, the TC and I yelled at the driver to keep driving. We rolled as far as we could through the kill zone. When our HMMWV finally died, we dismounted and took cover. My driver and I both had been hit by shrapnel from the IED, and I also took a glancing bullet to my helmet. Another driver had an AK bullet impact his helmet's nametape, but it did not fully penetrate to his head. The situation was incredibly intense, but we managed to make it out without any serious injuries. We were fortunate.

I thought I had escaped unharmed, but some injuries aren't visible. For well over a month, a ringing sound persisted in my left ear. I also noticed I was hearing certain sounds differently. The possibility of permanent hearing loss concerned me, but as time passed the ringing stopped and my hearing gradually improved. However, it hasn't been the same since that day.

Loud noise and concussion are extremely effective offensive weapons. For many years, Special Operations forces and SWAT teams have used "flash bangs" or stun grenades during room-clearing operations to throw the bad guys off balance and quickly gain the initiative. This shock and violent action works well by dramatically overloading the senses and slowing reaction times. Our enemies know this, and Iraqi insurgents continue to use hundreds of roadside bombs and rocket-propelled grenades against us. Many Soldiers have suffered hearing injuries from these attacks.

Most Soldiers don't consider wearing hearing protection in combat. I certainly didn't. But protecting your ears is just as important as shielding your eyes, hands, and head from injury. Taking in the sights, sounds, and smells of the

Hearing Loss equals Combat Casualty

battlefield without impairment improves situational awareness and enables a faster response. My situational awareness was reduced dramatically when I needed it most because I couldn't hear what was going on around me. Hearing, along with the other senses, allows leaders to direct their Soldiers and communicate with them during the "fog of war." And, unlike other injuries, hearing loss caused by loud noise can be permanent, despite medical treatment.

After the attack, I was faced with a decision. Should I wear my old triple-flange earplugs whenever I departed our compound? Although I knew they would protect me from loud, hazardous noises if we were attacked again, that protection would come at a cost—my ability to distinguish low-level sounds, such as voices. I figured the benefit outweighed the cost, so I didn't leave the compound without them.

I'm sure I wasn't alone in this thinking. Helmets for tankers and aircrews have integrated hearing protection, but the Kevlars issued to the rest of the Army don't. Until recently, Soldiers could either wear regular earplugs or nothing at all. However, in 2001, the Army developed the Combat Arms Earplug (CAE). This special earplug protects the ear from impulse-type noise, such as weapons fire and explosions, but allows the wearer to hear normal communications and sounds on the battlefield. It's also a dual-purpose earplug. In tactical situations Soldiers insert the yellow end of the plug, leaving the olive drab end exposed. This protects against loud noises while still allowing Soldiers to hear conversations. In industrial situations, Soldiers reverse the plug and leave the yellow end exposed to protect against loud machinery noises.

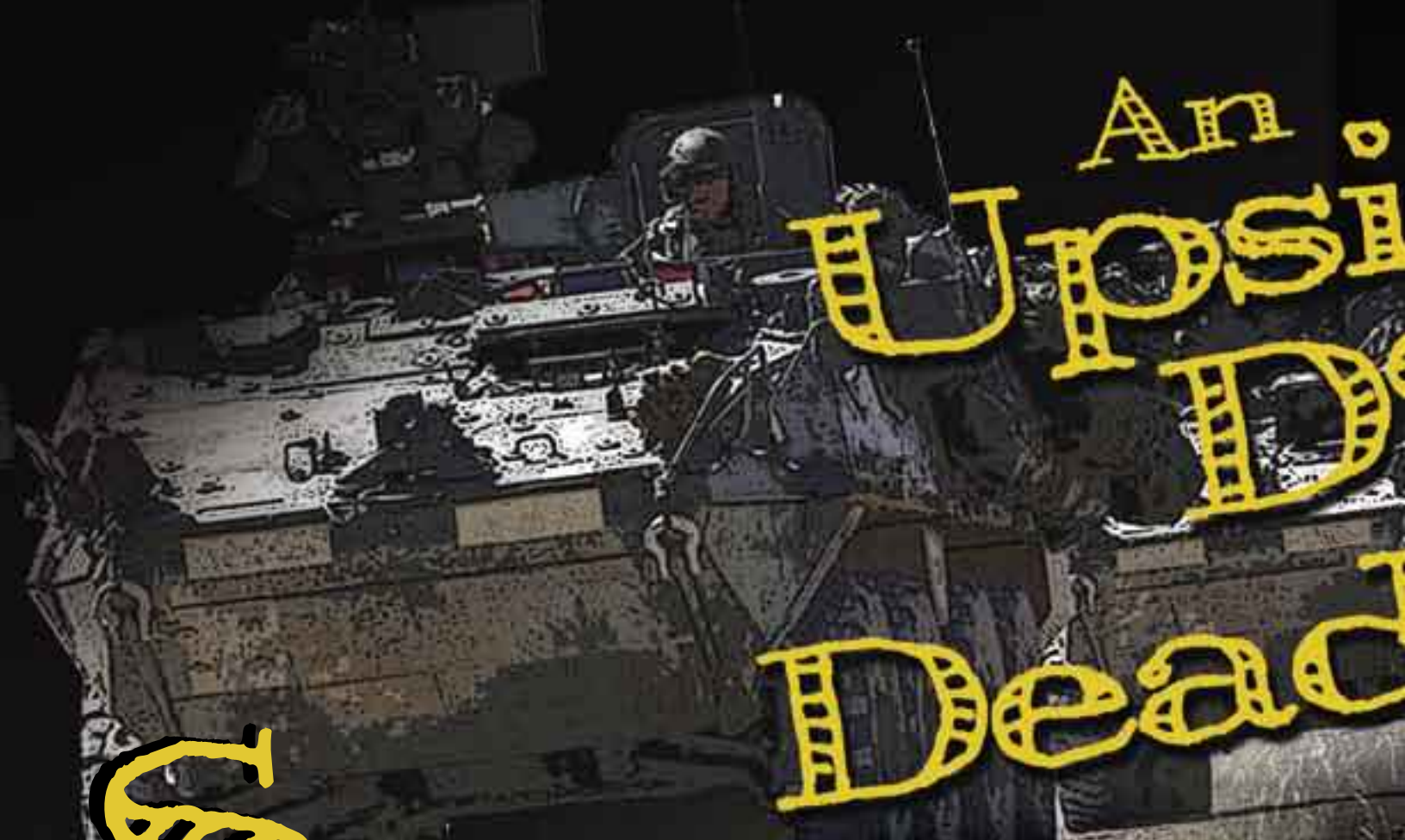
The CAE is the next-best thing until the Army fields a helmet with integrated hearing protection for dismounted Soldiers. It is a significant advance and will better protect Soldiers, especially during weapons firing. The M16 is one of the Army's loudest weapons. At more than 157 decibels, it is louder than both the M2 .50 cal and MK19 Grenade Launcher. The M249 Squad Automatic Weapon is even louder at 159 decibels. Repeated firing at these elevated decibel levels without protection can cause permanent hearing damage.

Wearing the CAE takes some getting used to, especially in a combat environment, but it's worth it in the long run. Soldiers wearing the CAE gain greater confidence in their abilities, especially when firing their weapons. Because of the reduced noise, the Soldier will be less likely to flinch while firing, thereby improving accuracy.

The CAE is available under NSNs 6515-01-466-2710 and 6515-01-512-6072.

We can expect our enemies to continue using IEDs and rocket-propelled grenades against us in future conflicts. You can bet that without hearing protection, many Soldiers will return home with some form of hearing loss. Don't be one of those Soldiers—the ears you've got are the only ones you'll ever have. Take care of them!

A 19-year Army veteran, SGM Sienda has served in a variety of conventional and special mission units in the counterintelligence and security fields. At the time of this incident he was serving as the G2 sergeant major for the 1st Armored Division in Iraq. He has since returned to Wiesbaden, Germany. He may be reached via e-mail at michael.sienda@us.army.mil.



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Second platoon's first real combat mission in Iraq was scheduled to be a nighttime show of force. Equipped with Strykers, they were part of a larger unit and eager to get going to show what they could do.

They would be driving down some narrow, muddy roads. Although a few of the Soldiers had been down the route before, they'd been in the back of a vehicle and didn't really get a good look. The narrow road was bordered by canals and had an 8-foot drop-off on both sides. The route was very dangerous.

Earlier that day, the platoon had readied their equipment and lined up for movement. It was still daylight when they began their mission, driving the route over the muddy roads. Darkness fell just as the platoon reached the most dangerous part of the route. Because the road was barely visible, many Soldiers donned their night vision goggles as they moved.

Suddenly an urgent message came over the radio—one of the Strykers had gone off the left side of the road, rolled over, and landed upside down in the canal. In fact, although the platoon didn't know it, two Strykers more than 200 yards apart had gone off the road and rolled over into the same canal. Both vehicles were sitting upside down on their remotely operated weapons systems, with one side of the vehicle resting against the bank. Nineteen Soldiers were trapped inside the partially submerged Strykers.

Both Strykers began rapidly filling with water, which was soon up to the Soldier's chins. As they stood inside the troop compartment, the Soldiers were afraid the Strykers might tilt and allow more water to flood in.

The squad leader inside the first Stryker yelled for a head count. He thought he heard each Soldier yell back and assumed everyone was accounted for. What he didn't realize was that he heard a Soldier calling out the name of a missing Soldier as he searched for him. The driver, who also was underwater, was having trouble escaping his compartment. Equipment blocked the passageway to the troop compartment, so he couldn't escape through that route. Ultimately he got the driver's hatch open, swam out of the Stryker, and then crawled on top of it. There he was joined by one of the vehicle's air guards, who'd barely managed to get out his hatch after the vehicle rolled over.

Inside the troop compartment the second air guard struggled underwater to open the back door. He passed out, possibly not realizing the door—which would have fallen open were the vehicle right side up—now had to be pushed open. The driver and air guard who'd gotten out of the vehicle opened the rear

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door, allowing the Soldiers inside to escape. They then climbed onto the road, resuscitated the second air guard, and conducted another head count. Finding one Soldier missing, the squad leader went back inside the Stryker to find him. He found the Soldier lifeless just a few inches beneath the water's surface. His load bearing equipment (LBE) had become entangled inside the vehicle, trapping him underwater.

The water was also up to the Soldiers' chins in the second Stryker. They tried to open the troop compartment door—their only way out—but heard someone outside yelling, "There's a lock on the troop door!" The Soldiers started to panic, so the team leader tried to calm them and asked for a head count. Two Soldiers—the driver and squad leader—were missing. The driver was trapped in his compartment. Equipment in the passageway leading to the troop compartment blocked his escape. The other missing Soldier, the squad leader, was trapped underwater by his LBE. It was almost a half hour before the lock was cut and the Soldiers could escape. By then, the driver and squad leader had both drowned.

Second platoon's first mission ended in tragedy as three Soldiers died without ever engaging the enemy. It was a high price to pay to learn the following lessons:

- Before heading out, leaders must conduct risk management for the entire mission—to include the complete driving route—to mitigate the hazards.
- Leaders must brief the route to the entire platoon so every Soldier knows the hazards to be faced.
- Crews must conduct rollover drills and ensure those drills are tailored to the mission. For example, if the route follows canals, Soldiers must know what to do should their vehicle roll over and land upside down in the water.
- Rollover drills are important; however, Soldiers also need to practice exiting their vehicle. The Soldiers who died in these Strykers had survived the rollovers, but couldn't egress their vehicles. For example, had the crew in the second Stryker practiced exiting their vehicle, someone would have noticed the lock on the troop door.
- Soldiers must follow proper load plans, making sure escape routes and hatches are accessible.
- Soldiers must conduct thorough pre-combat inspections on their vehicles to ensure all equipment is serviceable and there are no locks on hatches or doors.

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A Tale of Two Convoys

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The wrong way

Worried about meeting their start point (SP) time, the convoy's leaders hurried their Soldiers through the vehicle offloading process at the seaport of debarkation (SPOD). In a few hours, three convoys had converged into a single massive line of vehicles as they waited for the rest of the vehicles to come off the ship. When the vehicles were ready to roll, theater movement control personnel divided them into two marches instead of the originally planned three convoys. The convoy was two hours late, and the convoy commander hurried through a short safety briefing so he could get the vehicles underway. None of the unit's senior officers or NCOs were at the SP site.

The lead serial turned right to link up with a local national escort. The second serial, which was led by the first sergeant, waited an additional five minutes before starting. Since he wasn't part of the previous day's route reconnaissance, he missed the right turn that led to the escort vehicles. The convoy commander failed to conduct a radio check prior to the SP, and now the first sergeant couldn't contact him by radio.

Meanwhile, the convoy commander had increased his speed to keep up with the escort vehicle. The convoy vehicles soon became separated. Even though each vehicle's senior occupant had a strip map, it was hard to

read. Furthermore, the convoy commander hadn't designated any checkpoints at the major intersections.

The result was a mess. Seven vehicles broke down along the route and were stranded until they could be recovered. As it began to get dark, elements of the second serial followed other military vehicles on a different route and ended up at the wrong base camp.

The right way

Two days prior to deploying, the convoy commander briefed the division G-4 on how he'd organized, prepared, and rehearsed his convoy. He described the risk assessment he'd conducted with his subordinate leaders and how they'd incorporated control measures into their convoy rehearsals and briefings. He also discussed the convoy personnel and vehicle manifest, route intelligence summary, and how terrain models and rock drills were being used to show convoy personnel the route. He explained each vehicle was being provided a strip map with check points. He added that convoy personnel were rehearsing ambush immediate action drills, learning how to break contact after an engagement, and how to deal with roadblocks and improvised explosive devices. He added that they'd been trained in how to call in air and ground MEDEVAC.

The division G-4 and the chief of staff were present at the SP site. Three hours before the convoy departed, the first sergeant and senior NCOs checked the vehicles to ensure preventive maintenance checks and services (PMCS) had been done and inspected load plans and tie-down procedures. They also conducted weapons functions checks, verified ammunition condition and status, and inspected the placement of crew-served weapons. In addition, they checked internal and external communications, including frequencies, crypto loads, and emergency call signs. They also took note of how medics and tow bars were dispersed throughout the convoy and ensured each Soldier's personal equipment included a Coalition Forces Land Component Command (CFLCC) Rules of Engagement (ROE) and MEDEVAC card with the nine-line report. In addition, they made sure each Soldier had extra food and water. An hour before departing, the convoy commander quizzed his personnel on their training and reiterated the importance of the convoy staying together.

The convoy deployed on time and halted twice before reaching its destination. At each halt, a 360-degree security perimeter was posted. The convoy successfully reached its destination with all its vehicles and personnel.

Some thoughts

Sometimes the benefit of a bad example is that it shows, by contrast, how things should've been done. Here are some useful lessons learned from the first convoy's experience.

- Always conduct a risk assessment and ensure leaders implement and supervise control measures.
- Rehearse convoy operations, especially emergency procedures.
- Make sure leaders know the convoy plan and route.
- Check communications to ensure you have radio contact.
- Make sure PMCS is done before departing.
- Ensure strip maps are easy to read and understand.
- Designate checkpoints so drivers can confirm they're on the proper route.
- Don't make up for being late by taking shortcuts with safety briefings and PMCS. Rushing through safety can make you later than you can afford.

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PORT OPS

GETTING THERE IS HALF TH

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Editor's Note: See all those American tanks, Bradleys, HMMWVs, and trucks running around Iraq? Before they ever fired a round or transported a Soldier to a firefight, they had to "survive" just getting there—and that might not be as simple as people think. MSG Edward Wojtowicz spent 5½ months in Kuwait observing port operations and offering safety advice at the seaport of debarkation (SPOD). The SPOD was the entry point for Army equipment arriving in theater to support Operation Iraqi Freedom I, and also the departure point for equipment being redeployed home. It was a unique experience.

Ships from around the globe arrived at the SPOD daily carrying the cargo and equipment needed to sustain the military's mission in Kuwait and Iraq. Some 300,000 pieces of equipment ranging from tracked vehicles, trucks, helicopters, and CONEX (container express) containers were loaded and unloaded in a non-stop 24-7 process. The containers were packed with food, clothing, spare parts, and equipment that units sent ahead. The task of being an observer for the Army Safety Center was challenging.

We were responsible for watching over the safety of the Soldiers, Sailors, Marines, Airmen, and Coast Guardsmen working at the port. We watched out for vehicles going too fast for the equipment on their flatbed trailers, trailers without safety chains in place, broken pintle hooks, and improperly tied down equipment. The last category was our biggest problem. As I worked nights at the SPOD, I saw a lot of strange approaches to tying down equipment—some amusing, and some downright dangerous.

Blissful ignorance

The military had contracted third country nationals (TCNs) to deliver the stock to our desert camps. The only problem was these TCNs had never heard of MTMCTEA 55-30, so they didn't have a clue how to properly tie down military equipment. But that didn't stop them. They'd tie down an M1A1 tank with a couple of half-inch chains—one in the front and one in back—not the four three-quarter-inch chains required. And if chains weren't available, they'd

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nd Safety NCO
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toss nylon straps over the front and back ends of the equipment and consider it tied down. It was amusing to watch them try to tie down an M113 with nylon straps. In their home countries this might be an accepted practice, but it was very unsafe. The military finally bought 400 sets of chains to stop the TCNs from using nylon straps on large, heavy equipment. While this helped, there were other challenges.

'Creative' communication

The TCNs spoke little or no English, and we resorted to drawing pictures in the sand or on the palms of our hands as we tried to explain things. Sometimes it would work for a while, and then they'd go back to their old ways. When you tried to explain a tie down wasn't done properly, the TCNs would just say, "No problem, it's good!" So, it was back to broken pidgin language, sign language, or pictures to correct the issue. I was working one night with SFC Allen Muller, an Army Reservist from Pennsylvania, when we both got tired of using baby talk to explain tie down procedures to the TCNs. Out of frustration we climbed onto their heavy equipment transport (HET) and taught them—the best we could—proper tie down procedures. SFC Muller and I laughed quite a bit about it—that is, until the next night when we had to start from scratch with a new batch of drivers.

Traffic cops

The TCNs weren't our only safety concern. Soldiers were supposed to wear their seatbelts and Kevlar helmets whenever driving military vehicles in Kuwait. Many of the Soldiers working at the port support authority (PSA) thought they didn't need these and would offer the excuse, "We're only going 5 mph." Like good traffic cops, SFC Muller and I decided to motivate them. For Plan A, we made up a poster that read, "Wear it, click it, OR KP IT!" ("KP" refers to kitchen police duty, something most Soldiers would rather avoid.) This worked until the drivers figured out there was no KP duty at a logistical support area. After that we went to Plan B—bribery. The drivers had to stop at the ship's ramp before going down into the deployment yard, so we'd check them out and give them a piece of candy for wearing their seatbelt and Kevlar. It was a little thing, but it encouraged them to follow the rules and, at the same time, gave them and us a laugh. However, because saving lives is no laughing matter, nothing was too funny or extreme if it succeeded in getting the Soldiers to drive safely.

In closing

Protecting Soldiers and their equipment arriving in Kuwait may not be glamorous, but it's an essential part of the current mission in Iraq. Every piece of equipment lost or damaged, or every Soldier injured or killed during port operations weakens the Army's fighting power. Just as safety is essential to protecting Soldiers as they live and fight in Iraq, it's also essential to providing them the beans and the bullets to stay in the battle.

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Preparing for a Suc

SUSAN JERVIS
Fort Belvoir, Va.

Editor's Note: "Beside the Green" will be a recurring column in **Countermeasure***, courtesy of the Army Materiel Command. The column will contain safety information to help civilians and contractors support Soldiers safely.*

Our Nation is at war, and it's not just our Soldiers that are carrying out the Army's missions at home and overseas. Civilians and contractors are volunteering to deploy with our Soldiers now more than any other time in our history. Hundreds of these men and women currently are serving in Operations Iraqi Freedom and Enduring Freedom (OIF/OEF), facing many of the same dangers as our Soldiers.

If you're a civilian working for the Army, you're probably just as patriotic as the guy in the next maintenance bay or cubicle. When your boss announces that your organization will deploy someone for 120 days in support of OIF/OEF, you enthusiastically respond with "I'll go!" Next thing you know, you're busy packing your duffel and heading to the CONUS Replacement Center (CRC) to begin in-processing and training for your new—and sometimes daunting—assignment. The following paragraphs outline some of the "essentials" you'll need to remember as you begin preparing for your deployment.

Essential 1: Physical stamina for the tough work conditions and long work hours.

The physical environment in the area of operations likely will be markedly different from your usual work environment. Many of the buildings lack accustomed levels of heating, cooling, general ventilation, and lighting. Consult your personal physician before heading to the CRC, and explain the anticipated work environment and any physical stressors you expect to encounter. Seek your doctor's advice to ensure you can function in the deployed environment. Also check the availability of any prescription medication you might need by contacting the servicing personnel center or department sponsoring the deployment. That office should be connected with the medical treatment facilities serving the area of operations.

Essential 2: Stress management tools to help ease the inherent stress of a deployed situation.

Being away from your home, family, and friends only compounds an already stressful situation and often leads to depression. To help cope, there are several stress management tools you should include in your duffel. Bring a diary to express your thoughts. Pack pictures of family and friends to remind you of good times and reinforce the reasons you want to make it home safely. And don't forget workout clothes and a good pair of athletic shoes. Even with long work hours, make time to get some type of physical exercise. Exercise helps prepare you physically and also relieves some of the tension and anxiety experienced in a deployed situation.

Essential 3: A disciplined approach to time management.

Your first thought after arriving in the operational theater may be, "How will I ever get this done?" Don't set yourself up for a fatigue-related accident in your desire to do a great job. Fatigue can lead to inattention to detail, skipped steps, and ultimately an accident. It's possible that you might work 15 to 16 hours a day, seven days a week. Manage your time appropriately by making rest a priority, and get sufficient sleep to recharge after each shift.

Essential 4: Situational awareness to keep focused on the missions at hand.

Maximize your situational awareness by paying close attention to all force protection briefings and warnings in the area of operations. As you go through the day, stay alert for unusual activities or suspicious persons. Recognize that this type of

environment will increase your stress level, so it's even more important to use your stress management tools to cope.

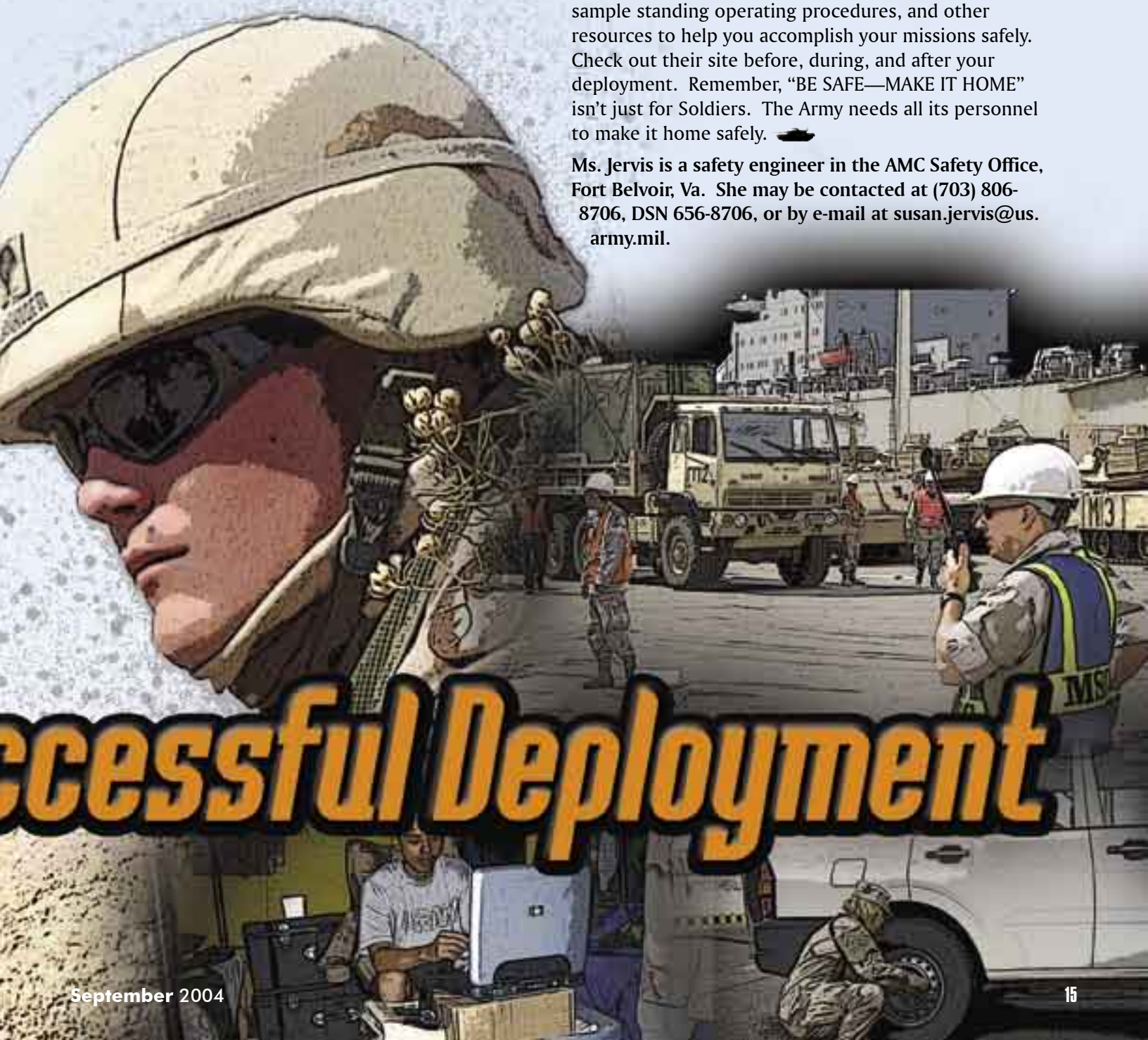
Essential 5: Risk management tools to ensure your personal safety.

Your duffel should include a risk management tool set. You'll need to perform a job safety analysis (JSA) for every task because of the changing work environment. Even in an administrative setting, the temporary nature of operations may create safety and ergonomic challenges. Computer setups and wiring may be temporary in nature, which can create tripping hazards and electrical hazards associated with overloaded electrical circuits. Set up your workstation so your arms, legs, and wrists remain in a neutral position, which will reduce stress on your joints and muscles and improve your physical comfort during long workdays.

Also use your JSA in maintenance and warehouse areas to make sure you aren't exposed to unnecessary risks from materials handling or other equipment, tools, or industrial chemicals. If you regularly use personal protective equipment for a similar job at your home station, use the same equipment at your deployed worksite. Check with your supervisor and local safety officer to ensure there are adequate protective devices for each task.

Don't forget to consult the Army Safety Center's Web site at **https://safety.army.mil** for references, videos, sample standing operating procedures, and other resources to help you accomplish your missions safely. Check out their site before, during, and after your deployment. Remember, "BE SAFE—MAKE IT HOME" isn't just for Soldiers. The Army needs all its personnel to make it home safely.

Ms. Jervis is a safety engineer in the AMC Safety Office, Fort Belvoir, Va. She may be contacted at (703) 806-8706, DSN 656-8706, or by e-mail at susan.jervis@us.army.mil.



Tie It Down the Right Way!

MSG ROBERT FISHER
Ground Maintenance Safety LNO
U.S. Army Safety Center

I recently returned from a deployment to Kuwait and Iraq as part of a safety assessment team for the Army Safety Center. As anyone who's been there knows, nobody has just one duty in an operational theater. I was no exception, and one of my jobs was to ensure equipment was tied down properly in the deployment and redeployment yards.

An accident involving a piece of equipment that wasn't tied down correctly had occurred just before I arrived in theater. A light medium tactical vehicle (LMTV) rolled off a heavy equipment transport (HET) trailer. Fortunately no one was hurt and there was minimal equipment damage, but the outcome could've been much worse.

The LMTV was tied down to the trailer with 5,000-pound tested cargo straps. However, someone tried using 5,000-pound cargo straps to secure a vehicle weighing 11,000-plus pounds. That was not a smart move. The cargo straps broke as the LMTV was being pulled up to the ramp for ship loading, causing the vehicle to roll off the trailer. Fortunately, it hit a stationary object—not a Soldier.

In simple terms, the wrong tie-down equipment was used. Cargo straps are for securing boxes, pallets, and other odd-shaped cargo—not heavy equipment like wheeled vehicles. The Soldiers that secured the LMTV with the cargo straps thought they were doing their task the right way. They obviously were mistaken, but we can't blame them completely. They were performing their mission the way they'd been trained—and their training was wrong.

As NCOs, we must know the correct standards if we are to train our Soldiers to standard. We cannot afford to lose equipment or Soldiers because someone "thought this was the standard." The old saying, "Tasks and conditions might change, but

STANDARDS remain the same" still holds true today, especially given the variety of conditions our Soldiers operate in throughout the world.

Tie-down procedures vary, depending on the type of equipment being transported. My team did some research and found several pamphlets that give specific tie-down guidance on the Military Surface Deployment and Distribution Command's Transportation Engineering Agency (TEA) Web site **(www.tea.army.mil)**. We made copies of these pamphlets and distributed them in the deployment and redeployment yards.

This information became very important when a question arose concerning the responsibilities of civilian contractors, including truck drivers: Who's responsible for equipment tie down on the trailer—them or the Soldiers? The TEA's PAM 55-20, *Tiedown Handbook for Truck Movements*, says that:

"A commercial truck driver is responsible for securing exposed loads. Therefore, military personnel will rarely secure loads on commercial flatbeds. Even when military personnel load and help tie down cargo, the commercial truck driver is still responsible for ensuring that the tie-down arrangement is safe.

"The driver of a military cargo vehicle is responsible for the safety of the load. The unit is responsible for loading and unloading the vehicle. Securing the cargo is a shared responsibility between the two. The truck driver will advise in securing the load and check to ensure it is safe for movement."

The above scenario is just one example of the many potential problems encountered in deployment and redeployment yards. There isn't enough space in this article, or even this magazine, to list the proper tie-down procedures for every piece of equipment we have going into and out of theater. Be sure to visit the TEA's Web site. They have a wealth of deployment information, and you can order a CD-ROM that contains all the pamphlets we distributed and more. Be safe and make it home!

Contact the author at (334) 255-9377, DSN 558-9377, or e-mail robert.fisher@safetycenter.army.mil.

Weapons Handling 101

Large Bore

HEADQUARTERS, SURFACE DEPLOYMENT AND DISTRIBUTION COMMAND
Alexandria, Va.

The Army currently is in a movement between the continental United States and various operational theaters throughout the world. Troops and equipment are being packed up and shipped "from here to there and everywhere." Among that equipment is weapons. It is important to keep in mind that no matter what caliber or type of weapon, there are certain items that must be checked before shipment.

Tanks, Bradley Fighting Vehicles, M113s, and artillery pieces all have large-bore weapons. Some Soldiers think all they have to do is ensure the breech is clear and the ready loads are out. However, mistakes do occur and can have devastating consequences.

A tank recently shipped back from theater was found to have live ammunition loaded in its weapons systems. Several rounds were left in the rounding area inside the vehicle, and one round was loaded in the breach. Fortunately, the problem was found and remedied, with no Soldiers or equipment harmed.

These types of incidents are more likely to occur with battle-damaged or accident vehicles. Ensure all large-bore weapons—especially those being returned to home station—are safe before you transfer them. Take the same care and pride in doing the right thing when handling large-bore weapons as you do with your small arms.

Am I My Buddy's K

Editor's Note: In Genesis God asks the first murderer, Cain, the whereabouts of his brother, whom he'd just slain. Cain responded, "I know not: Am I my brother's keeper?" That question still is asked today when one Soldier kills another in a careless accident. The following story describes how a Soldier recklessly killed a battle buddy in Iraq, and then tried to cover it up through threats and intimidation. The Soldiers' names have been changed, but the rest of the story is true.

The three Soldiers were conducting a roving patrol around their unit's logistical support area. SGT Manning was the vehicle commander; SPC White was the driver; and a third crewmember, SPC Simpson, was the weapons operator. They were assigned a HMMWV and told by their platoon sergeant to conduct their movement at a speed not to exceed 25 mph with their headlights on.

Shortly after departing the unit, SGT Manning began complaining that SPC White was driving like an "old woman" and insisted he be allowed to drive instead. SPC White knew SGT Manning recently had been counseled by their unit commander for speeding in an Army vehicle and that he had a habit of driving aggressively.

Later on, SPC White stopped and got out to relieve himself. While he was outside the vehicle, SGT Manning moved into the driver's seat. When SPC White returned, he saw SGT Manning behind the wheel and the two argued. SGT Manning drove off and then turned around and sped toward SPC White, hitting the brakes just in time to stop short of where the driver stood.

The two continued arguing, but finally SPC White gave in and climbed into the HMMWV. SGT Manning then turned off the headlights and began speeding and doing donuts. Despite both specialists repeatedly asking him to slow down, SGT Manning's answer

eeper?

COMMAND JUDGE ADVOCATE
U.S. Army Safety Center

was, "Relax, have fun, and hold on!"

The HMMWV, its headlights off, sped through the darkness at more than 50 mph. Unable to clearly see the ground ahead, SGT Manning suddenly hit the bank of a wadi. The HMMWV flew into the air and went some 50 feet before plunging almost straight down into the ground, landing on the driver's side front fender. The HMMVW rolled, throwing all three Soldiers from the vehicle. It came to rest on the passenger side part-way down the wadi's far bank.

SGT Manning called out for the other crewmembers, but only SPC White answered. The two searched the area for SPC Simpson and ultimately found him back at the crash site, pinned beneath the HMMWV. Having found SPC Simpson dead, SGT Manning then threatened SPC White and warned him not to reveal what happened.

The threat didn't work. SGT Manning was charged with SPC Simpson's death and conspiracy to lie about the events leading up to the accident. In the trial that followed, SGT Manning was demoted to the rank of private, sentenced to seven years in prison, and will recieve a dishonorable discharged for involuntary manslaughter.

In looking at what happened, it's important to note that an involuntary manslaughter charge requires no intent or malice. A Soldier, through his or her carelessness or recklessness, can be charged with another Soldier's death. Involuntary manslaughter carries a maximum penalty of a dishonorable discharge, forfeiture of all pay and allowances, and confinement for up to 10 years under the Uniform Code of Military Justice (UCMJ). SGT Manning wasn't trying to kill or injure his crewmembers, but his reckless behavior led to a death for which he has been legally tried and is being punished. The truth is, any Soldier exhibiting a careless disregard for the safety of himself, his subordinates, or his equipment can face legal action.

You may be wondering what action(s), if any, leaders could have taken to prevent SPC Simpson's death. On several occasions before the accident, leaders had observed SGT Manning's reckless driving. Yet they failed to take aggressive action, providing only on-the-spot corrections or informal counseling. The command could have charged him under the UCMJ's Article 92, "Failure to Obey an Order or Regulation," which carries a maximum penalty of a bad-conduct discharge, forfeiture of all pay and allowances, and confinement for nine months. They also could have restricted his duties to prevent him from operating an Army vehicle.

Unfortunately SGT Manning's subordinates, whom he'd threatened with violence, were reluctant to report his dangerous behavior and indiscipline. Now one Soldier is dead and another in prison while two families grieve. When counseling and informal efforts fail to motivate a Soldier to improve his behavior, stronger administrative, judicial, or non-judicial measures should be used.

PVT Manning is now serving his prison term and was unavailable for comment. However, the prosecutor contributed the following statement: "I guess if I could say anything about this case, it would be how tragic safety accidents are during combat. Soldiers understand the losses due to enemy action, but how does one explain to a family that the U.S. Government sent their Soldier across the world, only to be killed by horseplay?"

Further information on military offenses and punishments can be found online at **www.jagcnet.army.mil/laawsxxi/cds.nsf** or by speaking to your local judge advocate.

This article was prepared by Ms. Teresa Austin, Legal Assistant to the Command Judge Advocate, U.S. Army Safety Center. She may be contacted at (334) 255-9513, DSN 558-9513, or by e-mail at teresa.austin@safetycenter.army.mil.

mastering
the Master Driver Program

SSG EDWARD D. MILLS
and
SGT CHAVONE ERKINS
HHD, 702d MSB
Camp Casey, Korea

Korea is known as the second-most hazardous place to drive in the world. Driving in Korea is like dealing with a circus on a New York expressway during rush hour. Safety is the key, therefore the 702d Main Support Battalion (MSB) master drivers are going the extra mile to train Soldiers to drive safely. The Soldiers' welfare is the main motivation of the program's NCOs.

The 702d's Master Driver Program has two blocks of instruction. The first block runs 16 hours and is for specialists or corporals and above who have more than two years' military driving experience. The second block of instruction runs 40 hours and is for specialists or corporals and below with less than two years' military driving experience. In addition, every Soldier—officer and enlisted—is required to take a written exam before being issued a driver license (OF 346). Staff sergeants and above will be issued a standard license; sergeants and below will be issued a learner's permit.

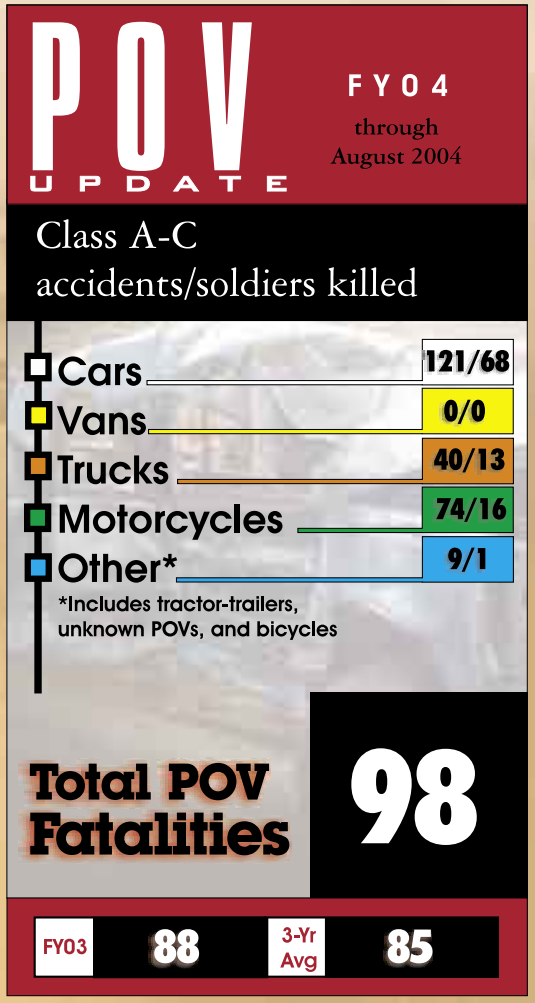
Our "Training the Main" program consists of driver's improvement training (DIT), ground guiding procedures (proper hand and arm signals), hazardous material (HAZMAT) familiarization, and seasonal (spring/summer and fall/winter) training. We also cover the responsibilities of vehicle and track commanders, proper speed management, and how to perform preventive maintenance checks and services (PMCS). In addition, we instruct drivers in convoy procedures, accident procedures, how to read a map, and how to use night vision goggles (NVGs). Because driving in Korea has its own unique challenges, drivers receive a special slide show to help prepare them for the road.

Driver's improvement training highlights speed limits and rules of the road. The segment on HAZMAT familiarization trains Soldiers to identify hazardous material and teaches them how to properly haul ammunition, fuel, and other dangerous cargo. Seasonal training shows Soldiers how to adjust their driving according to the weather conditions encountered in Korea. Vehicle commander and track commander training teaches leaders their responsibilities when they're in charge of a vehicle and their role in ensuring correct safety measures are followed. The training also gives them guidance on how to take charge of convoys and what to do in case of an accident. Night vision goggles' training instructs soldiers in how to operate a vehicle at night in low or no-light conditions.

Granted, no one can prevent every accident from happening, but we can make sure that SAFETY rules are enforced. By training Soldiers to the proper safety standards, we can protect them and the civilians sharing the road with them, along with Army equipment. When Soldiers complete the Master Driver Program at the 702d MSB, they can confidently say the "Main has been trained!"

Editor's Note: SSG Mills was one of two Soldiers to receive the Sergeant Major of the Army Safety Award earlier this year. SSG Mills leads a weekly Master Driver Program that has trained more than 1,100 Soldiers to drive safely in Korea.

Contact the author via e-mail at edward.d.mills@us.army.mil.



Carrying Safety into the Future

JULIE SHELLEY
Staff Editor

"You're never too young to learn." That phrase has been repeated countless times by parents across the world to children who can't seem to perform a certain task the right way. While young Soldiers certainly aren't children, leaders are responsible to ensure their troops perform their tasks safely and to standard.

However, most leaders will tell you that one of the most difficult parts of their job is getting safety through to their young Soldiers. Statistics show that young E1s through E4s are involved in fatal accidents—both on and off duty—more than any other group in the Army. How can leaders convince these "invincible" troops that safety is the way to go? The 4-23d Infantry Battalion at Fort Richardson, Alaska, may have the answer.

The 4-23d, under the leadership of LTC John Norris, recently implemented an innovative program that gives junior enlisted Soldiers "risk management ownership." The program, titled the "Unit Mission Protection Council" or UMPC, involves young Soldiers in the risk management process for each of their missions, and also incorporates off-duty safety.

The first UMPC was held at Fort Richardson this past May. LTC Norris explained to his battalion's senior leadership that young, inexperienced Soldiers should be part of the solution to the Army's climbing accident rate, not part of the problem. Since Soldiers aren't taught the risk management process during basic training or advanced individual training, chances are they won't hear about it until later in their careers. Yet, young Soldiers—the Army's future leaders—are the ones carrying out today's missions "where the rubber meets the road."

The idea behind the UMPC is to make Soldiers responsible for their own safety by involving them in the risk management process. This is accomplished by quarterly company-level practical exercises where the platoon leader walks his Soldiers through the events on the next quarter's training calendar. The Soldiers, in turn, begin by identifying the hazards and then implementing the 5-step risk management process for each task.

LTC Norris said the UMPC is based on the upcoming quarterly training calendar so Soldiers won't rush through the risk management process just before a mission begins. And once the Soldiers go out on their exercises, they'll take a small safety reminder with them. Wallet-sized risk assessment worksheets will be given to each Soldier so they can go through the five-step process before each mission.

The UMPC isn't just for tactical exercises. The effects of a long exercise or one that ends just before an extended weekend are examined for possible off-duty risks, such as POV accidents. In addition, POV inspections are performed on each Soldier's vehicle before they're released from the UMPC.

The Soldiers' response to the inaugural UMPC was wholly positive, according to LTC Norris. Many senior NCOs said they would've liked the same training early in their careers. The idea also is spreading: The 4-23d's parent unit, the 172d Stryker Brigade Combat Team, recently implemented the UMPC as part of its training program.

The UMPC is an excellent example of the new initiatives being adopted throughout the Army to save Soldiers and cut the accident rate in half by 2005. An educated Soldier is one that's ready to take up the fight safely. For more information on starting a similar program in your unit, contact LTC Norris by e-mail at **john.norris@richardson.army.mil**.

Contact the author at (334) 255-1218, DSN 558-1218, or by e-mail at shelleyj@safetycenter.army.mil.

HMMWV 'Fingermatic' Slices and Dices

When it gets cold outside, Soldiers like to stick their fingers into the heat duct in front of the HMMWV's passenger seat. The flexible tube that attaches to the duct is often broken or missing, allowing a Soldier to stick his cold fingers inside the duct's opening. Unfortunately, the average Soldier's middle finger is a little too long to do this safely and sometimes contacts the heater fan's fast-spinning blades. The result can be cut, abraded, or sliced-off fingertips.

Think this is rare? The picture shows one of three examples I saw while serving as the surgeon for the 4th Support Battalion, 4th Infantry Division, Tikrit, Iraq. An informal poll of my medical colleagues there revealed this is a chronic problem. They were all familiar with this "syndrome."

The safety message is for Soldiers to keep their fingers out of the heater ducts! This is a preventable on-the-job injury typically caused by carelessness and a lack of common sense.

LTC Roman Bilynsky
Chief, Neurology Service
William Beaumont Army Medical Center
Fort Bliss, Texas

When 18 Wheels Trumps Two

We wanted to clarify some of the information in this story describing a motorcyclist being forced into the median by a tractor-trailer. The rider—a certified Motorcycle Safety Foundation instructor—was riding in the right lane before attempting to pass. He was listening to a CD, but was careful to clear his left and signal before changing lanes. He was alongside the trailer when the truck driver suddenly swerved into his lane.

The Editor

Joey Reassigned to Covert Unit

The "Soldier" of safety—the "roo" of risk reduction—the "magnificent marsupial of managing menace"—has left the U.S. Army Safety Center.

In a surprise announcement, Director of Army Safety BG Joseph Smith stated, "We took a leap of faith in bringing Joey to the Center. We felt Joey would give the Center a 'kinder, gentler' face—one that would inspire Soldiers to send in their personal experience safety stories and any safety questions."

Despite great expectations, all has not gone as planned.

BG Smith explained, "While e-mails to Joey poured in at first, they have 'tailed off' in recent months. The Army must get 100 percent from each Soldier, so we felt it was time for him to get hopping and approved his request for reassignment. While we can't tell you where he is, we can say he's conducting covert operations in a location where he can easily blend in with the locals.

"We will miss Joey, but every Soldier has to go where he will do the most good," BG Smith said.

ACCIDENT BRIEFS

Information based on preliminary reports of ground accidents.

AMV

Class A

- Soldier was killed when the up-armored HMMWV he was driving overturned. Two other Soldiers were injured. The HMMWV was part of a four-vehicle convoy traveling at a reported 35 mph at the time of the accident.

- Soldier died after the HMMWV he was driving overturned. The Soldier's night vision goggles reportedly washed out, causing him to steer the HMMWV into a median and skid.

- Soldier suffered fatal injuries when the HMMWV he was driving was struck by an M1A2 tank. Both vehicles were traveling in convoys—the HMMWVs north and the M1A2s south—at the time of the accident. The two vehicles collided as the convoys passed. The tank's driver was not injured.

Class B

- Five Soldiers were injured when their HMMWV was involved in an accident with a dump truck. The dump truck pulled in front of the HMMWV and then swerved back, causing the HMMWV to hit the truck. The gunner was ejected during the accident sequence, and he and the other Soldiers were hospitalized for their injuries.

Personnel Injury

Class A

- Soldier was electrocuted while taking a shower. The Soldier was found lying on the shower floor with burn marks and pronounced dead at the local medical facility. The shower room was refurbished shortly before the accident.

- One Soldier was killed and another Soldier was injured when the pool they were swimming in experienced an electrical charge. The surviving Soldier suffered a hip injury. The accident was thought to have been caused by a faulty pump.

- Soldier died after suffering numerous gunshot wounds to his abdomen. The Soldier was trying to mount an M249 Squad Automatic Weapon onto a HMMWV when it fired, striking him and causing the fatal injuries.

- Soldier suffered a fatal gunshot wound to his head. The Soldier was cleaning his 9 mm weapon when it accidentally discharged a round, striking him in the head.

Class B

- Soldier's fingers were amputated when his right hand contacted the fan on a HEMTT during maintenance. The Soldier was adjusting the HEMTT's "idle" at the time of the accident.

- Soldier's finger was amputated when his hand was pinched between a HMMWV and a trailer.

POV

Class A

- Soldier was killed after his vehicle was struck head-on by another vehicle driving the wrong direction on a four-lane highway.

- Soldier died after his vehicle struck another vehicle head-on on an interstate highway. The Soldier was driving at a high rate of speed and in the wrong direction when the accident occurred. The Soldier was drinking before the accident.

- Soldier suffered fatal injuries after he was struck by an SUV. The Soldier was attempting to cross a highway and stepped into the vehicle's path. The accident occurred during the late evening hours.

- Soldier was killed when the vehicle he was riding in hit an embankment. The civilian driver ran a stop sign just before the accident.

- Soldier suffered a permanent total disability (brain damage) after being thrown from his motorcycle into oncoming traffic. The Soldier reportedly lost control of the bike just before the accident.

Class B

- Soldier's leg was amputated below the knee, resulting in a permanent partial disability. The Soldier was riding his motorcycle when it ran off the roadway and flipped over, causing the leg injury.

Why We Wear Ballistic Goggles

Cost of one set of goggles: $55.00

Cost of the eyesight or life saved by wearing these goggles: Priceless

The soldier wearing these goggles was the victim of an IED explosion. He suffered face wounds as a result of the attack, but he will live to fight again because he was wearing his ballistic goggles. Shrapnel is embedded in the lens instead of being embedded in his eye, possibly causing blindness or death.

BALLISTIC GOGGLES SAVE LIVES. WEAR THEM!

Be Safe!

U.S. ARMY SAFETY CENTER

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ARMY GROUND RISK-MANAGEMENT INFORMATION

Countermeasure

VOL 25 NO 10 https://safety.army.mil OCTOBER 2004

Waging War in the Winter

with the Army Mountain Warfare School

2004 APEX AWARDS FOR PUBLICATION EXCELLENCE

ARMY GROUND RISK-MANAGEMENT INFORMATION

Countermeasure

CONTENTS

features

U.S. ARMY SAFETY CENTER

on the web
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DASAF'S CORNER

From the Director of Army Safety

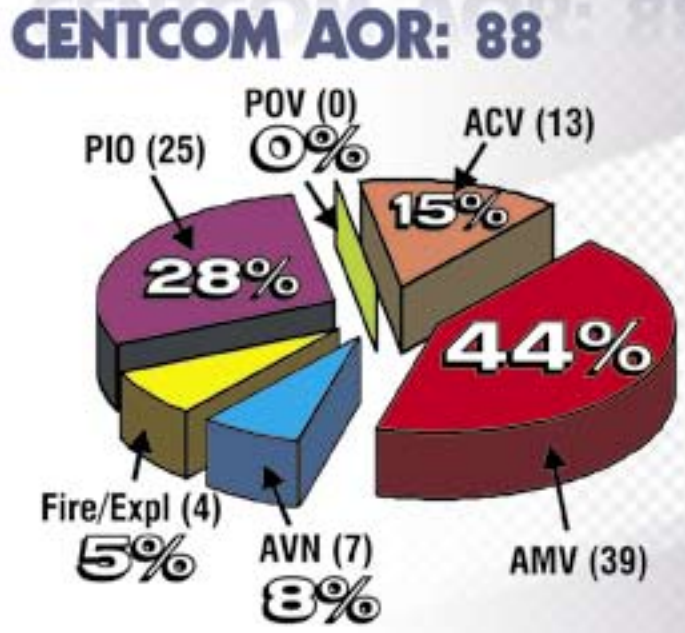
Is it Time for Driver Training to Become a Full-fledged Army Life Skill?

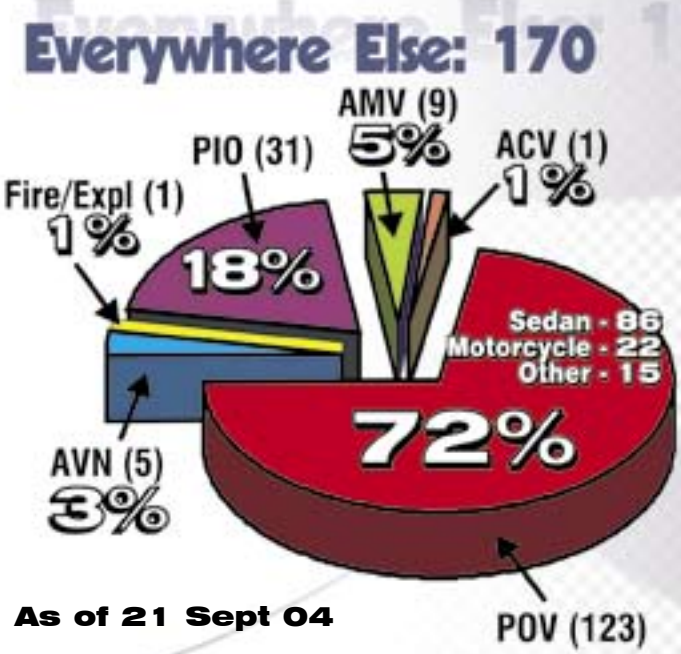
I love the quote by Albert Einstein, "We can't solve problems by using the same thinking we used when we created them." While sitting on NASA's Aeronautical Safety Assessment Panel, I noticed this same thinking held true during the *Columbia* shuttle tragedy investigation. NASA's research showed how losing shuttle foam over time eventually led to a disaster and realized "the machine was talking to us, but nobody was listening." Our Army statistics are also talking to us with nearly three-fourths of all accidental deaths happening when Soldiers are behind the wheel. Are we listening?

During this past year, the Safety Center has aggressively analyzed how our Army has lost Soldiers to accidents. For Soldiers who were not deployed, 72 percent of all accidental fatalities were from POV accidents. In theater, over two-thirds of our fatalities happened in Army motor vehicles and combat vehicles. Yes, the "Big Army Machine" is talking to us, and we are carefully listening so we can apply Einstein's advice. Not only is the Safety Center continuing to learn from accidents, it is now preparing to collect data on near misses to better understand the problems. Innovative solutions are headed your way!

Senior Army leadership is planning to make driving a "Soldier life skill." We are going to attack POV accidents with three major tools: an improved Defensive Driver Course (DDC), to include the use of simulators; online risk management through ASMIS-1, and hands-on Advanced Driver Skill Training partnered with General Motors. We're going to maintain basic motorcycle skill training at all installations and eventually add advanced motorcycle training to the curriculum to further enhance rider skills. Additionally, we're going to take a hard look at aggressive driving and the human aspects of operating a vehicle. During 2003, our Nation lost more than 42,600 people on the highways. Our goal is to make 2005 the safest year ever for Soldiers, civilians, contractors, and family members behind the wheel.

The G3 will attack AR 600-55, *Army Driver and Operator Standardization Program*, with a

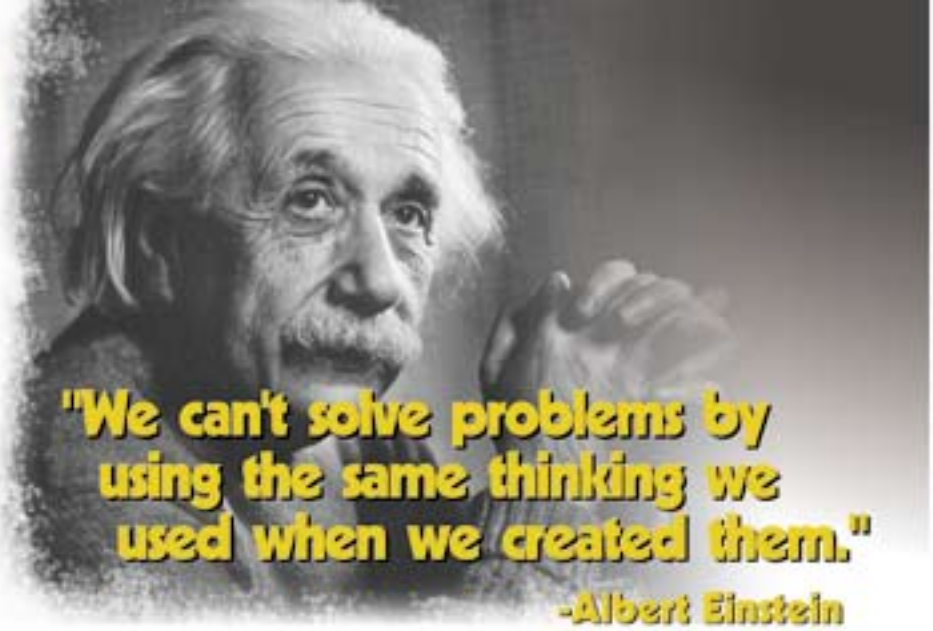




As of 21 Sept 04

DASAF'S CORNER

From the Director of Army Safety



critical eye on lessons learned from OEF and OIF. We know that driver inexperience, speed, seatbelt use, and rollovers are major contributors to accidental fatalities. We will blend the best attributes of military and civilian driver training to shape this Soldier life skill.

Aviation skills are taught on a basis of readiness level progression. This allows aviators to move from a basic to a more advanced flying skill level—one managed by control measures. Maybe it is time to do this with driving skills for military vehicles. We can no longer afford to "kick the tires, light the fires, and move out."

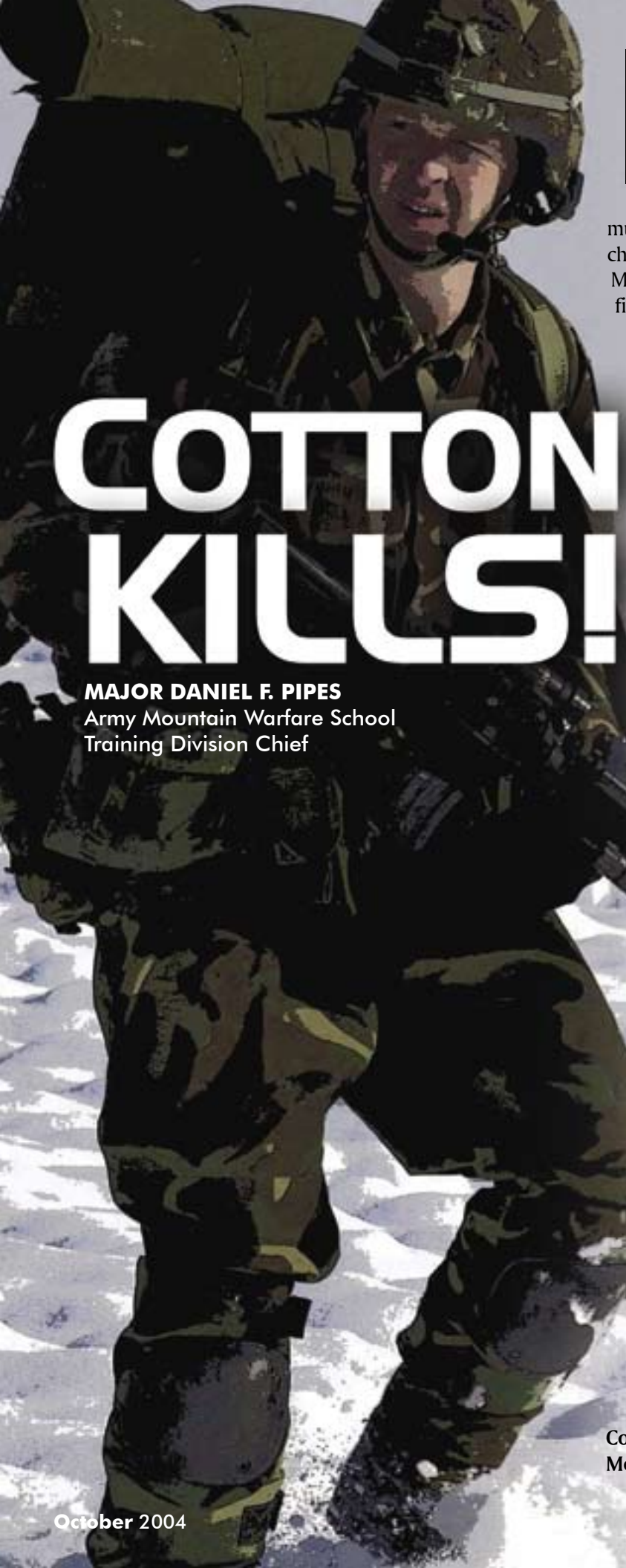
I greatly appreciate those of you using the POV module of ASMIS-1. We've had over 90,000 assessments without a single fatality. The most powerful aspect of this tool is that it requires leaders to talk to Soldiers—especially those in the 18- to 24-year-old high-risk group. The intent of this online tool is to focus on the risk associated with Soldiers driving from their home to a given location for pass, leave, or even during a TDY. Keep up the great work, but let's ensure we are using the tool appropriately. Troops are telling me that some leaders may not be using common sense when requiring ASMIS-1.

So, look for lots of energy in the Army's driver programs. The Web distance learning; classroom instruction, including the use of advanced simulators, and hands-on driver training will move us to the next level. It's clear that we can't solve the Army's driver training problems with the same thinking we've used during the last 10 years. We can win this battle with new, innovative thinking and by listening to the troops in the field. Continue to send us your thoughts and war stories! ★

Our Army at War: Be Safe and Make It Home!

Joe Smith

BG Joe Smith



COTTON KILLS!

MAJOR DANIEL F. PIPES
Army Mountain Warfare School
Training Division Chief

If you want to increase the combat effectiveness of your organization in cold weather one way is to forbid your Soldiers from wearing the brown cotton T-shirt on any field operations.

When dressing for the cold, the first layer of clothing must wick moisture away from the body because sweat chills quickly if it remains trapped against the skin. Medium or lightweight polypro or a similar synthetic fiber pulls moisture away from the skin. Cotton, by contrast, has no wicking ability, trapping moisture against the body and continually drawing heat from the body's core. Placing a cotton T-shirt over a polypro first layer is a common practice, but that's not the correct solution. Moisture wicked off the body by the polypro is trapped by the cotton and not allowed to pass outside. The brown cotton T-shirt should only be worn in the summer or in garrison.

Contrary to popular belief, this problem is not limited to the upper reaches of the Yukon, glacier travel, or the polar regions. If you are in an area where the temperature drops below 60 degrees Fahrenheit and the wind blows more than 10 miles per hour, hypothermia is a potential threat. Mount Washington, N.H., has some of the most extreme winter weather in the nation. However, more people die of hypothermia there during the summer months (June to August) than all other months combined, and most of them are found wearing cotton. If you train the way you fight and are serious about keeping your Soldiers dry, you must get rid of the brown cotton T-shirts in the field.

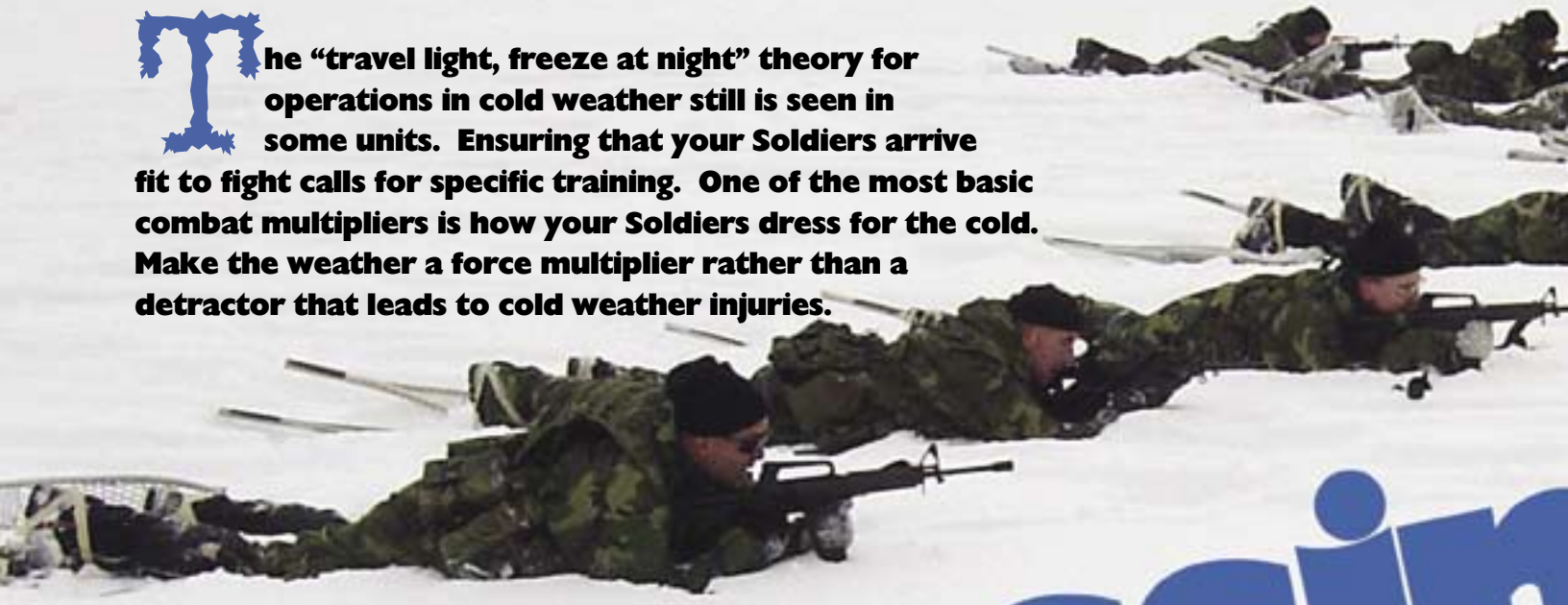
Soldiers love to have the latest gear. Officers should invest in a basic load of lightweight polypropylene T-shirts and set the example for their subordinates. They're more comfortable on long road marches on hot summer days, and also in the winter as the first wicking layer. Encourage your S-4 to purchase and issue these items to your Soldiers. Use them as rewards for outstanding performance.

Do whatever it takes to ensure your Soldiers remain dry. Removing the brown cotton T-shirt from any field operation will make a huge difference in your Soldiers' survivability.

For more information, visit **www.benning.army.mil/amws** or **mwsvt@vt.ngb.army.mil**.

Contact the author at the Training Division, Army Mountain Warfare School, at (802) 899-7221 /7220.

The "travel light, freeze at night" theory for operations in cold weather still is seen in some units. Ensuring that your Soldiers arrive fit to fight calls for specific training. One of the most basic combat multipliers is how your Soldiers dress for the cold. Make the weather a force multiplier rather than a detractor that leads to cold weather injuries.



Dressin for th

SSG STEPHEN JENNINGS
Instructor, U.S. Army Mountain Warfare School

ng the Cold

Our bodies produce heat, which keeps us warm and alive. Being cold and wet forces our bodies to work overtime to compensate for heat loss. If you can't generate more heat than you lose, you eventually will become hypothermic and possibly die if you're not treated.

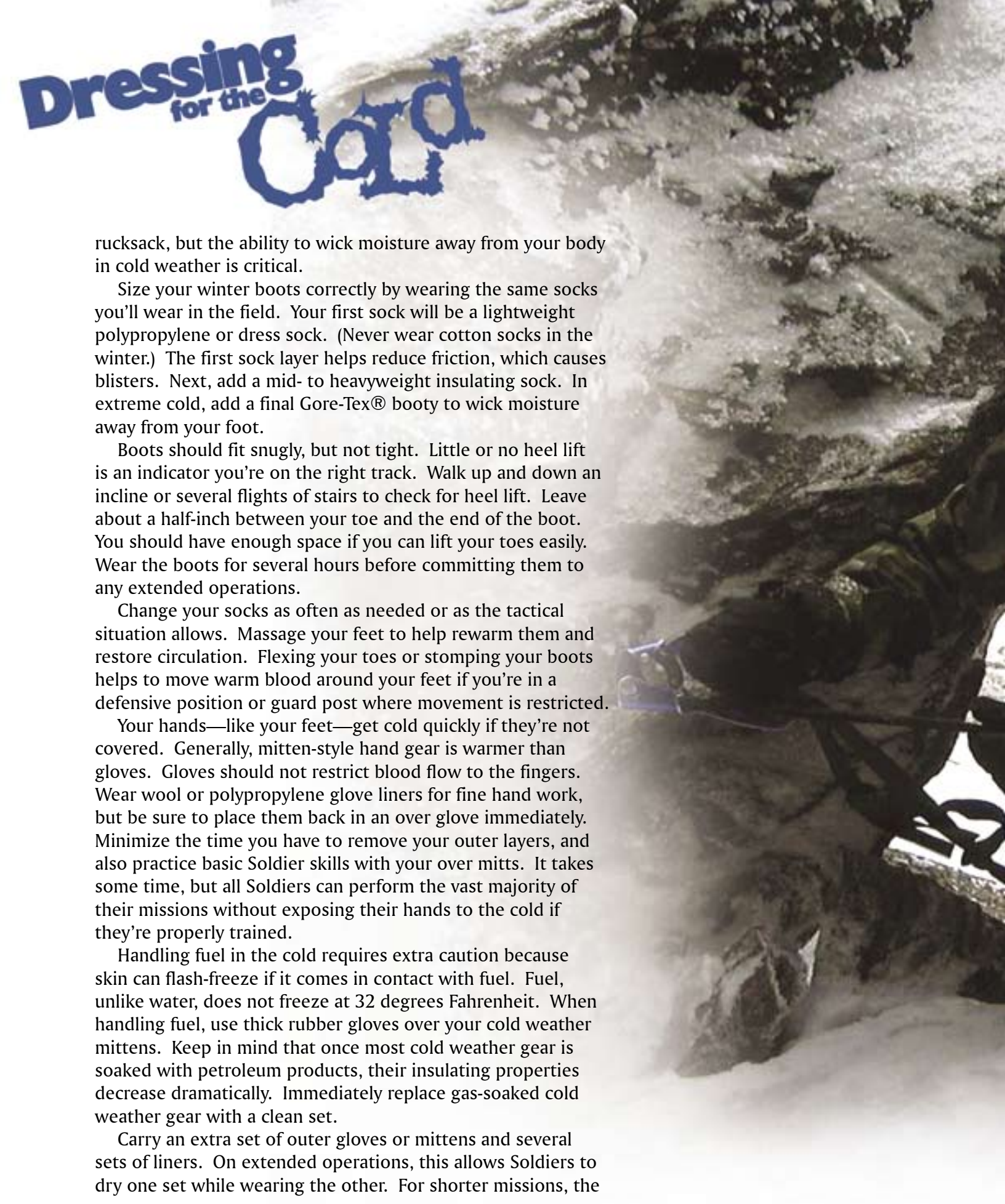
To keep your head warm, use a wool or Lycra watch cap and the multifunction neck gaiter for field operations. During periods of extended exertion, a watch cap can be removed easily for quick ventilation.

The first layer of clothing must wick moisture away from your body. Sweat will chill Soldiers quickly if it remains trapped against the skin. Medium or lightweight polypropylene or a similar synthetic fiber pulls moisture away from your skin. The brown cotton T-shirt has no wicking ability and traps moisture against your body (see previous article, "Cotton Kills!").

The next insulating layer can be the field jacket liner, Polartec® Spear suit top, or a similar fleece jacket. These items will hold warmth next to your body's core, which needs more insulation than your arms and legs. If you are moving regularly, a pair of mid- to lightweight polypropylene underwear often will be all you need to protect your extremities.

Finally, a breathable waterproof or windproof outer shell over the insulating layers allows your body's moisture to escape while preventing rain and snow from soaking through to your skin. The issued Gore-Tex® pants and parka work well as the final layer. Breathability is the key to keeping dry. Don't confuse the Gore-Tex® jacket with a rain suit. A rain suit may take up less space in your

Dressing for the Cold



rucksack, but the ability to wick moisture away from your body in cold weather is critical.

Size your winter boots correctly by wearing the same socks you'll wear in the field. Your first sock will be a lightweight polypropylene or dress sock. (Never wear cotton socks in the winter.) The first sock layer helps reduce friction, which causes blisters. Next, add a mid- to heavyweight insulating sock. In extreme cold, add a final Gore-Tex® booty to wick moisture away from your foot.

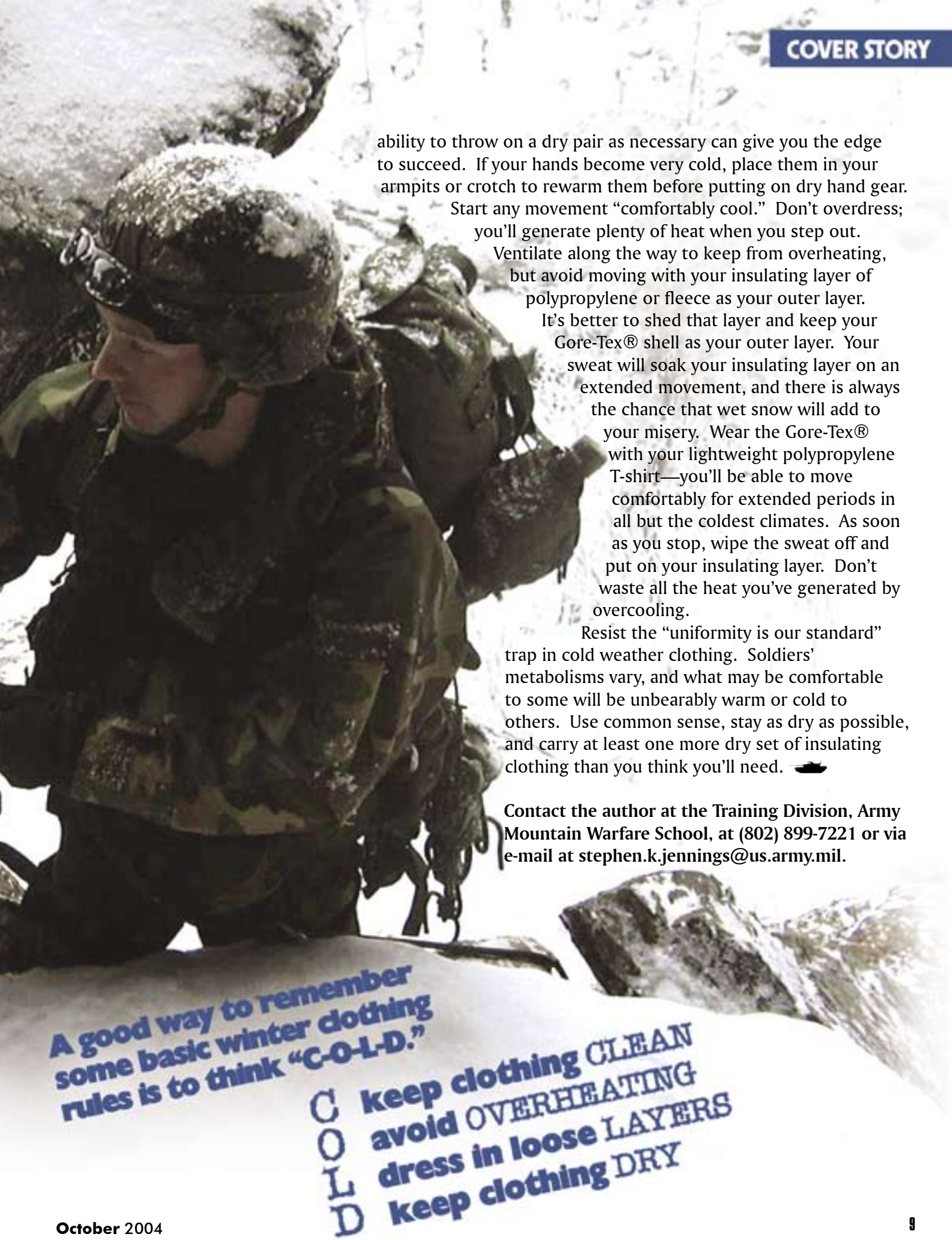
Boots should fit snugly, but not tight. Little or no heel lift is an indicator you're on the right track. Walk up and down an incline or several flights of stairs to check for heel lift. Leave about a half-inch between your toe and the end of the boot. You should have enough space if you can lift your toes easily. Wear the boots for several hours before committing them to any extended operations.

Change your socks as often as needed or as the tactical situation allows. Massage your feet to help rewarm them and restore circulation. Flexing your toes or stomping your boots helps to move warm blood around your feet if you're in a defensive position or guard post where movement is restricted.

Your hands—like your feet—get cold quickly if they're not covered. Generally, mitten-style hand gear is warmer than gloves. Gloves should not restrict blood flow to the fingers. Wear wool or polypropylene glove liners for fine hand work, but be sure to place them back in an over glove immediately. Minimize the time you have to remove your outer layers, and also practice basic Soldier skills with your over mitts. It takes some time, but all Soldiers can perform the vast majority of their missions without exposing their hands to the cold if they're properly trained.

Handling fuel in the cold requires extra caution because skin can flash-freeze if it comes in contact with fuel. Fuel, unlike water, does not freeze at 32 degrees Fahrenheit. When handling fuel, use thick rubber gloves over your cold weather mittens. Keep in mind that once most cold weather gear is soaked with petroleum products, their insulating properties decrease dramatically. Immediately replace gas-soaked cold weather gear with a clean set.

Carry an extra set of outer gloves or mittens and several sets of liners. On extended operations, this allows Soldiers to dry one set while wearing the other. For shorter missions, the



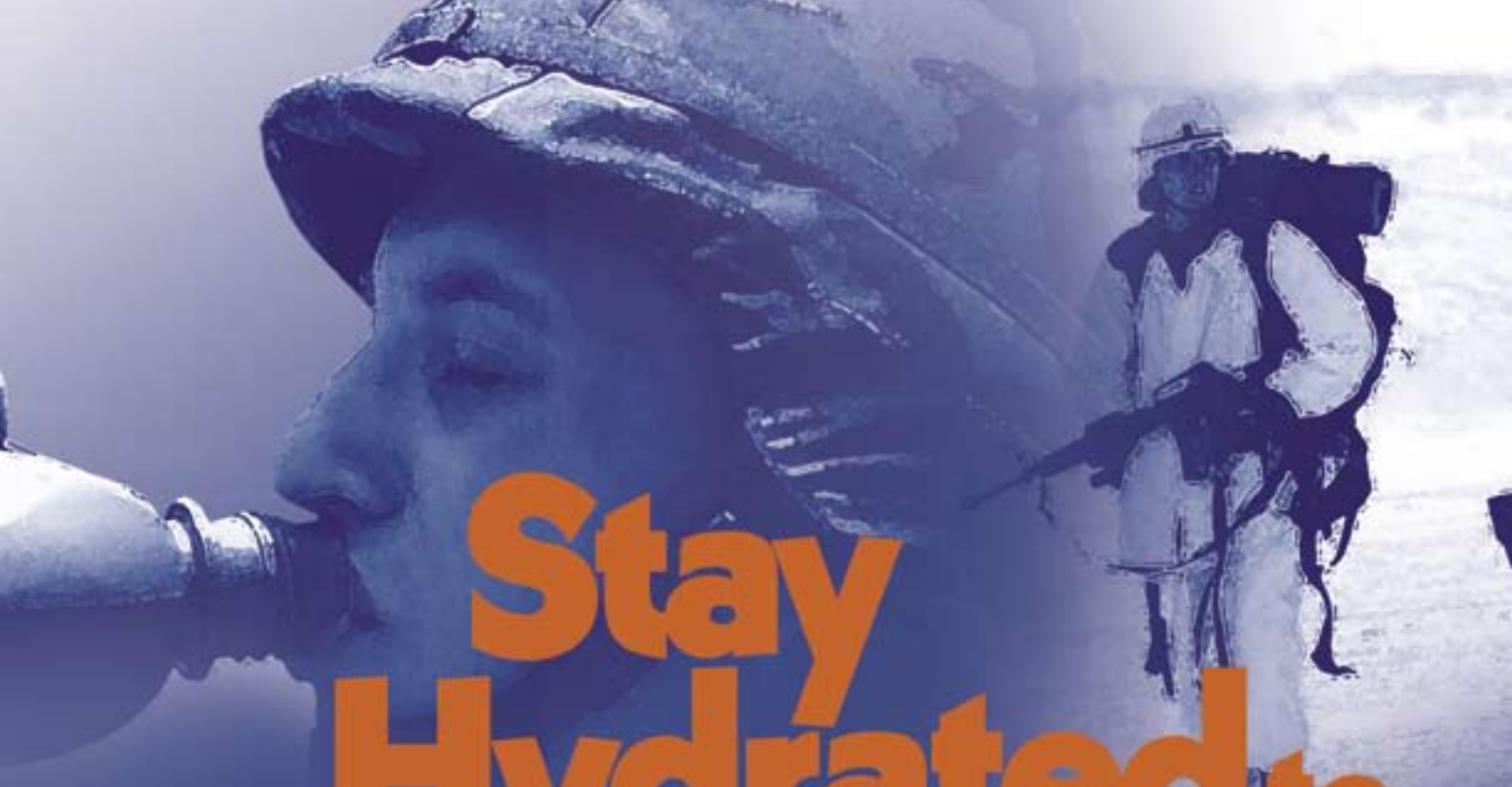
ability to throw on a dry pair as necessary can give you the edge to succeed. If your hands become very cold, place them in your armpits or crotch to rewarm them before putting on dry hand gear.

Start any movement "comfortably cool." Don't overdress; you'll generate plenty of heat when you step out.

Ventilate along the way to keep from overheating, but avoid moving with your insulating layer of polypropylene or fleece as your outer layer. It's better to shed that layer and keep your Gore-Tex® shell as your outer layer. Your sweat will soak your insulating layer on an extended movement, and there is always the chance that wet snow will add to your misery. Wear the Gore-Tex® with your lightweight polypropylene T-shirt—you'll be able to move comfortably for extended periods in all but the coldest climates. As soon as you stop, wipe the sweat off and put on your insulating layer. Don't waste all the heat you've generated by overcooling.

Resist the "uniformity is our standard" trap in cold weather clothing. Soldiers' metabolisms vary, and what may be comfortable to some will be unbearably warm or cold to others. Use common sense, stay as dry as possible, and carry at least one more dry set of insulating clothing than you think you'll need.

Contact the author at the Training Division, Army Mountain Warfare School, at (802) 899-7221 or via e-mail at stephen.k.jennings@us.army.mil.



Stay Hydrated to Stay Safe

SSG CHRISTOPHER BUSHWAY
Instructor
U.S. Army Mountain Warfare School

Drinking enough water is essential to preventing cold weather injuries. The average adult loses 1.5 to two liters of water each day. Being in a cold weather climate can greatly increase this water loss through the increased excretion by the kidneys, perspiration, and evaporation from the lungs (the breath you see on a cold day).

Dehydration is a leading cause of cold weather injuries. A dehydrated Soldier has inadequate blood flow to the extremities. This reduced circulation can contribute to a Soldier developing frostbite (freezing injury) or trench foot (non-freezing injury). First sergeants and support personnel bringing water up to line units can usually tell if Soldiers are hydrating properly by the amount of water they consume daily. It's not unusual for Soldiers to drink a gallon of water or more each day when moving extended distances in mountainous terrain during winter.

The adequacy of fluid intake can also be judged by urine color and volume. Darkly colored urine—orange snow instead of light yellow snow—and not needing to urinate upon awakening from a night's sleep are indicators of significant dehydration. Be aware this technique may not work for Soldiers who take vitamins, supplements, or medications that discolor the urine.

Soldiers may be less interested in drinking water during cold weather and, as a result, become dehydrated. Drinking in cold weather takes more effort than in warmer temperatures and canteens sometimes freeze. To prevent this, Soldiers should carry at least one canteen in the front chest pocket of their Gore-Tex® jacket to allow body heat to keep the water from freezing. Also, because water freezes from the top down, the canteen should be placed in the pocket

upside down. The simple act of positioning the canteen properly will ensure there is at least a quart of water always available. Another way to encourage Soldiers to drink water is to provide warmer water, or flavor the water with the MRE drink mix or other product. The important thing to remember is not to store sweetened drinks in your canteen because sugar will cause bacteria to grow.

Finally, buddy teams must be trained so that Soldiers encourage each other to drink plenty of water. Both Soldiers must understand the importance of pushing fluids before, during, and after exertion. Enforcing proper hydration during cold weather is one of the easiest ways to ensure your Soldiers stay healthy and arrive ready to fight.

For more information, contact the Army Mountain Warfare School at mwsvt@vt.ngb.army.mil or visit their Web site at www.benning.army.mil/amws. You may also call the Army Mountain Warfare School Training Division at (802) 899-7221.

The Freeze-Dried Soldier

CW2 ALTON FARRIS
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Fort Bragg, N.C.

Dehydration is a condition Soldiers rarely think about during the winter months. It's a dangerous condition—one Soldiers may not be watching out for because it often takes longer for the symptoms to become obvious. The following story describes how several seemingly unconnected factors nearly took the life of a Soldier in Germany.

It was typical October weather at the Grafenwohr training area and temperatures were hovering around the low 30s as we began our Primary Leadership Development Course (PLDC) training. Early on we'd set up a coffee fund, hoping the caffeine would help us stay awake during some of the less exciting classes. By itself, the coffee seemed an insignificant issue. However, coupled with other factors, it would nearly prove fatal for one of my classmates.

We were transitioning to the field mode of our training and it was the morning of the road march to the field training exercise (FTX) site. The weather was cold, and the thought of heat injuries was far from anyone's mind. We'd fallen behind schedule because of administrative reasons, and there was a sense of urgency because the first sergeant wanted the FTX site set up before lunch. The cadre leading the road march was fairly new and missed a turn en route, adding another two miles to our march.

We had made it to the FTX site when one of our Soldiers suddenly collapsed. Fortunately, three of our cadre members were trained combat medics and immediately treated the Soldier and got her evacuated to a health clinic. She was treated, released with a profile, and allowed to complete her training. The doctor told her she'd nearly suffered heatstroke and was fortunate that medical aid was rendered so swiftly.

You ask how this could happen to a Soldier in near-freezing weather. The truth was she unknowingly had been putting herself at increased risk during the previous three weeks. Each day she'd been drinking six to eight cups of coffee and four to six cans of soda, and she was also taking Vivarin. In addition, she'd begun her menstrual cycle three days before the road march. All these caused her body to lose fluid which, when combined with her not drinking enough water, almost led to a disaster.

The sad thing is this incident could have been prevented by a few risk control measures (see the related article "Stay Hydrated to Stay Safe"). Leaders must recognize Soldiers can suffer dehydration year-round and that coffee and sodas aren't a substitute for water.

Since this incident, the academy has taken measures to address this risk. The cadre is very proactive about keeping Soldiers properly hydrated during winter months. Leaders are trained to watch for the danger signs of dehydration and excessive caffeine use.

Leaders must train their Soldiers about these dangers so they'll know how to avoid them. After all, while a freeze-dried meal is OK, a freeze-dried Soldier isn't!

Contact the author via e-mail at alton.farris@us.army.mil.

Snow Forts

Walls That Stop Steel

SSG LARRY GARNER
Instructor
U.S. Army Mountain Warfare School

A recent TV show posed the question of how to construct a fighting position in a snow-covered, frozen environment. Would you: (A) use explosives; (B) use heavy equipment; or (C) use destroyed structures? The show's host chose (C) because it would take too many explosives and too much time with heavy equipment to build a position. However, the best answer was one never considered: (D) build a snow fortification.

A snow fortification is nothing more than a fighting position built from snow. It's not necessary to dig into frozen ground to build a fortification that will stop small-arms fire, but it is essential to pack the snow down as much as possible. We at the Army Mountain Warfare School have tested this technique repeatedly with 5.56 mm, 7.62 mm, 9 mm, 12-gauge buckshot and slugs, and several AK-47s and AK-74s.

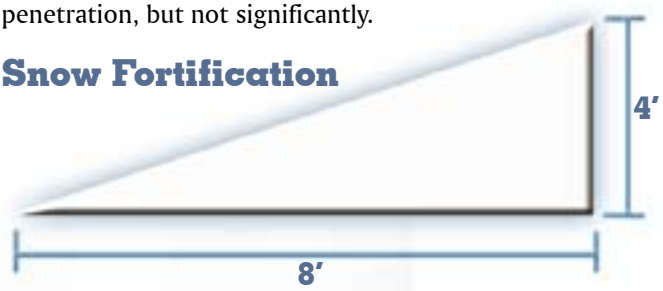
For these tests, we first began firing at 100 meters and advanced toward the fighting position while changing weapons systems. At 5 meters we fired 9 mm pistols, buckshot, and 12-gauge slugs. We've never had a round punch through the fortification into the Soldier's fighting area.

It doesn't take much to make a snow fortification—just some snow, several Soldiers, and at least 10 minutes. Make a mound of snow using shovels, MRE boxes, or any other field expedient snow-moving equipment. Pack the snow down by laying a box over the mound, and then have the Soldiers compact it with their bodies. Whenever possible, pack debris such as twigs, sticks, or boards into the snow. Frozen ice chunks or rocks tend to fragment and are not recommend.

The minimum dimensions of a properly constructed snow fortification are 8 feet by 4 feet. The fortification should be built in a wedge shape (see diagram). These dimensions and the unique shape will effectively stop small-arms fire up to 7.62 mm. We've found the wedge shape helps deflect the rounds and is a very important part of the construction.

As a general rule, the more you compact the snow, the more effective it will be at stopping rounds. Conversely, the less you compact the snow, the less effective it will be. If resources are available, it's critical that you add other materials to the snow for more stopping power (see above paragraph regarding proper materials). Average penetration from our "non-scientific" field tests using snow fortifications built to the dimensions described above range from two feet to a maximum of four feet. We've noted that temperature and the resulting snow consistency do affect bullet penetration, but not significantly.

Snow Fortification



The same rules for building a normal fighting position apply when building a snow fortification. Build interlocking fields of fire, don't disturb the position's front if at all possible, and camouflage the position. If the snow is deep enough, the part of the position you'll fight from is the same as the normal fighting position. You also can build grenade sumps, or even have overhead cover. The main difference between the two is on the outside. If you're in snow that's less than waist deep, angle the snow upward towards you. This will make the bullets spin and ricochet off the position. If you're in snow deeper than your waist, the position should look like a normal fighting position.

Use these techniques if you find yourself in a snowy environment and need to build a fighting position quickly. Only 10 minutes could save your life!

Contact the author at the Training Division, Army Mountain Warfare School, at (802) 899-7221 or via e-mail at larry.garner@us.army.mil.

KEEP IT SHOOTIN' IN THE COLD!

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Instructor
U.S. Army Mountain Warfare School

Cold temperatures can greatly affect the maintenance, functioning, and employment of infantry weapons. To properly handle and care for your weapon under a variety of adverse conditions, you must take the temperature into consideration.

Preventing the weapon from freezing by NOT letting condensation form is extremely important. Condensation forms on weapons when they are taken from the extreme cold into any type of heated shelter. Condensation often is referred to as "sweating." This moisture freezes when you leave a heated area and internal parts may freeze to one another, causing stoppages. For this reason, it is best to leave weapons outside during freezing temperatures.

When left outside, weapons should be readily accessible, guarded, and sheltered where ice and snow will not get into the working parts, sights, or barrel. Because the condensation process will continue for about an hour after a weapon is taken inside a warm shelter, wait until the sweating stops before beginning cleaning. Once you're inside the shelter, keep your weapon near the floor to minimize condensation. In addition, keeping the interior of the shelter close to 32 degrees Fahrenheit will minimize condensation and also prevent Soldiers from overheating. When you move back into the cold, you should manually operate your weapon by pulling the charging handle to prevent the internal parts from freezing. Charge the handle several times during the first five minutes after leaving a warm shelter. Make sure you don't inadvertently load the weapon and have a negligent discharge.

When you clean your weapon, completely strip it and use a solvent that won't leave a residue to remove all lubricants and rust-prevention compounds. Once your weapon is clean, use a lubricant that won't thicken and cause your weapon to operate sluggishly or jam. Use Lubricant, Arctic Weapon (LAW) rather than BreakFree CLP in all weapons except the M249 Squad Automatic Weapon and M2 .50 caliber machine gun. Remember to use lubricants sparingly.

Another consideration is your battle-sight zero. You should battle-sight zero your weapons in the area where you're going to use them. Temperature, elevation, and atmospheric pressure all affect where the round hits and how the weapon operates. A common error is to battle-sight zero your weapon at home station, and then deploy to a different area and wonder why your weapon isn't shooting to the point of aim. If you want to accurately engage your enemy with precision, then battle-sight zero your weapon in the area of operation.

These are only some of the things you need to consider when operating your weapon in a cold climate. We will continue to operate in cold weather environments worldwide, and we must be able to maintain our weapons in any climate. Including the basic lessons in this article in your pre-deployment training plan will help ensure you and your Soldiers are battle ready!

Contact the author at the Training Division, Army Mountain Warfare School, at (802) 899-7221 or via e-mail at james.rooney1@us.army.mil.

A Long and Chilly Trail

1LT MATTHEW NOWLIN
Maryland Army National Guard

I couldn't have been prouder of myself. It was the perfect plan, or so I thought. I would later realize that failing to consider the risk management process almost cost me my life.

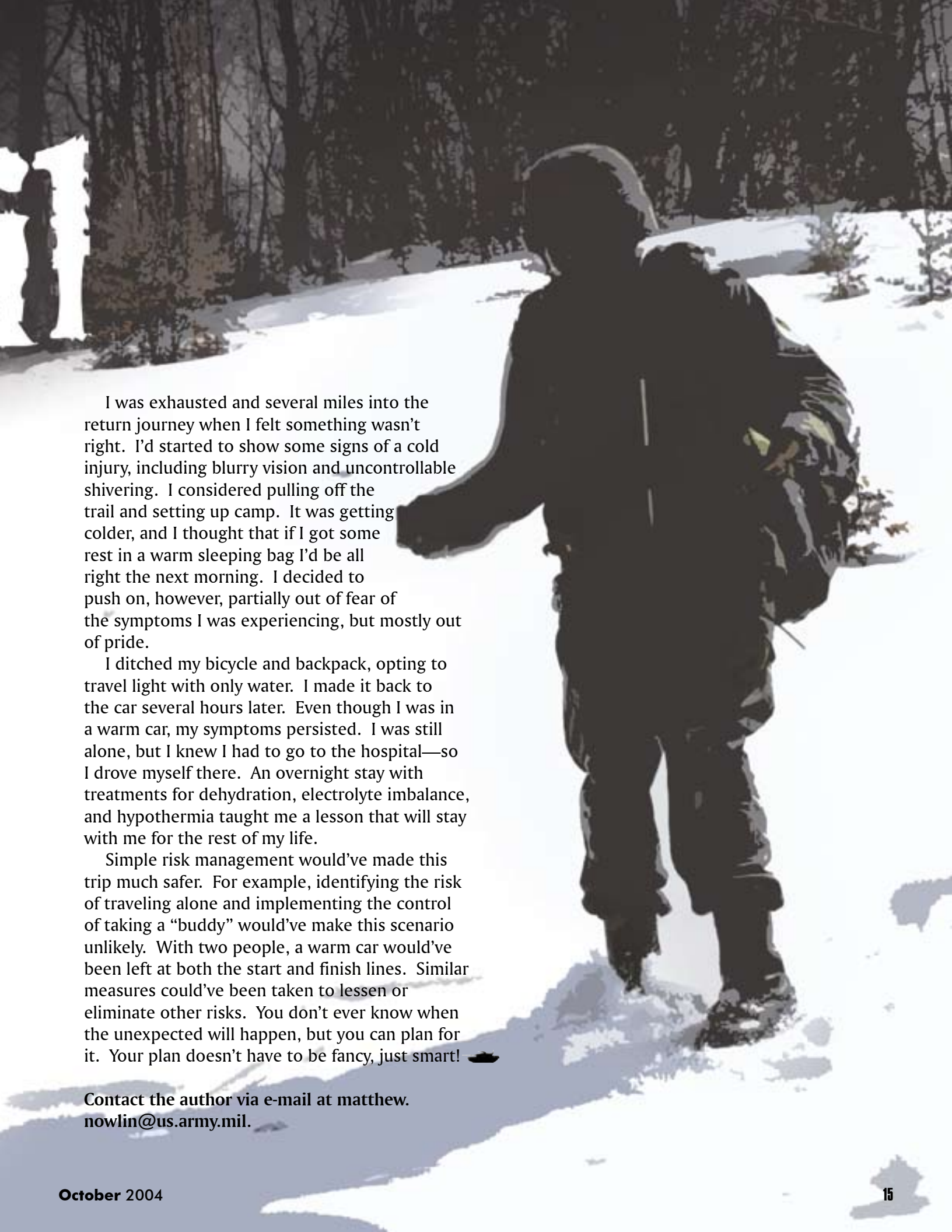
It was a beautiful spring day in April, with an expected daytime temperature of around 60 degrees. I was looking forward to graduating from my state's Officer Candidate School in a few months. Only one thing was standing in my way—the 12-mile road march. I wanted to give the actual course a try, and this would be my only opportunity for a "dry run" before the timed event.

I started out alone on the course, which followed a canal in western Maryland. I didn't see any other hikers most of the day. The hike hardly seemed like work, and I was having a great time. But it wasn't the great weather, the canal and river winding its way through the mountains, or the occasional turkey that made this trip memorable. The "memorable" part would come later.

I finished the course with plenty of time to spare, so I sat down to eat and take in more of the scenery. As I relaxed, I marveled at how well I'd planned and executed this one-man mission. I'd examined the route, planned what supplies to bring, and even put a bicycle at the route's end to ride back to my car. The expected events I'd planned for, but I'd failed to consider the unexpected.

I hadn't expected to get such a late start that day. When I finished the course, there was only an hour or two of daylight left. I also hadn't anticipated traveling back at night. And on this particular night, forecasters were warning of frost and temperatures dipping into the teens.

As the light faded and the temperature dropped, my plan began to unravel. The dark and cold made riding the bicycle on the trail difficult and dangerous. I soon had to get off and walk the bike. Suddenly, the original 12 miles I was supposed to walk became 24.



I was exhausted and several miles into the return journey when I felt something wasn't right. I'd started to show some signs of a cold injury, including blurry vision and uncontrollable shivering. I considered pulling off the trail and setting up camp. It was getting colder, and I thought that if I got some rest in a warm sleeping bag I'd be all right the next morning. I decided to push on, however, partially out of fear of the symptoms I was experiencing, but mostly out of pride.

I ditched my bicycle and backpack, opting to travel light with only water. I made it back to the car several hours later. Even though I was in a warm car, my symptoms persisted. I was still alone, but I knew I had to go to the hospital—so I drove myself there. An overnight stay with treatments for dehydration, electrolyte imbalance, and hypothermia taught me a lesson that will stay with me for the rest of my life.

Simple risk management would've made this trip much safer. For example, identifying the risk of traveling alone and implementing the control of taking a "buddy" would've make this scenario unlikely. With two people, a warm car would've been left at both the start and finish lines. Similar measures could've been taken to lessen or eliminate other risks. You don't ever know when the unexpected will happen, but you can plan for it. Your plan doesn't have to be fancy, just smart!

Contact the author via e-mail at matthew.nowlin@us.army.mil.

Be the VIP in VPP

SUSAN JERVIS
Army Materiel Command
Fort Belvoir, Va.

The Occupational Safety and Health Administration (OSHA) established the Voluntary Protection Program (VPP) in 1982. The VPP is a formal means of recognizing sound management principles used in establishing and maintaining an effective safety culture. In 1998, federal workplaces were granted the right to participate in the VPP. To date, Tobyhanna Army Depot, Pa., is the only Army installation to achieve the VPP's top STAR recognition.

The VPP uses the following major elements to evaluate safety and health programs and determine STAR eligibility:

- **Management leadership and employee involvement**
- **Worksite analysis**
- **Hazard prevention and control**
- **Safety and health training**

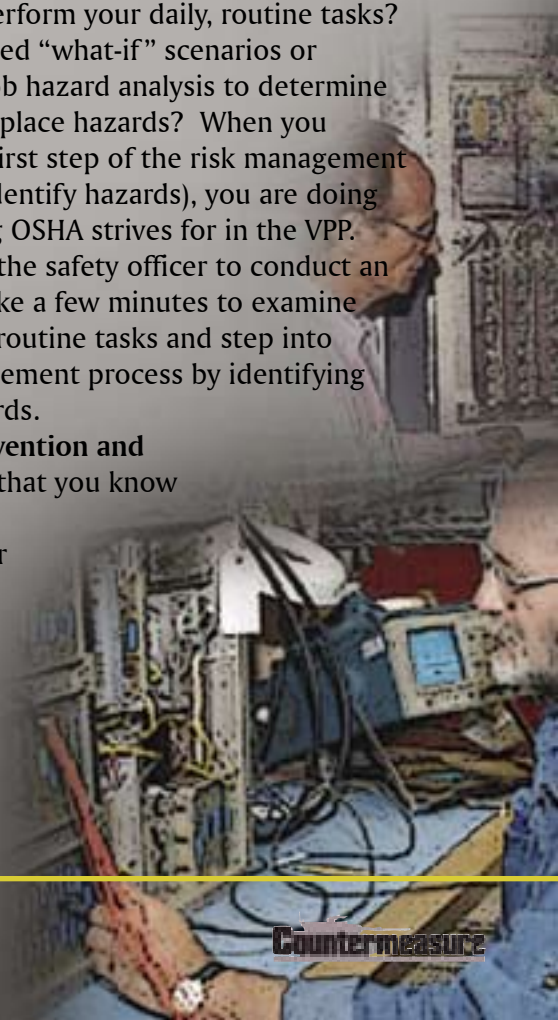
Is it worth the effort for an organization to attain VPP STAR recognition? Statistics show the average VPP site has a lost workday incident rate 52 percent below the average for its type of industry. Tobyhanna Army Depot experienced a 50-percent decrease in accidents by focusing on their safety and health efforts as they worked toward STAR recognition. Tobyhanna's success story continues as the depot wins work bids, due in part to decreased overhead and safety costs. In turn, the depot's employees enjoy the benefit of a safer workplace.

So what's the key to VPP success? It's YOU—you are the VIP in this program, the one that can make a difference. Whether you are a senior leader, commander, supervisor, staff officer, employee, or Soldier, you can make the VPP work for you and your organization. Let's look at how you can use the program's elements to become a STAR in your local safety culture.

Management leadership and employee involvement. There's something for everyone in this program element. If you're a leader, get personally involved and take a genuine interest in enhancing the safety awareness of everyone in your organization. When you show your workers that you care about their safety, it will encourage them to be safe. Whether you work in an office, industrial complex, construction site, or in the field, you're responsible for your safety and for developing safety awareness in those around you. Your active participation in the safety program, regardless of your role in the organization, will definitely make the difference.

Worksite analysis. You show up for work each day and seemingly nothing significant changes in your workplace environment. But have you ever stopped and closely examined the way you perform your daily, routine tasks? Have you applied "what-if" scenarios or completed a job hazard analysis to determine potential workplace hazards? When you complete the first step of the risk management process (i.e., identify hazards), you are doing the exact thing OSHA strives for in the VPP. Don't wait for the safety officer to conduct an inspection. Take a few minutes to examine both new and routine tasks and step into the risk management process by identifying potential hazards.

Hazard prevention and control. Now that you know the potential hazards in your work area, you can take positive action to mitigate those hazards. Before your start a task,

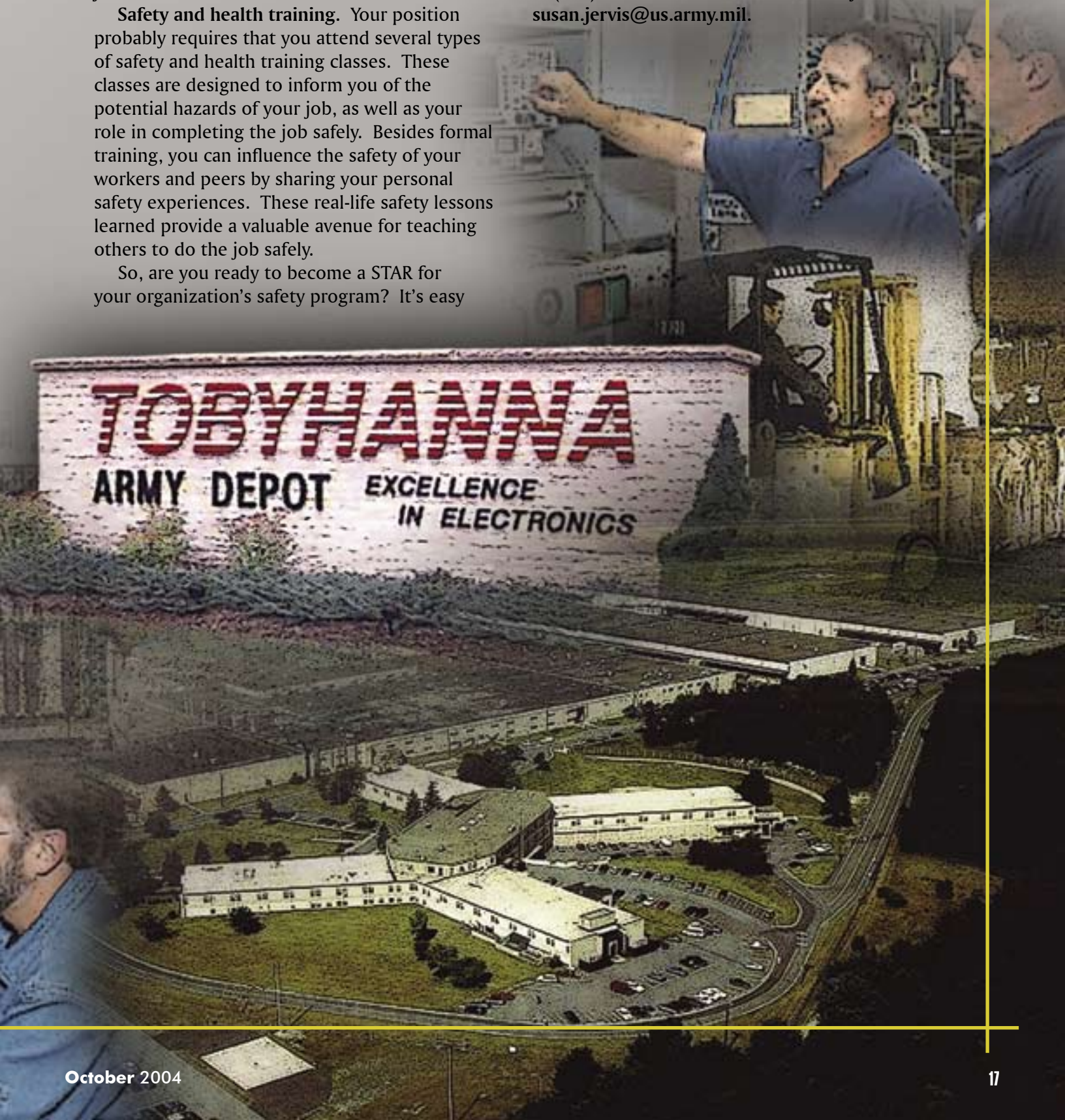


mentally check off your list of job safety rules. You're the one that has the most to gain by wearing the appropriate personal protective equipment or following the correct procedures. Contact your local safety staff to help you identify engineering controls to eliminate potential hazards and enhance the safety of your job site.

Safety and health training. Your position probably requires that you attend several types of safety and health training classes. These classes are designed to inform you of the potential hazards of your job, as well as your role in completing the job safely. Besides formal training, you can influence the safety of your workers and peers by sharing your personal safety experiences. These real-life safety lessons learned provide a valuable avenue for teaching others to do the job safely.

So, are you ready to become a STAR for your organization's safety program? It's easy to implement the VPP elements. Besides, it's a great way to contribute to your organization's mission success and ensure you make it home to your family and friends at the end of the day.

Ms. Jervis is a safety engineer in the AMC Safety Office, Fort Belvoir, Va. She may be contacted at (703) 806-8706, DSN 656-8706, or by e-mail at susan.jervis@us.army.mil.



Are Captured Weapons Safe to Shoot?

The article, "Are Captured Weapons Safe to Shoot?," (April 2004 *Countermeasure*) has stirred a lot of reader interest and resulted in some informative e-mails. We'll share those below.

The April 2004 issue of *Countermeasure* had a fine article on non-U.S. weapons and their associated dangers. As a technical note, some information was misleading while still being correct. In commenting on the NATO 7.62 mm round being unable to be used in the AK-47, the author is correct. The NATO round will not replace the Russian 7.62x39 mm round. It is highly unlikely that anyone would try as the NATO round is much longer—the Russian round being a shortened cartridge (almost a pistol round) made specifically for assault rifles. I believe the 7.62x54 mm R round is a rimmed round derived from the cartridge used in the old Mosin-Nagant rifles going back to the late 19th century. While close to the same length as the NATO round, the 7.62x54 mm R looks very different and is not likely to be confused with the non-rimmed 7.62 mm NATO round.

A much more probable confusion is between the 5.56x45 mm round for the M-16 and its derivatives and the Russian 5.45x39 mm round for the AK-74. This was not highlighted in the article. Unless compared side by side (or close inspection of the rear of the case for the manufacturer's code) they are difficult to differentiate. The 5.56x45 mm will fit into the magazine of the AK-74 and can even be chambered, but the results of trying to fire it would be disastrous. I've handled all these weapons and rounds and still have a demilitarized 5.35x39 mm round on my mantle. The real experts are the people at my old unit, the 513th MI BN, here at Aberdeen Proving Grounds. Of course they have been renamed and are now, I believe, the 203rd MI BN. They specialize in foreign materiel.

Charles Bedard
Mathematical Statistician
Army Evaluation Center
Aberdeen Proving Ground, Md.

Good observations! I had not considered a comparison of the 7.62 mm NATO and 7.62x54 mm R in this article. You're right about the Russian cartridge. It dates from 1891 and has survived until now as a standard military cartridge. I believe that makes it the oldest 7.62 mm (.30 caliber) cartridge still in military use. Indeed, it outlived the communist empire it helped to build!

I hope the following information will shed some light on this subject. I have been on active duty for 18 years and my assignments have allowed me to train with foreign weapons. My last posting took me to Fort Bliss, Texas, where I taught threat doctrine and systems to all branches of DOD. I also was tasked to teach small arms.

While assigned to Fort Bliss I deployed to Iraq to "look for weapons." I encountered the type of rifle you talked about in the article and it is not a Russian-made Dragunov SVD. Rather, the rifle is called an "Al Kadeshi" and was manufactured in Iraq. It is a mix of two rifles, 90 percent being the Russian SVD and 10 percent the Romanian FPK. There are two variants of this rifle. One is for live fire and field issue, while the other is for training only. The training rifle has a metal disk with the inscription (in Arabic) "training use" inlayed in the right-hand side of the buttstock. The training rifle also has a red grip cap, just like the rifle pictured in your article. If you look closely at the hole in the barrel, you'll see the metal has been blued. That means the hole was put there when the rifle was manufactured, not as an act of sabotage.

You make a very good point—foreign weapons should be inspected before they're fired.

SFC Warren Jueschke
Fort Bliss, Texas

Great response! Your observations on this article are correct and I passed them to the Air Force Special Operations Command, Hurlburt Field, Fla. They were the folks who were test-firing the captured rifle when it exploded and provided me the information. We moved to get the original information into the field quickly out of our concern for the safety of Soldiers in Iraq. The original story and your e-mail emphasize how important it is to be careful around captured enemy weapons.

I enjoyed the article, especially the part about using the proper ammunition. Like yourself, I'm a Makarov owner and shooter. I do think your article was a little misleading in one respect. The Makarov Web site **(www.makarov.com)** FAQ section does not endorse using anything other than the proper ammunition in any Makarov pistol. When asked about using a 9 mm Parabellum in the Makarov, this is what the folks at Makarov.com said:

"Holy smokes …what are you trying to do? Kill yourself?!? The 9mm Parabellum is a very high pressure round intended for locked-breech pistols. Look, fire a 380 ACP (Automatic Colt Pistol) from a .380 ACP pistol. Fire a 9x18 mm Makarov from a 9x18 Makarov pistol. Fire a 9mm Parabellum from a 9mm pistol. It's that simple. If you want a multi-caliber handgun, get a .357 Magnum; then you can fire .38 Specials from it."

Yes, the 9 mm Parabellum can be chambered in a 9x18 mm Makarov. However, it is very clear that it is unsafe to fire anything but the correct ammo.

SFC Daniel S. Masessa
Equipment Specialist
DCSLOG-MAINT
Maine Army National Guard

Hearing Loss Equals Combat Casualty

One of the benefits of working at the U.S. Army Safety Center is that Countermeasure is available on our Web page in PDF format before distribution hits the streets. An early on-line reader of our September 2004 issue had the following comment about the article, "Hearing Loss Equals Combat Casualty."

Hooah!!!!!!!!—and thank you. Our audiologist is Baghdad is telling us he has yet to see a perforated eardrum from mortars or roadside attacks in anyone who was wearing hearing protection. One of the best, or at least one of the most elegantly put, endorsements we've received on the Combat Arms Earplug was the following from an infantry officer in Taji, Iraq.

"Combat Earplugs—the yellow and green ones—work great in this environment! I was able to test them two different times, and they probably made the difference between having eardrum and hearing damage and not. They definitely allow you to mentally recover very quickly so you are able to deal with your 'situation' versus standing around like a stunned mullet."

Dr. Douglas Ohlin
USACHPPM
Aberdeen Proving Ground, Md.

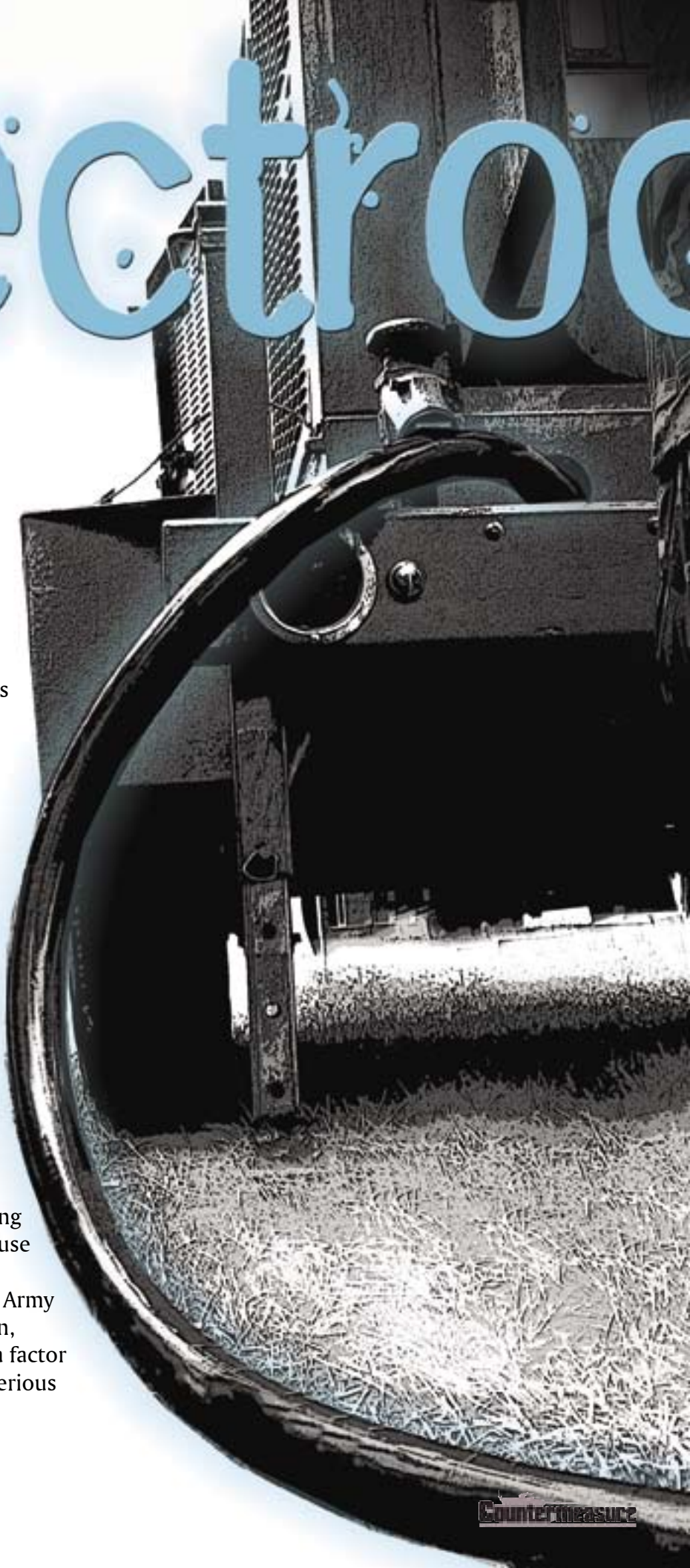
electroc

There are many hazards in combat, including the enemy and his weapons, the heat and cold, and vehicle and weapons accidents. However, another killer of Soldiers has emerged in Iraq this past year—electrocution—and it's a killer that is growing at an alarming rate. Five Soldiers have died from electrocution in Iraq this fiscal year. Two recent cases are cited below.

One Soldier died and another was injured in a swimming pool in the Iraqi theater last May. Although the incident is still under investigation, it appears the Soldier was killed when an electrical current charged the pool, likely traveling from the water filtration system to the pool's edge. The preliminary investigation revealed the water pump had not been properly grounded.

Less than two weeks later another Soldier was found dead, lying on a shower room floor with burn marks on his body. The apparent cause was electricity that traveled from the water heater through the metal pipes to the showerhead. Again, improper grounding of electrical systems is the probable cause of this Soldier's death.

According to Frank Trent of the U.S. Army Corps of Engineers Gulf Region Division, Baghdad, Iraq, improper grounding is a factor in nearly every electrocution and is a serious threat for Soldiers and civilians there.



cution:
The Unexpected Killer

CW4 (RET) BRETT BLOUNT
Safety Specialist
MACOM Support Branch
U.S. Army Safety Center

"We've had several shocks in showers and near misses here in Baghdad, as well as in other parts of the country," Trent said. "As we install temporary and permanent power on our projects, we must ensure we require contractors to properly ground electrical systems. I have seen and also have received reports about generators being improperly or inadequately grounded."

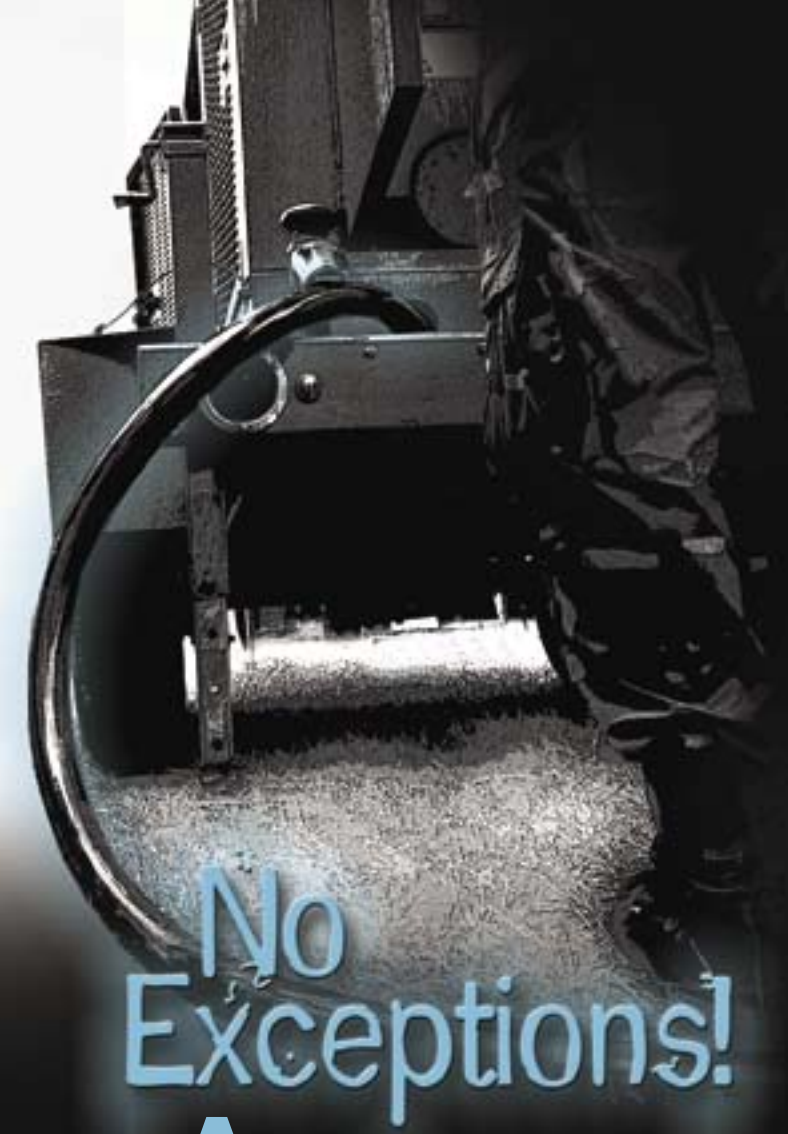
Because coalition forces are using many different types of commercial generators there can be confusion about how they should be grounded. However, the principles of grounding remain the same, regardless of generator size and manufacturer.

Michael F. Howell, chief of the Buildings System Division at the U.S. Army Corps of Engineers Transatlantic Program Center, explained that a properly grounded electrical system consists of two major components: an earth system ground and an equipment safety ground. "The purpose of the earth system ground is to intentionally tie the power supply (generator) to earth. The ground-to-earth connection limits voltages on the system due to lightning (strikes), line surges, or accidental contact with other electrical systems."

He added it's the second component of proper grounding—the equipment safety ground—where the major problems are arising.

"The purpose of the equipment safety ground is to prevent or remove dangerous voltages that could exist on exposed metal surfaces during a ground fault condition, or because of improper wiring connections," he said. "This is accomplished by interconnecting the metal parts of the electrical system and then tying them to the earth system ground. Accidental deaths are much more likely to be related to problems with the installation and maintenance of the equipment safety ground than the earth system ground."

The effectiveness of the earth system ground is dependent on the soil's moisture content, temperature, and resistivity (how much the soil resists the flow of electricity from the ground rod). Temperature is only an issue in permafrost situations. However, in arid conditions—such as in Iraq—the soil's moisture content and resistivity can be big concerns. Any field expedient method that adds moisture and salt to the soil will help. While there are no standards or guidelines



No Exceptions!

Adhere to the guidelines already established by ALL of the Army's subordinate commands. Tie neutral and ground terminals together at the generator set output terminal lugs. Then tie that neutral ground connection to the generator set frame. Finally, tie that generator set frame to a PROPERLY installed earth ground. If a system contains a separate component, such as a motor with a water pump, the electric motor must be grounded to the frame holding the motor and pump. Tie that frame to the same ground as the power source. NO EXCEPTIONS!

for these methods, the simplest technique is to dig a trench around the grounding rod and add rock salt and water. However, this should only be considered a temporary answer because it requires maintenance (adding more water and salt), becomes less effective over time, and pollutes the soil.

There are two commonly used permanent methods. One is to dig a trench or hole, fill it with a material that will enhance conductivity (Bentonite clay is often used), and insert the grounding rod or ring into it. The clay should be placed in a trench or an augured hole surrounding a ground ring conductor or ground rod.

The second method is to use electrolyte rods. One widely used electrolyte rod consists of a copper pipe that has weep holes in the bottom and is filled with non-toxic salts. The pipe is surrounded by moisture-retaining material and has a breather cap at the top. The rod improves the electrical conductivity of the soil by extracting moisture from the air and then time-releasing ionized salts through the weep holes.

Both permanent methods can be purchased commercially and are relatively inexpensive and install quickly.

The U.S. Army Corps of Engineers Safety Manual EM 385-1-1, Section 11, contains the standards governing the proper grounding of electrical systems. For more detailed information check the Web at **http://www.hq.usace.army.mil/soh/em385/current/current38511.htm**.

Providing Soldiers and civilians in Iraq with electricity and functional electrical systems is a complicated and daunting task. Only those individuals properly trained to work with electrical systems should ever attempt to repair or inspect them.

Leaders, take the time to assess the state of your organization's electrical systems. Get your electrical experts to properly inspect your generators and electrical systems. Make sure you include the less obvious systems, such as shower water heaters, lighting systems, and pool filtration pumps.

Contact the author at (334) 255-2681, DSN 558-2681, or by e-mail at brett.blount@safetycenter.army.mil.

AMV

Class A

■ Soldier was killed when the LMTV he was riding in overturned. The LMTV's driver was operating the truck in a convoy and lost control after passing a civilian POV. Thirteen other Soldiers suffered injuries.

■ Four Soldiers drowned after their HMMWV ran off the roadway into a canal. The driver reportedly lost control of the vehicle, which was part of a convoy.

■ Soldier was killed when the HMMWV he was riding in rolled over. The driver was attempting to turn the vehicle around on the roadway at the time of the accident. The deceased Soldier was the vehicle's gunner and was thrown from the vehicle. The driver was injured but survived.

■ Soldier died after the M923A2 truck he was operating overturned. The Soldier lost control of the truck during a convoy movement in rainy conditions, causing the vehicle to run off the roadway and overturn in a drop-off. The Soldier was wearing his seatbelt.

Class B

■ Three Soldiers were hospitalized with injuries after their HMMWVs collided. The two HMMWVs, which were acting as lead, were traveling in separate convoys and in opposite directions when they hit. Two other Soldiers suffered minor injuries.

Personnel Injury

Class B

■ Soldier's thumb was severed by a power saw. The Soldier was positioning a 2x4 wood beam under the saw at the time of the accident. Although the thumb was reattached, the Soldier suffered permanent loss of use in the digit.

■ Soldier suffered a permanent partial disability when he was struck in the face by the locking handle of a trailer ramp. The Soldier was assisting other personnel in reattaching the trailer's rear ramp when he was hit.

POV

Class A

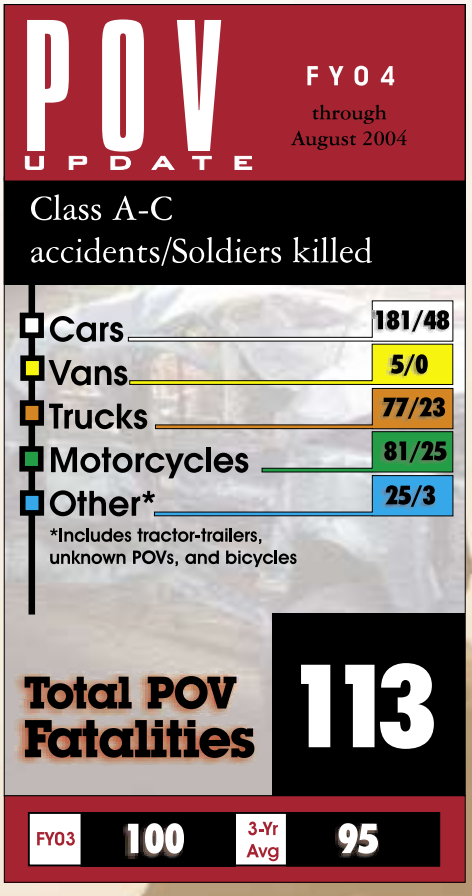
■ Soldier suffered fatal injuries when the vehicle he was riding in overturned, ejecting him. The driver, also a Soldier, had swerved to avoid a passing vehicle and lost control of her car just before the accident. The driver, who was wearing her seatbelt, was treated for minor injuries.

■ Soldier died after his motorcycle struck another vehicle head-on. The Soldier was passing other vehicles on a two-lane road during the late evening hours when the accident occurred.

■ Soldier was killed when her vehicle collided with a barrier and was hit by an oncoming truck. The Soldier's vehicle crossed the centerline just before the accident.

■ Soldier suffered fatal injuries when her vehicle was struck on the driver's side by a full-size pickup truck. The Soldier reportedly ran a stop sign. Immediately after the accident, the Soldier was transported to a local hospital, where she was kept overnight. However, the Soldier was found dead at her home after she was discharged from the hospital. An autopsy determined the preliminary cause of death to be a pulmonary thromboembolism caused by blunt trauma to the torso and lower extremities.

■ Soldier died after his vehicle rolled several times on an interstate highway. The Soldier swerved and lost control of the vehicle just before the accident, causing it to flip.



Don't be a burden on your battle buddy!

Watch for these signs of cold weather injuries:

- Dizziness, weakness, or blurred vision
- Swollen red or darkened skin
- Painful, tender, hot, or itchy skin
- Numbness or tingling
- Bleeding or blistered skin
- Numb, gray, or waxy skin that feels "wooden" to the touch
- Vigorous shivering
- Lack of coordination and impaired judgment
- Painful, red, watery, or gritty feeling in the eyes (snow blindness)

U.S. ARMY SAFETY CENTER

ARMY GROUND RISK-MANAGEMENT INFORMATION

Countermeasure

VOL 25 NO 11 https://safety.army.mil NOVEMBER 2004

Warriors on Wheels

2004 APEX AWARDS FOR PUBLICATION EXCELLENCE

ARMY GROUND RISK-MANAGEMENT INFORMATION

countermeasure

CONTENTS

features

U.S. ARMY SAFETY CENTER

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DASAF'S CORNER

From the Director of Army Safety

So What's the Biggest Risk When You Get Home?

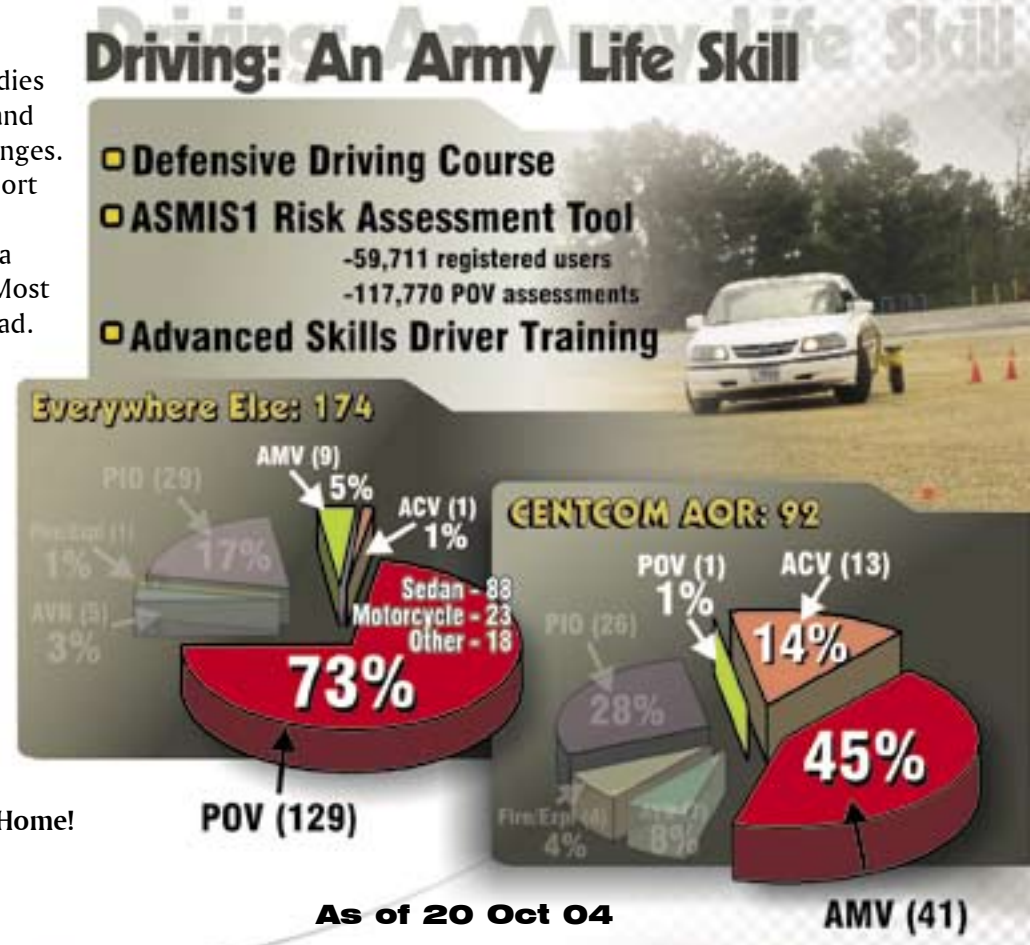
In the August issues of *Countermeasure* and *Flightfax*, we showed a picture that was worth a thousand words. The unnamed faces represented 216 Soldiers who had lost their lives in accidents. This was a powerful message that highlighted the personal impact of each Soldier's death and the cost to families and organizations. At the time, the accident rate was clearly unacceptable because we were losing a Soldier nearly every day. That trend continued through the remainder of FY04 and the charts below show where we lost 266 Soldiers to accidents. For those not deployed, a whopping 79 percent died while behind the wheel of a vehicle, and in-theater driving accounted for 60 percent of our accidental deaths. Clearly, our focus for FY05 must be continued emphasis on driving as an "Army Life Skill."

Our Army is finalizing a three-pronged attack on POV fatalities with distance learning, ASMIS 2.0 for risk mitigation, and Advanced Skills Driver Training for a hands-on course of instruction. We've listened carefully to the ASMIS comments and feedback, so pay special attention to the upgrades coming your way. To date our troops have conducted over 115,000 assessments with only one recorded fatality. Keeping safety in Soldiers' faces works! However, ASMIS only works IF you use it.

According to our mobile training teams, focus groups, and surveys, only 20 percent of the Army's population is engaged and actively mitigating POV risks. I ask you to take a moment to consider if you and your organization are part of the 80 percent not aggressively attacking our number one accidental killer of Soldiers. Come on … let's "buck up" and get after this. We are still in the mode of "lessons noted" rather than "lessons learned." We are still killing ourselves by not wearing seatbelts, speeding, and driving irresponsibly.

Just before writing this article, I sat down to review the fatalities from 15 to 18 October when four Soldiers died on their motorcycles over the weekend. Reckless driving, failure to wear helmets, alcohol, and behaving irresponsibly are the suspected culprits. There's no way to classify these deaths other than tragic and needless. Soldiers returning from war are combat-proven heroes and deserve nothing less than involved leadership and battle buddies who will speak up. Our Army is at war and transforming to meet tomorrow's challenges. We need each and every Soldier to support our Nation's fight.

Over the last four months we've lost a Soldier every 32 hours to an accident. Most of these deaths have occurred on the road. Our daily missions are tough and inherently dangerous, regardless of location. We are doing better with tactical risk management, so let's take the skill set one step further. Don't allow your subordinates or battle buddies to be our next fatal statistic from behind the wheel. We need a "leadership push" in off-duty activities to stop this trend. Winter driving and the holiday travel season are on their way—let's beat the odds and stop POV losses! ★



Our Army at War: Be Safe and Make It Home!

Joe Smith

BG Joe Smith

Warrior Stories: He

The explosion rocked our M1114 up-armored HMMWV as shrapnel from an improvised explosive device (IED) shredded the right-rear tire and tore into the quarter panel above it. The powerful concussion slammed into the HMMWV and spun it to the right as the passenger-side tires grabbed the road and the vehicle began to roll over. The earth and sky changed positions three times before the damaged and now-burning HMMWV finally landed on its wheels. The driver was unconscious. The gunner had been blown back inside the vehicle and tumbled around as the HMMWV rolled over. But at least he was alive.

We'd been driving down Main Supply Route (MSR) Sword south of CP45 in Baghdad on Sept. 8 when we were attacked. Fortunately, help came quickly. Soldiers from our brigade judge advocate general, camp liaison detachment, protective services detail (PSD), 21st Military Police Company MSR patrol, and 1st Cavalry Quick Reaction Force quickly helped us. They got my driver and gunner stabilized and evacuated for medical treatment, controlled the scene, recovered sensitive items and personal equipment, and maintained security so the convoy elements could return to base and reconsolidate.

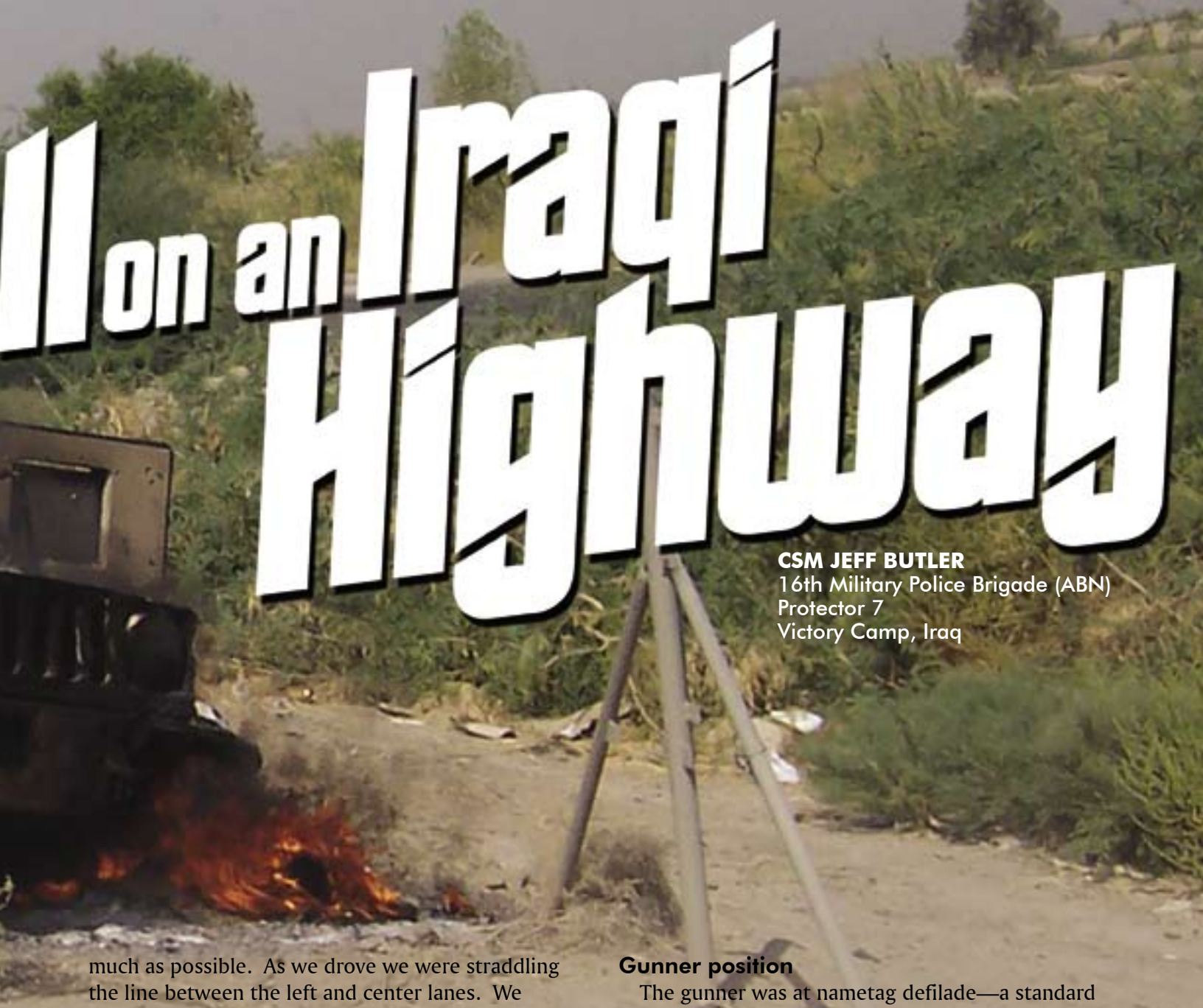
Although we all had suffered minor injuries during the attack, the major loss was the vehicle, which burned to a shell. As I reflected on this, I was thankful for the safety measures that were in place that greatly contributed to our surviving this incident. We repeatedly put out safety messages and guidance, hoping Soldiers will understand the importance of them. If you're out on a mission and nothing happens to you, then these safety requirements might seem unnecessary. However, I'm here to testify to their effectiveness when it counts. I want to list and discuss some of these safety factors along with tactics, techniques, and procedures (TTPs).

Route position

Vehicles should travel in the middle of the lane as

ll on an Iraqi Highway

CSM JEFF BUTLER
16th Military Police Brigade (ABN)
Protector 7
Victory Camp, Iraq



much as possible. As we drove we were straddling the line between the left and center lanes. We had adopted this technique so the rear vehicle blocked traffic from passing on the left side. This is in response to recent vehicle-borne improvised explosive devices (VBIEDs). The blast came from the median, and our location on the road created some distance between us and the device. Ideally, we would have been fully in the center lane, but we had to weigh all the potential risks.

Movement techniques

Maintaining proper distance while traveling, based on road conditions, is very important. As our three-vehicle convoy was moving down the open highway we had approximately 75 to 100 meters between vehicles. This made it impossible for more than one vehicle to be attacked (by a single IED).

Gunner position

The gunner was at nametag defilade—a standard that brigade and corps has repeatedly reinforced. After all, you must survive the IED or the enemy's first attack if you're to fight back. I still see gunners throughout Iraq standing above nametag defilade, creating a large profile for the enemy to strike. In our case the concussion from the IED blew our gunner down inside the vehicle, where he remained as we rolled. Had he not been at nametag defilade he would have been killed.

Gunner orientation

Front and rear gunners must orient themselves at the 3 or 9 o'clock position to protect themselves from IED attacks. Because these attacks come primarily from the shoulder or median, a gunner turned to the 12 or 6 o'clock position has exposed

Warrior Stories: Hell on an Iraqi Highway

his sides to the threat. A gunner at the 3 or 9 o'clock position has the gunner's shield to protect his front and the hatch to protect his back. My gunner had his back to the blast and his hatch took shrapnel, some of which punched a hole through the upper section of the hatch. That shrapnel would have struck a gunner standing above nametag defilade.

AT4 location

Brigade has put out that the M136 AT4 Rocket Launcher will not be placed on the hatch atop the vehicle, but rather kept inside the passenger compartment. Ours was in the vehicle as required and was recovered after the incident. Soldiers think it looks cool atop the hatch; however, it can't be fired any quicker than if kept in the compartment. What storing the AT4 on the hatch does is create another hazard for the crew when attacked. Storing an explosive next to the gunner's head is not smart, and hatch-stored AT4s are routinely lost or damaged during IED attacks.

Seatbelts

All seated occupants must wear seatbelts. I and the passenger in the right-rear seat were belted in. This was critical as it kept us secure as we rolled over. I know I would have been seriously injured or possibly killed were I not belted in. Unfortunately, my driver was not wearing his seatbelt. He routinely does, but I didn't ensure that he did so this time when we moved out on the mission. Supervisors must correct their crews on this issue to protect them. Fortunately, the driver did manage to stabilize himself by holding the steering wheel as we rolled over.

Goggles and glasses

All occupants need to wear protective eyewear. Flying debris, shrapnel, and, later on, exploding ammunition all were hazards that threatened our eyesight. Each Soldier in my crew was wearing his Wiley Xs or gunner's goggles.

Sensitive item list and load plan

Strict accountability of the crew's sensitive items must be submitted and tracked prior to departing base camp. It's important to maintain this list back at base, not inside the vehicle itself. This makes reporting and accounting for damaged and destroyed sensitive items a smooth process. Because my vehicle burned, it was impossible to recover the radios and other items.

Comments

We didn't do everything possible correctly and we weren't perfect. In hindsight I would recommend all doors be battle locked whenever traveling in an up-armored HMMWV. My driver's door and the left-rear door were opened by either the blast or the rolling. Also, it's vital that drivers and passengers wear their seatbelts. Without them you could be thrown from the vehicle or tossed around inside like a rag doll.

We also needed to know where the driver kept the keys to the radios. Prior to the cab being

overwhelmed by flames we possibly, although at great risk, could have removed the radios. However, the driver was unconscious and couldn't tell us where the keys were. It's important to develop a standard operating procedure so all the occupants know where the driver keeps those keys; for example, if he keeps them in the left-front pocket of his BDU top.

Vehicle compartment loads should be secured and strapped down as much as possible. Ammo cans and other items can hurt when they become projectiles inside a vehicle during a rollover.

Final message

The photo of my burning vehicle was taken about 10 minutes after the incident. The other picture, which was taken by an Iraqi newsman and which I got off the Internet, shows my burned-out vehicle a bit later on. I and my crew are very fortunate to be alive and hope others can learn from our example.

Editor's Note: This story amply demonstrates "composite risk," a concept which blends accidental risks with tactical risks during wartime. Wearing seatbelts, staying at nametag defilade, wearing goggles or safety glasses, and using proper load plans are traditional safety procedures. However, combat has added emphasis to these, as well as leading to the development of tactical safety procedures such as gunner orientation, vehicle placement on the road and vehicle spacing, as mentioned above. From the cauldron of combat, Soldiers are refining the lessons they've learned—identifying the composite risk, assessing it, and controlling it so they can live to fight another day.

Contact the author via e-mail at jeffrey.butler@vcmain.hq.c5.army.mil.

Explosives Safety DVD Available

The U.S. Army Safety Center (USASC) is releasing a DVD dedicated to protecting Soldiers from explosives hazards. The DVD, part of USASC's "Letters From War" series, is targeted toward Soldiers deploying to combat areas. The DVD provides lessons learned and tactics, techniques, and procedures (TTPs) from combat-experienced Soldiers, EOD personnel and the IED Task Force Field Team. In addition, Field Manual 21-16, Unexploded Ordnance (UXO) Procedures and USASC's Munitions Handling 101 Booklet also will be available on the DVD.

The DVD first will be made available to deploying units as well as the combat readiness centers, and then Army-wide. Units wanting to order the DVD should go to the USASC Web site at https://safety.army.mil, click on the "Media" button and then click on the DOD Audio/Visual Library link. Type in "Explosives safety" for a key word search, select the DVD and add to your shopping cart. It will be shipped free to units.

"Letters from War: Explosives Safety" is only the first installment. Future DVDs in the "Letters from War" series will cover topics which include tactical movement, weapons handling, fort to port, medical issues and aviation operations. In each there will be a combination of videos and additional resources, like field manuals and pamphlets.

For more information contact Rebecca Nolin at (334) 255-2067, DSN 558-2067, or e-mail video@safetycenter.army.mil.

They've endured skids, abrupt braking and avoiding obstacles at high speeds. Now they're back and ready to help the Army's Soldiers and families hone their driving skills.

Skidding Your Way to Safe Driving

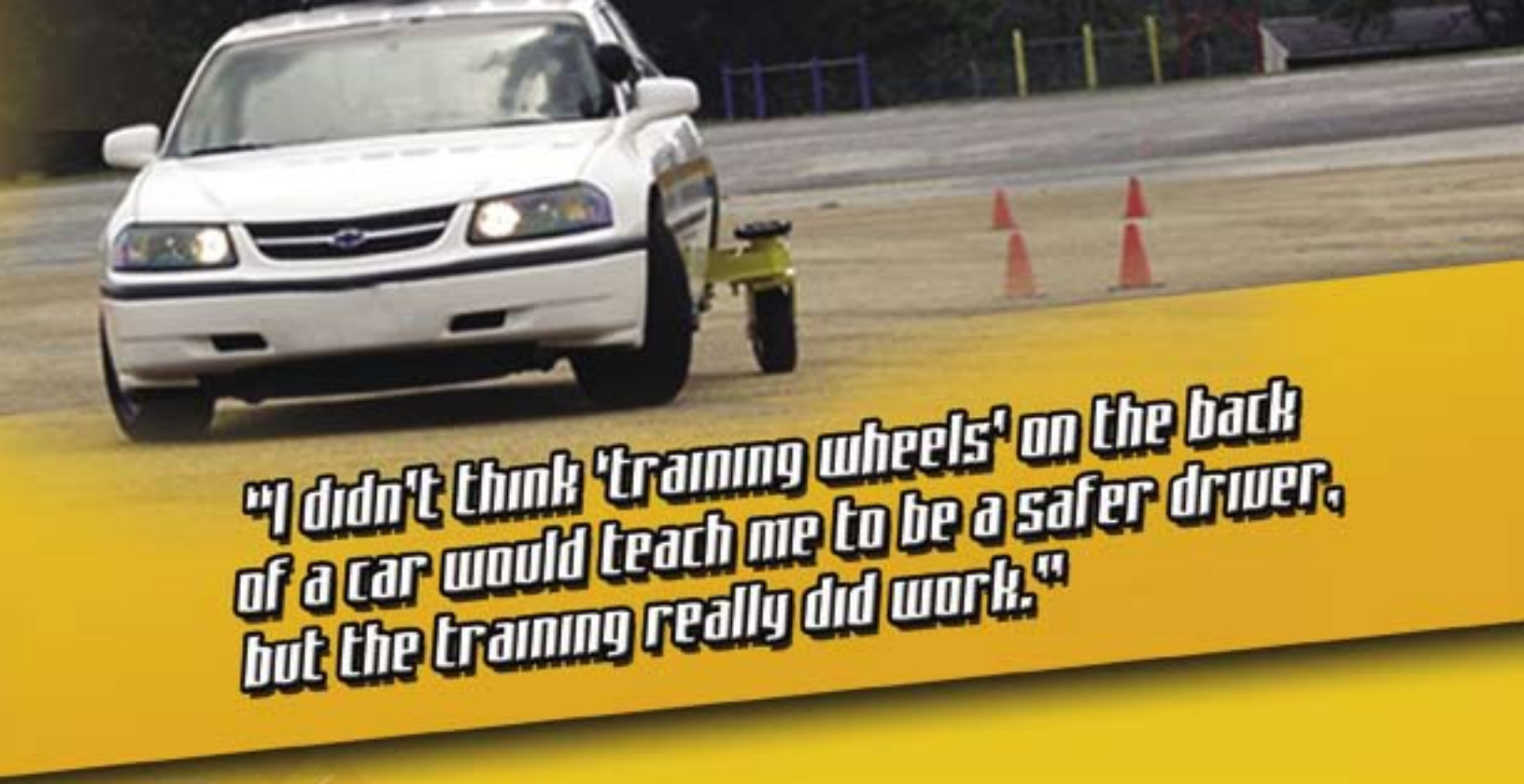
JULIE SHELLEY
Staff Editor

A team from the U.S. Army Safety Center (USASC) recently returned from Fort Story, Va., where the Army and General Motors partnered to implement the first Advanced Skills Driver Training Course. Statistically, this training couldn't come at a better time: The Army currently is experiencing its worst accident rate in recent years. Together, Army Motor Vehicle, Army Combat Vehicle, and privately owned vehicle (POV) accidents account for nearly 75 percent of all Army accidental fatalities. Speeding, fatigue and improper reactions all are cited as contributing factors to these accidents.

General Motors recognized these same causal factors more than 10 years ago and developed the training course for company employees and their family members. The course—suitable for any type of POV—is designed to improve drivers' reactions to unexpected driving conditions. The training is both academic and hands-on, and requires a 1,000' by 1,000' blacktop area where permanent skid pads can be installed. The Army Safety Center's goal is to establish at least one course in each state at willing installations.

The USASC Traffic Section is developing and coordinating plans to implement the program throughout the Army and train Soldiers, family members, and civilian employees in several basic areas. Trainees will go through exercises in controlled braking, evasive maneuvering, straight-line backing, serpentine weaving, off-road recovery and the "Skid Monster."

The Skid Monster (a dolly type device



"I didn't think 'training wheels' on the back of a car would teach me to be a safer driver, but the training really did work."

that replaces a vehicle's back wheels) allows instructors to push a button and simulate a skid in a variety of environmental conditions, including rain and ice. Then, the instructor tells the student the proper procedures for steering, braking, acceleration and also "targeting."

In targeting, the driver selects a stationary object, such as a billboard or signpost, in the distance and in their path of travel. Since the driver is looking in that direction, logic dictates that the car will travel the same path. Thus, when a vehicle skids or swerves abruptly, the target serves as the driver's reference point for correcting the vehicle.

One Soldier who went through the Fort Story training had nothing but positive remarks. 1LT Matthew Nowlin, B Troop, 1/158th Cavalry, Maryland Army National Guard, totaled his POV after skidding on an interstate during heavy rain.

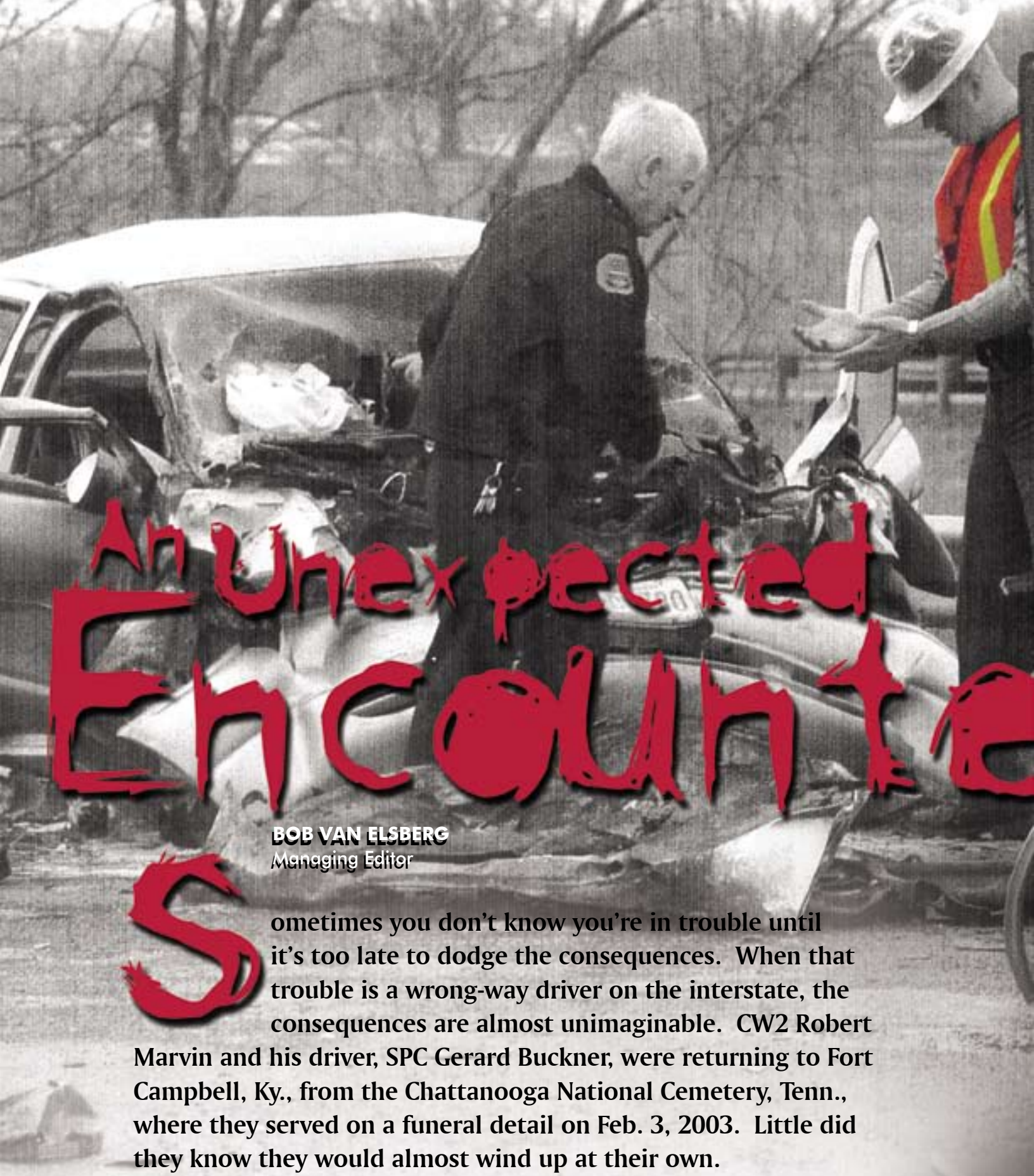
"I wish I'd had this training years ago," 1LT Nowlin said. "It might have made a difference in that accident. I didn't think 'training wheels' on the back of a car would teach me to be a safer driver, but the training really did work."

Although the training is conducted in standard POVs, Soldiers who drive tactical vehicles should take note of what they learn and transfer those skills to the battlefield. Akio Miyamoto, president and senior instructor for Vehicle Dynamics, Inc., explained that the same principles apply in any type of vehicle. With many of the Army's in-theater accidents occurring because of skids and drivers swerving to avoid an obstacle, this training would prove invaluable to Soldiers deploying to Iraq or Afghanistan.

"This training will have a great impact on them (deploying Soldiers)," Mr. Miyamoto said. "You're dealing with the physics—the handling of a vehicle. Vehicles handle the same, so their movements are predictable. You just have to be able to control it, and this training helps with control of the vehicle."

For more information or to schedule a training visit at your installation, contact Mike Evans at (334) 255-2643, DSN 558-2643, or e-mail mike.evans@us.army.mil.

Contact the author at (334) 255-1218, DSN 558-1218, or e-mail julie.shelley@safetycenter.army.mil.



An Unexpected Encounte

BOB VAN ELSBERG
Managing Editor

Sometimes you don't know you're in trouble until it's too late to dodge the consequences. When that trouble is a wrong-way driver on the interstate, the consequences are almost unimaginable. CW2 Robert Marvin and his driver, SPC Gerard Buckner, were returning to Fort Campbell, Ky., from the Chattanooga National Cemetery, Tenn., where they served on a funeral detail on Feb. 3, 2003. Little did they know they would almost wind up at their own.

"After we finished the ceremony we changed out of our uniforms, stopped for lunch at a McDonalds in Chattanooga, and then began our three-hour drive home. I'd driven the trip out from Fort Campbell and was tired, so I chose to have SPC Buckner drive us back. We'd been on Interstate 24 headed west for almost an hour when I fell asleep in the passenger seat. That was the last thing I remembered," CW2 Marvin said.

The trip in their Plymouth government sedan had been uneventful. They were only 10 miles from Fort Campbell when SPC Buckner pulled into the fast lane to pass a tractor-trailer. To their left was a metal guardrail—part of the grassy median separating the east-and west-bound lanes. As SPC Buckner looked ahead he saw a small rise in the road where an overpass crossed over some railroad tracks. Normally, that would not have meant much, but this day was different. As SPC Buckner watched the road ahead he suddenly saw a blue Ford pickup come over the rise and head straight at him. There was nothing he could do. Blocked by the diesel to his right and the guardrail on his left, he didn't even have time to hit the brakes. After all, who would have expected to meet head-on traffic on a divided interstate?

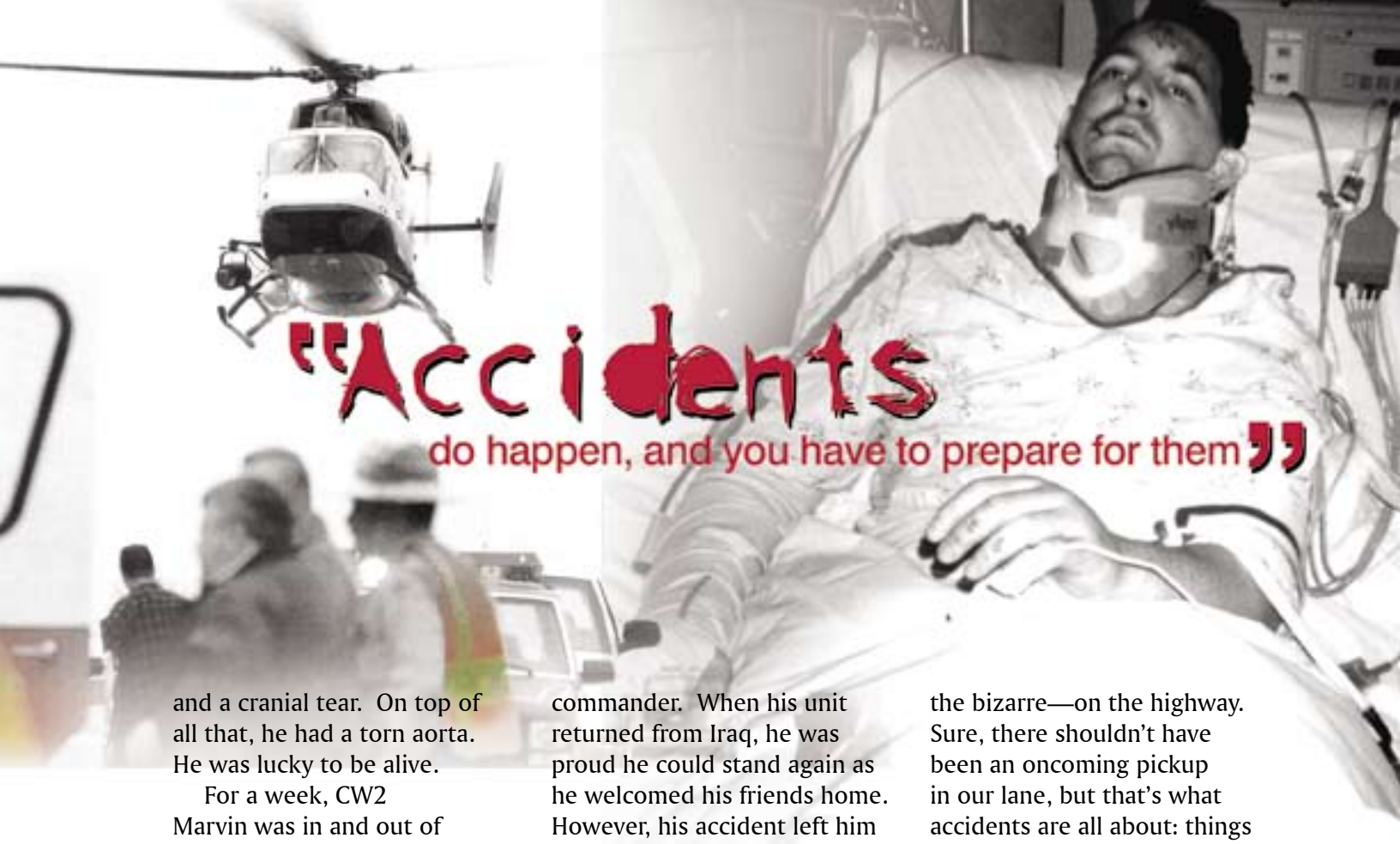
The Plymouth and the pickup smashed into each other at a combined speed of 140 mph. The impact crushed the front of the sedan, pushing the dash back and trapping CW2 Marvin in his seat. The truck driver died from his injuries. A highway worker helped SPC Buckner out of the driver's seat, but then the Plymouth's engine compartment caught fire. Workers from a nearby company and ran to the accident scene. They borrowed an extinguisher from a tractor-trailer stopped on the interstate, and one of them used a special tool to free CW2 Marvin. A fire truck arrived and put out the fire.

When CW2 Marvin next awoke he was in Vanderbilt University Medical Center.

"The first thing I remember, it was like a dream. I recall the nurse telling me to take a deep breath. When I did, they took the breathing tube out of my throat. It felt like my throat was on fire.

"The next thing I remember was my battalion commander asking me if I knew who he was. In my mind I was thinking, 'Why is he asking me this?' I answered him and said, 'You are LTC Smith,' and then went unconscious again, heavily medicated for pain."

CW2 Marvin was listed in critical but stable condition for the first two days. Doctors weren't certain whether or not he would survive. He had broken 10 bones, including his left femur; five ribs—one puncturing his left lung, and his right humorous (upper arm). The last injury had damaged his radial nerve and rendered his right arm useless. He also had head injuries, including bleeding inside the skull



and a cranial tear. On top of all that, he had a torn aorta. He was lucky to be alive.

For a week, CW2 Marvin was in and out of consciousness. Doctors performed several operations to repair his broken bones and inserted a tube into his chest because of his lung injury. He was transferred to Fort Campbell's Blanchfield Army Community Hospital, where he remained for nearly four months going through physical therapy. He'd been there two months before his legs could carry his weight and he could walk. He recalled, "My greatest accomplishment in life at that point was being able to go to the restroom on my own."

CW2 Marvin left the hospital in June and took two weeks' convalescent leave. His unit had deployed to Iraq while he was still in the hospital, so he reported to their rear detachment and ultimately became its commander. When his unit returned from Iraq, he was proud he could stand again as he welcomed his friends home. However, his accident left him with some clear thoughts on driving safety.

"Accidents do happen, and you have to prepare for them," he said. "I wore my seatbelt—that's a habit for me when I get into a car—and made sure my driver did too. I chose to have SPC Buckner, who was in better shape for the long drive, take the wheel. While being asleep and relaxed may have helped me survive, I also know it was my job as the vehicle commander to ensure SPC Buckner stayed awake. That's a lesson I will never forget.

"I couldn't have prevented the pickup driver from being on the wrong side of the road. He was 83 years old, had recently suffered a stroke, and was driving with an expired license. In retrospect, I realize that you must prepare for the unexpected—even the bizarre—on the highway. Sure, there shouldn't have been an oncoming pickup in our lane, but that's what accidents are all about: things that shouldn't have happened. In the future, I'll stay alert and make sure we pass ONLY when we can see the road ahead. I don't need any more unexpected encounters."

CW3 Marvin currently serves as the Company A, 2nd Battalion, 101st Aviation Regiment safety officer. He recently completed the Aviation Warrant Officer Advanced Course at Fort Rucker, Ala. His goals are to return to flight status and become an instructor pilot for the AH-64D Apache Longbow. He can be contacted at (270) 798-0245 or by e-mail at robert.marvin@us.army.mil.

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The Flying Convoy Potty Break

CW2 LARRY KYLMAN
Aviation Safety Officer
Company B, 2nd Battalion,
1st Aviation Regiment
Tikrit, Iraq

I was a private first class assigned to a maintenance company at the beginning of the first Gulf War. I worked in the motor pool as a heavy wheeled vehicle mechanic. My company was preparing for movement immediately following the start of the air campaign. The motor pool section was short on drivers, so the motor sergeant asked me about my previous driving experience. It wasn't much—I had four years' experience driving a POV, but I'd once driven an M35A1 2 ½-ton truck while I was in the Army Reserve. Since we were in "combat," that meager experience was enough to satisfy my leadership. I was put in a 5-ton tractor with my squad leader, SGT Biggs, who was supposed to train me while we convoyed north.

We started our movement shortly after dark, and all was uneventful for the first hour. SGT Biggs was training me on the "finer points" of driving the tractor while towing the tool van. For example, he told me I could greatly reduce my driving workload by pulling the throttle cable and locking it into position at my current speed setting. I tried it and, sure enough, my right foot was free and I could stretch my legs. What SGT Biggs didn't tell me, however, was that using the throttle cable as a cruise control is extremely dangerous because the cable doesn't disengage when you hit the brakes. This was the first of many dangerous practices he would teach me.

We had been told in the convoy briefing that we would stop every three hours for a short rest break. The second and third hour came and went, but we never stopped. I'd been drinking a lot of caffeinated beverages, so after the fourth hour I really needed a break. I told SGT Biggs this, but he responded that we couldn't stop or signal the lead vehicle because we were under radio silence. Instead, he "instructed" me on "how we do things in combat."

To my amazement, SGT Biggs opened his door and stepped on the running board. He then climbed onto the right fuel tank and straddled his leg over the protruding spare tire. Next, he crossed between the fifth-wheel deck and cab and climbed down on the left running board. Then he opened my door—remember, I was driving—and grabbed the steering wheel while I slid over into the passenger seat. I couldn't believe what I'd just witnessed, but nature's call still had to be answered. This wasn't a problem for SGT Biggs. He told me to climb up on the fifth-wheel platform, take my long-overdue "relief break," and while I was there, get him a soda.

Traveling at 49 mph in a convoy on a narrow desert two-lane highway, I stepped onto the running board and onto the right fuel tank. I threw my leg over the spare tire. I had my right hand on the handhold by the door and my left hand on the spare tire's rim. I froze for a moment because my left hand couldn't touch any part of the truck's frame. The only thing I could grab hold of to pull my weight around the spare tire was the tire itself, and it was loose and rattling in its carrier. I finally overcame my fear and pulled myself onto the fifth-wheel deck, where I got some much-needed relief. I then reached into the left-side tool storage compartment and passed SGT Biggs a soda through the cab window. I got into the truck and we continued on our way. About an hour later, we finally stopped to refuel.

Since I was relatively new to the Army and vehicle operations, I assumed this unsafe behavior exhibited by my squad leader was perfectly normal. After all, we were in combat. It wasn't until later that I found out how wrong he really was.

The lesson learned in this is that safety isn't something we just discard when hostilities start. There's no such thing as "peacetime" safety and "wartime" safety. There is only safety, which is a state of being. The only way to achieve this state is to actively manage risk. How well you do that is directly proportional to how well you mitigate risks. In my case, we didn't even attempt risk management—in fact, we did the opposite. My squad leader ignored rules, regulations, and policies normally followed during peacetime because he thought doing so was more "efficient." I don't think he was intentionally trying to do things unsafely—his behavior was just the byproduct of taking shortcuts.

Don't get caught in the same trap of ignoring safety in the name of combat efficiency. Use the risk management process wisely so you can make it home to tell your war stories!

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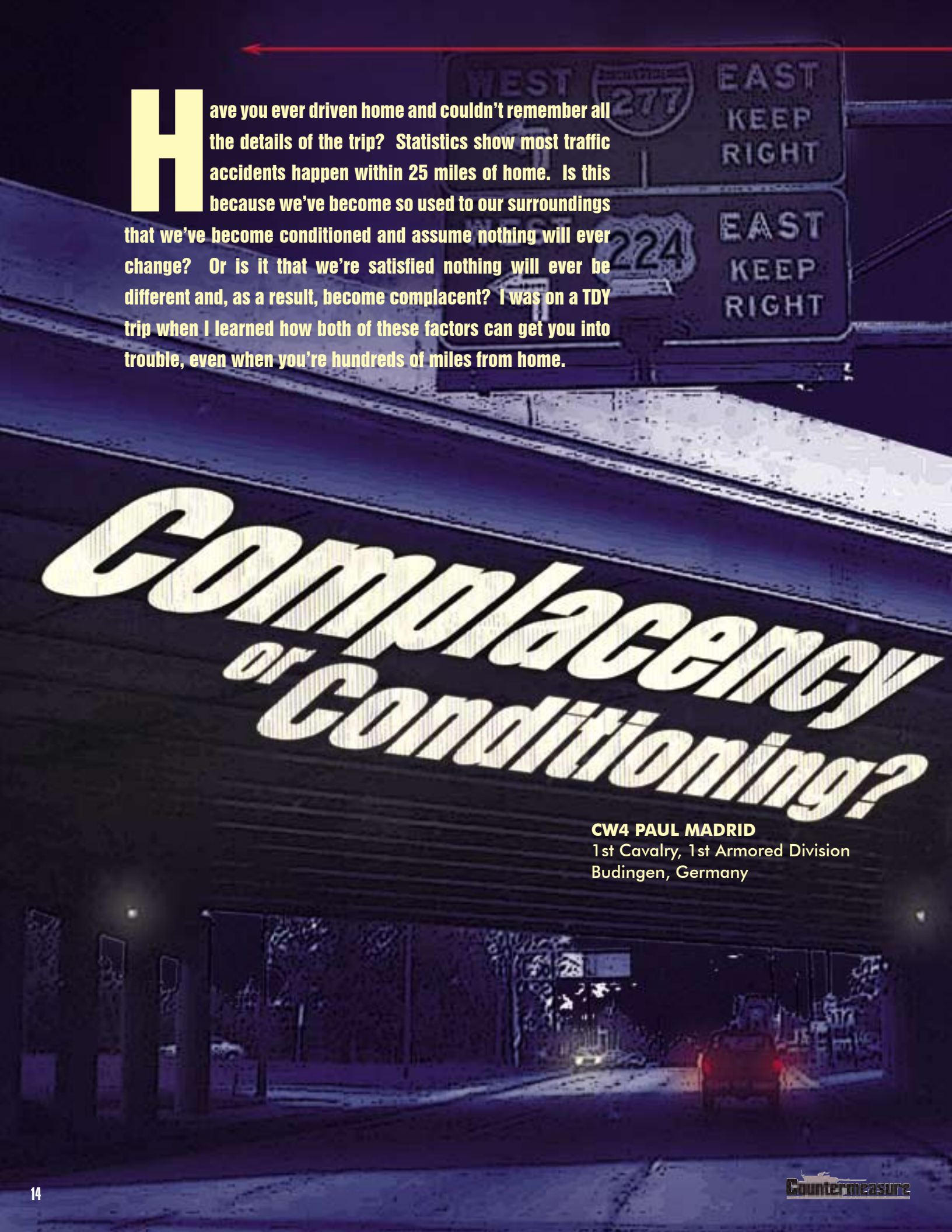

Complacency or Conditioning?

CW4 PAUL MADRID
1st Cavalry, 1st Armored Division
Budingen, Germany

Have you ever driven home and couldn't remember all the details of the trip? Statistics show most traffic accidents happen within 25 miles of home. Is this because we've become so used to our surroundings that we've become conditioned and assume nothing will ever change? Or is it that we're satisfied nothing will ever be different and, as a result, become complacent? I was on a TDY trip when I learned how both of these factors can get you into trouble, even when you're hundreds of miles from home.

I was on a week-long TDY to Aberdeen Proving Gounds, Md., to inspect a National Guard drug interdiction program. It started off like all the other TDY trips I'd taken in the past—I packed, got the plane tickets, and launched. As always, I got a rental car. Not everyone treats these vehicles with a lot of respect. I, for one, don't like to deal with all the paperwork should something happen, so I tend to be over cautious.

After checking into the hotel I decided to visit the unit, which was about 15 miles away. Along the drive was a four-mile-long straight stretch of highway that went up a gradual slope. On the return trip there were 11 red lights along the road, and another one by the overpass at the bottom of the slope. I'd driven the road enough during the first three days that it was becoming routine, and I wasn't counting on things changing late at night. So what was different on that long stretch of highway after 10 p.m.? To make things easier late at night, those red lights changed to flashing yellow caution lights so you didn't have to stop at every other traffic signal. Made sense to me. After making this trip for three days and nights I was getting comfortable with this section of road—maybe a little too comfortable.

On the fourth night things were going well for the unit. The only thing left to do was outbrief the command the next day, so a few of the Guard guys decided to follow me back to the hotel for a small get-together. I was in the lead with three other cars behind me. No problem, right? Wrong! As I started down the slope, I could see all those yellow caution lights flashing away. I cruised down the slope expecting yellow lights all the way, but as I went beneath the overpass a Jeep Cherokee suddenly pulled out in front of me. My first thought was, "What is this guy doing?!" With me going 50 mph and him only 20 yards in front of me, I didn't have much time to react. My rental car became a knife and cleanly shaved the front end off the Jeep. I won't go into all the details of the damage done to both vehicles. Let's just say it was severe enough that they couldn't be towed and had to be loaded onto slide-bed wreckers.

So what happened? Remember all those red lights that changed to flashing yellow at 10 p.m.? Well, not all of them had changed, and the one that hadn't was the one behind the overpass. As I came down the slope I could see every light except that one.

> **"Whether you're 25 miles from home or TDY 2,500 miles away, keep your head in the game all the time."**

This accident could have been catastrophic. I realized had I entered the intersection a couple seconds later, I would have perfectly T-boned the Jeep. That would surely have killed its driver and done who knows what to me.

Had I become complacent and unaware of the actual danger, or had I become conditioned and assumed the lights all did the same thing at the same time? Either way you look at it, the story is the same.

So what's the point of this? The combination of complacency and conditioning can lead you into a deadly trap. Whether you're 25 miles from home or TDY 2,500 miles away, keep your head in the game all the time. Not doing so can get you killed.

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A Close Call on a Slick Road

CW2 AMELIA DAWSON
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Camp Robinson, Little Rock, Ark.

I've always considered myself a safe driver. Knock on wood, I've never been involved in a serious accident, and I haven't received a ticket since I was 19. However, I recently discovered that anyone can be caught off guard on the road, and if you're not prepared, you can get in big trouble.

I'm a National Guardsman and my civilian job is approximately 30 miles from my home in Arkansas. It was about 4 p.m. on a spring afternoon and I was driving home after work. There'd been a brief thundershower earlier that day, but the skies had cleared by the time I left work. The roads, however, were still pretty wet.

I was driving in the far left lane of a six-lane highway separated by a concrete divider. The shoulder on either side of the road was wide enough for a vehicle. The roads were still wet, but as I was traveling at the 65 mph speed limit I was surprised when my car began to fishtail. At first I was calm because I felt I was still in control of the vehicle and could drive out of the fishtail. However, it quickly became apparent that I couldn't. My car spun 180 degrees, landing me in the center lane facing oncoming traffic, then continued to spin until it stopped on the left-hand shoulder. Fortunately, I wasn't hit. This entire event probably took less than five seconds, but I recall having time to think, "This is really going to hurt!"

Afterwards, I thought about the conditions that led to this incident and what, if anything, I could have done to prevent it. I searched the Internet and on the **www.smartmotorist.com** Web site saw where it said the three main factors contributing to hydroplaning are vehicle speed, tire tread depth, and water depth. On that particular day I had all three working against me. Even though I hadn't been speeding, I had been traveling too fast for the road conditions. Also, the last time I bought tires, I only replaced two of them. Although the water on the road wasn't deep, it was deeper than the tread on the two older tires.

All in all I was very lucky and came out of this with a lot of food for thought. I've since replaced all my tires and am more careful when there is water on the road. Sliding out of control down the highway is a ride I hope never to repeat.

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Here are some safety tips to help prevent hydroplaning

• Replace worn or balding tires. If you stick a penny in the tread and can see the top of President Lincoln's head, you need to replace the tire. The shallower the tread, the shallower the water needs to be to cause hydroplaning.

• Slow down. There is a relationship between tire pressure and hydroplaning speed. At a tire pressure of 36 psi, you'll begin hydroplaning at 54 mph. At lower inflation levels, you will hydroplane at even slower speeds.

• Avoid puddles, especially on curves.

• Try to drive in the tracks of the vehicle in front of you—but don't tailgate.

• Maintain at least twice your normal safe following distance.

• If your car does hydroplane, avoid hard braking and turn your wheels in the direction you want to go until you regain control.

I approached the intersection and entered the left turn lane just as the signal turned red. The cross traffic had just started to move when I heard the sound of screeching brakes—but it was too late. A car had run the red light, entering the intersection and crashing into a young woman's car. Her signal light had turned green, and she'd just begun moving. The red light runner hit her car in the driver's side front fender area and caused significant damage. Fortunately, the young lady was not killed.

RED LIGHT ROULETTE

CW4 BRIAN FULLER
160th Special Operations Aviation Regiment
Fort Campbell, Ky.

Does this sound all too familiar? According to the Federal Highway Administration, one in three people claim they know someone who has been injured or killed in a red light running crash.

We all remember the childhood game "red light, green light." While running through an imaginary intersection the "designated" traffic officer would shout for us to either stop or go. The game was a prelude to what we would face when we grew up and started driving. Sadly, too many drivers aren't playing by the rules anymore. Instead they are playing "red light roulette"—trying to hurry through an intersection after the light has turned red, hoping they don't hit another vehicle or pedestrian.

The statistics are sobering: In 2000 there were 106,000 red light-running crashes that resulted in 89,000 injuries and 1,036 deaths. Numbers from more recent years show the deadly statistics are on the rise.

Who is running red lights? The answer is that every demographic group is involved in this dangerous practice. More than half of Americans admit to running red lights, and yet 96 percent of drivers say they fear being hit by a red light runner in an intersection. Half the drivers who run red lights say they're just "in a hurry."

What can you do to reduce your risk of being hit by a red light runner? I have developed a couple of control measures that I use at every intersection.

When you're the first car waiting for a red light to turn green, wait one or two seconds and look both ways before pulling into the intersection. By waiting, chances are good you'll spot the guy running the red light and avoid an accident.

When approaching an intersection with a "stale" green light, go ahead and stop rather than trying to squeeze through on a yellow. Yes, you'll be delayed a minute or two, but look on the bright side—you'll be at the front of the line when the light turns green. Just be sure to heed the first control measure.

We're not alone out there on the highways. You can't control the actions of other drivers, but you can implement control measures to keep you safe at intersections.

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Car Speak

SUSAN JERVIS
Army Materiel Command
Fort Belvoir, Va.

You can't wait for tomorrow to get here! Finally, after many years, it's time to shop for a new car. Well, maybe it won't be brand new, but it will be new to you and definitely newer than the clunker sitting in your driveway.

As you climb into bed, you're still thinking about all those options. Do you want a sports car, sedan, sport utility vehicle (SUV), or truck? Do you prefer red, blue, or silver? There are so many important decisions before heading to the car dealership. Hopefully, you'll have a better idea in the morning.

When you wake up, you're puzzled by a crazy dream. Instead of dreaming about the color and model of your new car, you were watching vehicle safety devices come to life before your very eyes. You're still baffled that you were actually listening to an anti-lock braking system (ABS). Who will ever believe you got the hard sell from a bunch of safety stuff?

"With ABS, you can get your exercise from pumping iron instead of the brakes." The ABS is available as a standard feature or option on almost every vehicle. The system is designed to help drivers avoid crashes. If you need to slam on your brakes to avoid a collision, the ABS will keep the brakes from locking and allow you to maintain better control and confidence in an accident situation.

"What's the big deal about a headrest?" The head restraint system is designed to prevent the backward snap of your neck and head in an accident. Most vehicles have head restraints incorporated into the front seats, but more and more vehicle manufacturers are putting the same type of restraint in the back seats. The restraint should be at least level with the top of your ear and located less than 10 centimeters from the back of your head. Closer head restraints can be twice as effective in preventing injuries in an accident.

"So you think I'm full of hot air?" Driver- and passenger-side airbags have been required in cars since 1998, and in SUVs, trucks, and vans since 1999. Over the years, airbags have saved lives and lessened the severity of injuries suffered in a vehicle accident. Airbags are designed to stop the driver's or passenger's impact with the hard surfaces inside the vehicle. While airbags present unique hazards to children and those of smaller stature, statistics indicate airbags are still an effective safety device. New-generation airbags come with sensors to control the force of airbag deployment depending on whether you're buckled up, how hard you crash, or if children are in the seat. Side-impact airbags also are

finding their way into many vehicles. Remember, airbags can only protect you as designed when used in conjunction with the vehicle's seatbelt restraint system.

"Slip, sliding away…." Some vehicles come equipped with a traction control system or an electronic stability control system. The traction control system helps improve stability by controlling the amount the drive wheels slip when you apply excess power. Traction control can automatically adjust power output from the engine and may apply braking force to selected wheels. Some four-wheel drive and all-wheel drive vehicles, as well as passenger cars, offer traction control systems. The electronic stability control system helps the driver maintain control under extreme steering maneuvers. The electronic control can apply power or brakes to the vehicle when you over or under steer. Both these controls are designed to help the driver stay in control and maneuver the vehicle in a tricky situation.

"You're never out of touch." Many vehicles now offer the option of automatic notification and satellite communication when the car is disabled or involved in an accident. These systems and their associated communication services can provide exact vehicle position and dispatch emergency response services when the driver needs assistance. They can even unlock your doors if you lock the keys inside.

"Mirror, mirror on the wall…." Many vehicles come equipped with automatic dimming mirrors when the driver is hindered by headlight glare. This feature is offered on rearview and side mirrors on some cars. These dimming mirrors assist the driver in transitioning to nighttime driving and eliminate the blinding glare of headlights approaching from the rear.

Wow! You never really considered all the important safety features of your new vehicle. There's a lot more to selecting your new car than the color and model. Before you head out car shopping, check out additional vehicle safety and crashworthiness information at **http://www.safercar.gov**. Remember, your vehicle's safety features are designed to help you and your passengers make it home safely.

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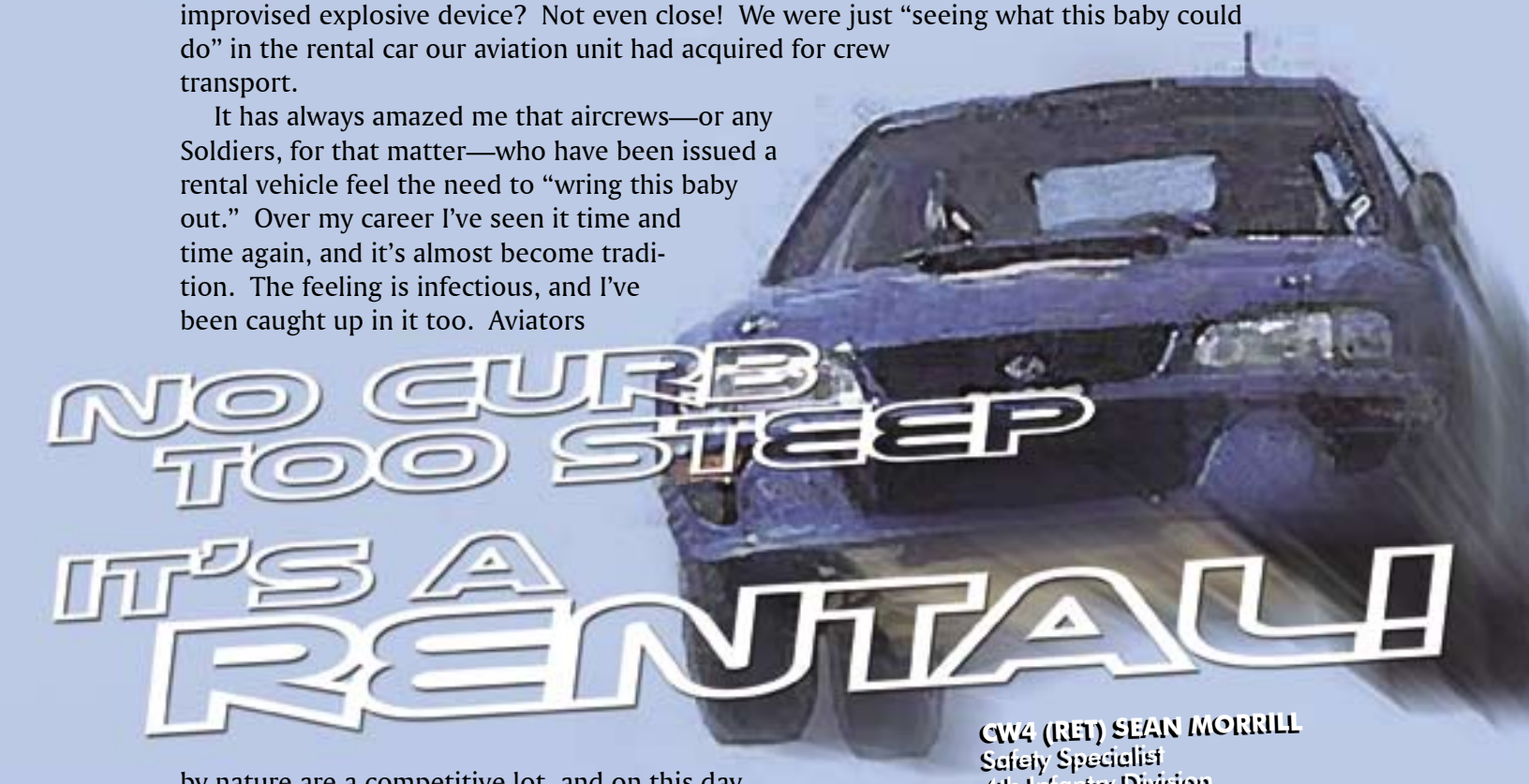
NO CURB TOO STEEP IT'S A RENTAL!



CW4 (RET) SEAN MORRILL
Safety Specialist
4th Infantry Division
Fort Hood, Texas

There we were in a remote location in the Middle East, careening across the desert with clouds of dust billowing behind us. Guys were screaming as their heads bounced off the vehicle's windows. Were we evading an ambush or an improvised explosive device? Not even close! We were just "seeing what this baby could do" in the rental car our aviation unit had acquired for crew transport.

It has always amazed me that aircrews—or any Soldiers, for that matter—who have been issued a rental vehicle feel the need to "wring this baby out." Over my career I've seen it time and time again, and it's almost become tradition. The feeling is infectious, and I've been caught up in it too. Aviators by nature are a competitive lot, and on this day doing more than the last guy was encouraged and cheered by the other passengers. The situation was getting out of hand fast, with an accident the only sure outcome.

I was the newly assigned unit safety officer and I immediately objected to the aggressive driving. I was challenged and seen as the "bad guy" for stopping the fun. But the "power slides," "brake checks," and "going cross country" were dangerous and becoming more so. Fortunately, I was able to reason with some of the unit's senior guys, who also recognized this. With their help the stunt driving stopped without getting the command involved. Best of all, no one was hurt or killed in a rollover or other accident.

Driving a rental car like an off-road vehicle or a race car is dangerous and threatens the Soldiers inside, and even the mission itself. We would not tolerate this kind of behavior in a HMMWV or other tactical vehicle. Just think about the last time you and everyone else in the back of an LMTV or 5-ton truck yelled at a driver you thought was driving too fast. Rental cars can kill or maim just as effectively if they are misused.

Remember, rental cars are authorized to help you accomplish your assigned mission. Since we were in a remote location, we were fortunate to have a rental vehicle to augment the meager transportation we had available. Our mission schedule was hectic and ever-changing, and demanded that we be at the flight line at various hours (i.e., oh' dark thirty). The rental vehicle was a great tool to help us accomplish our missions and gave us the flexibility we needed.

Don't let aggressive driving in a rental car kill or injure your buddies or cause your unit's mission to fail. Recognize it for what it is—an enabling tool that needs care and proper use so everyone gets to go home when the mission is done.

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ACCIDENT BRIEFS

Information based on preliminary reports of ground accidents.

ACV

Class A (Damage)

■ M1A1 suffered Class A damage after its engine caught fire. The tank had departed its refuel point when fire was discovered coming from the engine. The crew initiated shut-off procedures, but they failed; the crew then disconnected the engine fuel line. No crewmembers were injured.

Personnel Injury

Class A

■ Soldier collapsed and died during a cool-down period following self-paced physical training. The Soldier was pronounced dead at the local emergency room.

■ Soldier collapsed and struck his head on a concrete pad after a five-mile foot march. The cause of death was not reported.

■ Soldier was killed when he lost control of his all-terrain vehicle and struck a pole. The Soldier was thrown from the vehicle during the accident sequence. The accident occurred during the late evening hours.

■ Soldier suffered fatal injuries after being electrocuted outside a metal latrine. The Soldier was leaning against an exterior wall of the latrine when he suffered the electrical shock. The cause of the electrical surge was not reported.

POV

Class A

■ Soldier was killed when his vehicle was struck head-on by a vehicle driving in the wrong direction on a four-lane highway. No other details were provided.

■ Soldier suffered a permanent total disability when his vehicle struck a tree. The Soldier, who reportedly was driving at a high speed, encountered a sudden rain shower on an interstate highway and lost control of the vehicle. The vehicle spun 180 degrees, slid into a median, and struck the tree. The Soldier was wearing his seatbelt.

■ Soldier was killed when he was ejected from his vehicle during a rollover. The Soldier lost control of the vehicle, causing it to overturn. The accident occurred during the early-morning hours.

■ Soldier died after his motorcycle was struck head-on by a pickup truck. No other details were provided.

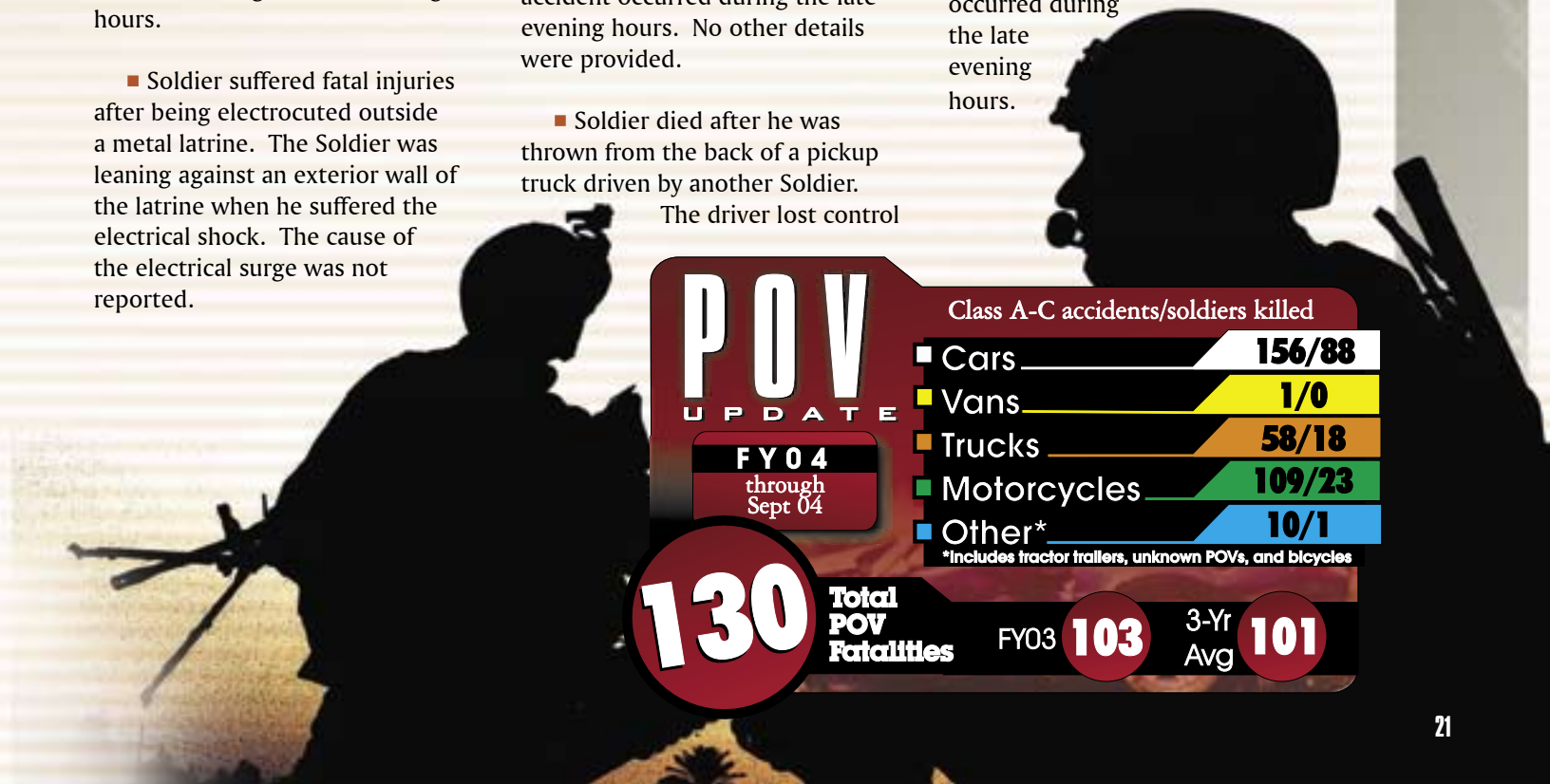
■ Soldier suffered fatal injuries when he lost control of his vehicle and struck an 18-wheeler. The accident occurred during the late evening hours. No other details were provided.

■ Soldier died after he was thrown from the back of a pickup truck driven by another Soldier. The driver lost control of the truck and hit an overpass guardrail, causing the deceased Soldier to be thrown onto the highway below the overpass. The Soldier lived for six days following the accident. The driver, who was not injured, is suspected to have been under the influence of alcohol or drugs.

■ Soldier was killed when his vehicle was rear-ended by another vehicle and forced into another lane, causing it to be struck by a second vehicle. The accident occurred on an interstate highway.

■ Soldier suffered fatal injuries when he lost control of his motorcycle, causing it to overturn. The Soldier, who was wearing his helmet, was riding with a group of motorcyclists at the time of the accident.

■ Soldier died after being ejected from his vehicle. The Soldier was traveling with another Soldier and a civilian when the vehicle crashed for unknown reasons. All three occupants were ejected. The deceased Soldier, who was driving, is suspected to have been under the influence of alcohol or drugs. The accident occurred during the late evening hours.



Chillin' Out on the Slop

ANONYMOUS

Several years ago I was stationed at Buckley Air National Guard Base in Denver. I'd never snow skied, but after my first "initiation by fire" trip I was feeling pretty comfortable and actually considered myself a somewhat fearless skier. I would go hard and fast until I hit something or just fell down. Ski equipment would scatter from where I fell to where I slid to a stop—meaning I spent a lot of my time crawling back up the mountain for my gear. This style was somewhat modeled after my good buddy Jim.

Jim was a Special Operations weapons sergeant and fearless in nearly everything, including skiing. We often went "tree bashing," where we turned off a cleared ski run and cut through the trees to the next run. The space between the runs was usually a couple hundred yards wide, and skiing through the trees made for a limited view. Reaction time was minimal and if you didn't react quickly enough, you bashed into a tree. The snow in the wooded areas wasn't packed like the normal runs, and the loose powder was sometimes deeper than I was tall. Trying to get back up on skis in that snow was a lot like swimming.

One day a group of us had gone up the slopes for some fun and spent the day trying to outdo each other. The day had started out pretty warm, but it was getting colder. I'd worn ski bibs and been hot all day. Jim had worn polypropylene bottoms with jeans over them and a jacket. He'd probably been more comfortable, but things were about to change.

It was getting late, so Jim and I went up for one last run. We looked at a map and picked which runs to take, including

some that would be good for tree bashing. However, we made a wrong turn on the way down and went one run further to the right than we'd intended. We wound up about a half-mile from our intended run. To make matters worse, once we turned into the trees we got separated. Although we were still in voice range of each other, we should have come out of the trees sooner.

I then noticed that Jim—by far the better skier—was starting to fall behind. I yelled to see where Jim was, and he told me to go to the edge of the trees and wait for him there. I didn't make it far before I heard Jim say he was having a hard time skiing. Now, Jim is the type of guy who won't complain unless he's dying, so when he said he was having a hard time moving his legs I was a little concerned.

I began skiing uphill in loose powder to find Jim. He was standing on a stump, stripping off his wet pants. I didn't realize that jeans, which aren't waterproof, would be useless in loose powder. That hadn't been a problem earlier because he rarely fell and when he did it was on packed snow that didn't stick to him. I got really concerned when I saw that Jim was having a hard time balancing on the stump. He had begun to shake, and his legs were turning blue. The sun was going down fast. It was significantly colder in the shade and getting worse by the minute. We didn't even know where we were—we just knew we had to keep going and get out of the trees before dark.

I stripped down and handed my bibs to Jim. He gave me his wet pants, which had begun to freeze and also were a couple sizes too big. As soon as Jim warmed a little, we made a break for the bottom. I was amazed at how fast the wet pants cooled me off. It seemed like I was instantly cold and shaking all over. Skiing was more difficult wearing the wet jeans, too. I didn't have enough hands to negotiate the trees and keep the pants up at the same time, so I let them slide to my ankles. I had an added incentive not to fall in the loose powder with just my polypropylene between my skin and the snow!

Luckily, we were only three or four hundred yards from the tree line. It wasn't long before we emerged from the trees and found our group, who'd been looking for us. They'd been loaded and ready to go, but as time went by without the sight of either Jim or I, they began to worry. We were thoroughly chastised before we got into the van, stripped off our wet clothes, and finally warmed up.

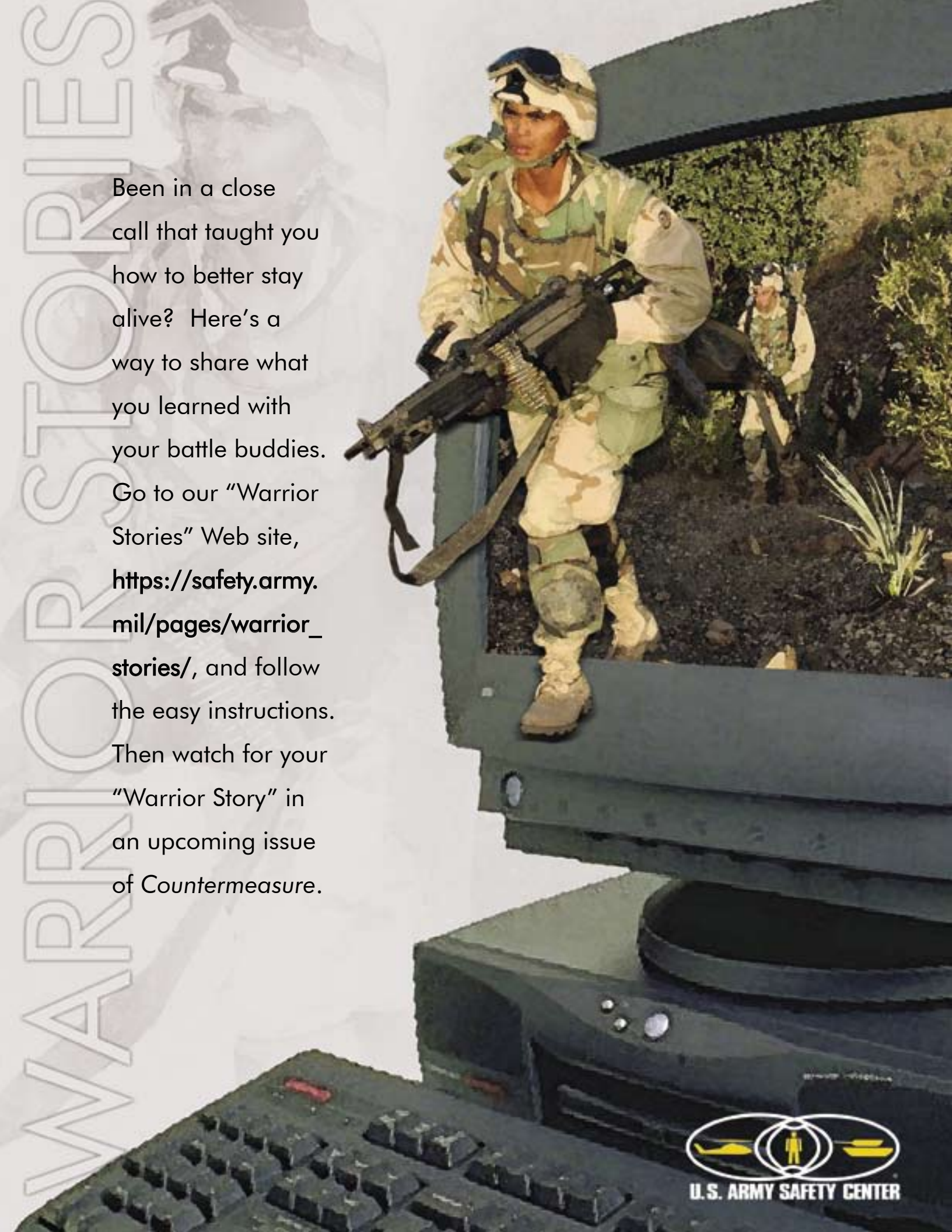
Jim's legs were blue for half the trip back to Denver. He had minor burns down the outside of his thighs from the cold, but no serious injuries. I was fine after I warmed up. It was a memorable day and I think it scared both Jim and I. Jim, true to his character, still skis in jeans. I, however, learned my lesson—I'll always ski in waterproof clothing. It's better to prepare for the worst and be a little hot, than be very cold when the worst does happen!

Skiing safety tips:

- **Use the proper equipment. Buy or rent the equipment from experts who can instruct you on its proper usage.**
- **Take lessons from a qualified instructor before venturing out on the slopes.**
- **Wear clothing that is water and wind resistant.**
- **Dress in layers to accommodate your body's constantly changing temperature.**
- **Always wear eye protection. Goggles or sunglasses can protect you from "snow blindness" and dangers from falls and collisions.**
- **Know your limits. Most injuries occur at the end of the day when fatigue has begun to set in.**

Safety tips provided courtesy *Safety Times*.

WARRIOR STORIES



Been in a close call that taught you how to better stay alive? Here's a way to share what you learned with your battle buddies. Go to our "Warrior Stories" Web site, **https://safety.army.mil/pages/warrior_stories/**, and follow the easy instructions. Then watch for your "Warrior Story" in an upcoming issue of *Countermeasure*.

U.S. ARMY SAFETY CENTER

ARMY GROUND RISK-MANAGEMENT INFORMATION

Countermeasure

VOL 25 NO 12 https://safety.army.mil DECEMBER 2004

Best Practices & Year-End Review

Team 19 Safety

2004 APEX® AWARDS FOR PUBLICATION EXCELLENCE

ARMY GROUND RISK-MANAGEMENT INFORMATION

Countermeasure

CONTENTS

features

U.S. ARMY SAFETY CENTER

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DASAF'S CORNER

From the Director of Army Safety

We're Listening!

As I travel around the Army, I continue to be impressed with the dedication and true grit of our Soldiers! We are an Army at War, transforming for the future. This means increased exposure and lots of changes. High OPTEMPO and change are the norm—not the exceptions.

Our Soldiers are mission focused. They don't want "admin or safety" to get in the way of progress. I agree and want to focus this month on how safety fits in the feedback we're getting from the field. Maybe it's the name "safety" that's getting in the way of Composite Risk Management (CRM). Performing solid mission analysis and using troop-leading procedures to reduce risk should be a good thing—not something that gets in the way.

CRM will help get us on the razor's edge and improve our chances of accomplishing tasks that appear very high risk or even impossible. So don't think safety; think CRM and get after it! My challenge to each of you: Look hard each day at what will kill you or our Soldiers and put control measures in place that will get the job done and still let everyone come back and brag about it. "See the enemy … see yourself." Before every mission, ask "How can the enemy take me out, and what are the hazards that could cause an accident and take me out?"

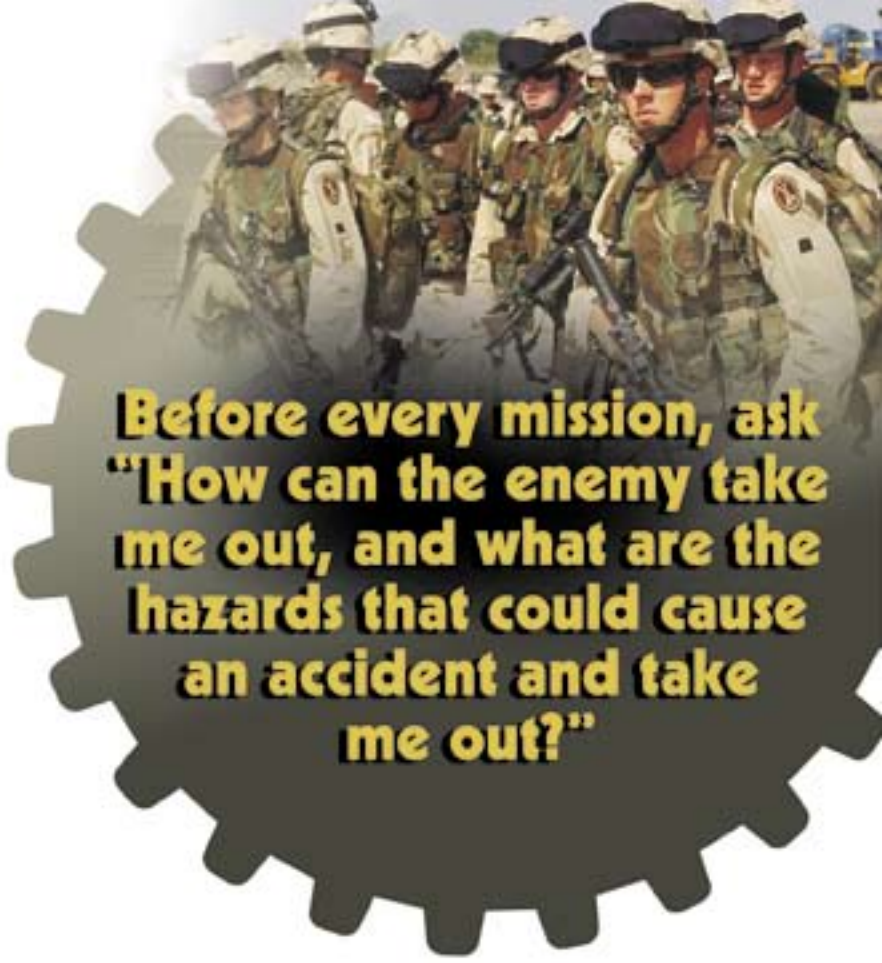
There are many tools out there to help with CRM. You asked for them, and we are listening. Listed below are your comments, followed by what we are doing to respond.

"**Good tools, but poor connectivity**." Just like AKO Lite, we now have "Safety Lite" on the Safety Center homepage at **https://safety.army.mil**. The system will log on automatically with the most efficient connection based on your bandwidth. The Risk Management Information System is also now on SIPRNET. Log on and try these tools out!

"**Commander's Safety Course—not good**." An entirely new version of

DASAF'S CORNER

From the Director of Army Safety



the course will be available online by the middle of this month. It's modular in design and easy to change based off your feedback. The initial test came back with great reviews.

"**We need an online course for additional duty safety officers. The Commander's Safety Course won't cut it!**" The Safety Center agrees. A new course focused on NCOs, also modular, will be available online later this month.

"**Driver's training is weak.**" The Army Safety Coordinating Panel, made up of Army senior leadership and Major Command representatives, is tackling this issue head-on. A new task force is headed your way to quickly beef up both tactical and POV driving skills.

"**Negligent discharges: There are too many different standards for weapons clearing.**" Sergeant Major of the Army Kenneth O. Preston recently attacked this issue to clarify clearing procedures. The July 2004 *Countermeasure* included an insert that covers all currently issued U.S. Army weapons. You can download the pamphlet from our Web site at **https://safety.army.mil/pages/media/pubs/cm/safeweaponpullout.pdf**.

"**Aircrew coordination training needs improvement.**" Since 1997, 50 percent of all aviation accidents have had some causal factors associated with crew coordination. The new Aircrew Coordination Training Enhancement Program is on the street and being taught by the Directorate of Evaluation and Standardization. Aviation units—if you're not scheduled yet, ask for assistance!

"**Risk management training needs to be reviewed from the bottom up.**" TRADOC will publish a new version of Field Manual 100-14 in Third Quarter 2005. By the way, all three modules of the Army Safety Management Information System risk management tool are now on our Web site. The POV version has been out the longest and with much success. To date, we've had over 120,000 assessments completed with only one POV fatality. Putting risk management in Soldiers' faces works!

There are lots of other ongoing initiatives to move us toward predictive analysis of accidents. Until then, my message is simple: Managing composite risk will move 'ya to the edge to get the tough jobs done, and now there are plenty of tools available to get after it. ★

Get the job done and bring 'em all back home!

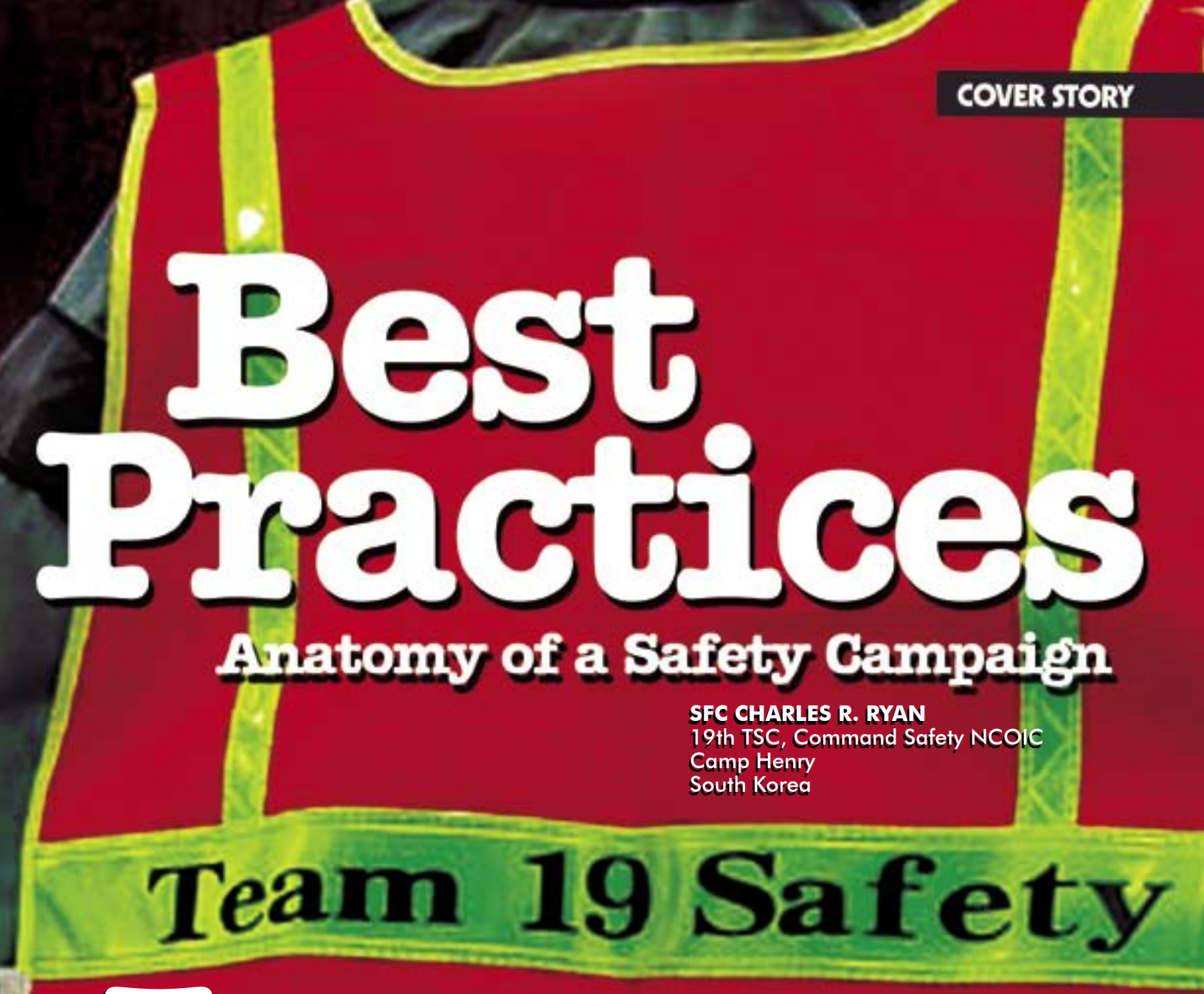
Joe Smith

BG Joe Smith

Best Practices

Anatomy of a Safety Campaign

SFC CHARLES R. RYAN
19th TSC, Command Safety NCOIC
Camp Henry
South Korea



In May 2003 the secretary of defense mandated a 50-percent reduction in accidents—a goal echoed by the acting secretary of the Army. In response, the 19th Theater Support Command (TSC) Safety Office, Camp Henry, South Korea, joined other safety offices around the globe in going into high gear. When our acting safety manager began briefing our safety campaign to the commander of the 19th TSC, Major General Jeanette K. Edmunds, I recall thinking, "Now what could be a bigger challenge than a 50-percent reduction in accidents?"

Best Practices

The answer came quickly. Without blinking an eye MG Edmunds said to us, "The 19th TSC's goal is not a 50-percent reduction in accidents; it is zero accidents!" I blinked at what she said, and then it hit me the key word was "campaign."

What is a campaign, other than influencing others through the use of communication? The key to good communication is effectively using media to "get out the word"—and that was just what our command needed. We have units stretching from as far south as the port city of Busan to the northern Demilitarized Zone (DMZ), where they support Area One. If you want to use Kansas for a comparison, envision our headquarters being at Fort Riley, our southernmost camp in Wichita, and our northernmost units at Fort Leavenworth. However, bear in mind traveling in Korea takes twice the time it does in Kansas. Developing an effective media program was the only way to reach all our units with our campaign.

The campaign

The first plan of attack was to reinforce the need to be safe through a visual aid or symbol. Our command's Soldiers and civilians were provided a small "safety dot" to place on their watch. Whenever they glanced at their watch they were to ask themselves, "Is what I'm doing safe?"

We came up with some other ways to visually reinforce the need to be safe. For example, imagine running in a physical training (PT) formation and printed on the back of the PT vest in front of you were the words "Bob's Hamburgers." That might make you interested in one of those hamburgers. We used the same logic when we had the words "Team 19 Safety" printed on the back of our 8,000 new PT vests. Also, with so many Soldiers in Korea wearing backpacks while walking or riding bikes, I had the vendor enlarge the vests' neck hole so Soldiers could wear the vests over their backpacks. In addition, we printed the major subordinate command's name on the front of the vests to boost esprit de corps. Other safety measures included unit safety officers and NCOs wearing a cloth badge on their BDUs, a safety-related motto or quote attached to all e-mails, and a "Sergeant Safety" cartoon character.

As part of our campaign we conducted a full-scale media blitz. The 19th TSC's headquarters is located in Daegu, which also contains Camp Walker's Armed Forces News-Korea detachment. The detachment's radio and television sections strongly support our campaign. Every Friday I have a one-hour radio "Sergeant Safety Show" where I discuss everything from current accident trends to the weekend safety brief.

In addition, MG Edmunds also supported my writing and directing 12 public service announcements (PSAs). We worked with our subordinate commands to produce the PSAs, using the command team as speakers and the unit's soldiers as "actors." We also got space in unit publications for stories, giving us another way to put safety messages before Soldiers. As Soldiers heard our safety messages and put them to use, we rewarded them with special coins and watches.

The results

The19th TSC Safety Campaign was implemented in February 2004 and has produced dramatic results. Compared to the

second quarter of 2003, accidents during the second quarter of 2004 were down 33 percent. Third quarter statistics reflected a 44-percent decrease in accidents compared to the same period during 2003. On Sept. 30, 2004, we met the Army Safety Campaign's goal of a 50-percent reduction in two years. Our offices' efforts were recognized by the Eighth Army (Korea) Safety Office, as well as by the Department of the Army Inspector General team. In addition, our off-duty risk assessment form was briefed as a "best practice" in Korea. The campaign was a true team effort—from Acting Safety Manager Randall Ross proofreading and improving every product we created, to our Korean national administration clerk, who interpreted my meetings with local vendors.

Now that Safety Campaign 2004 is over we can relax, right? Wrong! Our new commander, Brigadier General Timothy P. McHale, is also committed to safety and is adding his Campaign 2005 measures to the existing ones. We're off to rock for another year, but more importantly we're off to help the 19th TSC "ROCK SAFELY!"

Editor's Note: SFC Ryan's success at creating an effective, theater-wide safety program is both appreciated and commended by Director of Army Safety, BG Joe Smith. In recognition of SFC Ryan's efforts developing this safety campaign, he has received the Sergeant Major of the Army Excellence in Safety Award. SFC Ryan brings 17 years' combat arms and seven years' combat service support experience to his safety office. He is completing his Masters Degree in Occupational Safety and Health. He may be contacted at rocksafely@yahoo.com or charles.r.ryan@us.army.mil.

An Award-Winning Motorcycle Safety Program

FRED FANNING
Safety Manager
Office of the Director of Army Safety

The Motorcycle Safety Foundation (MSF) has recognized Fort Leonard Wood, Mo., as having the best motorcycle rider training program in the military for 2003. The program provides Experienced RiderCourse and Basic RiderCourse instruction using MSF curricula. The post's instructors and driving ranges are certified by the MSF, and the Missouri Motorcycle Safety Program also has authorized the instructors to provide motorcycle training.

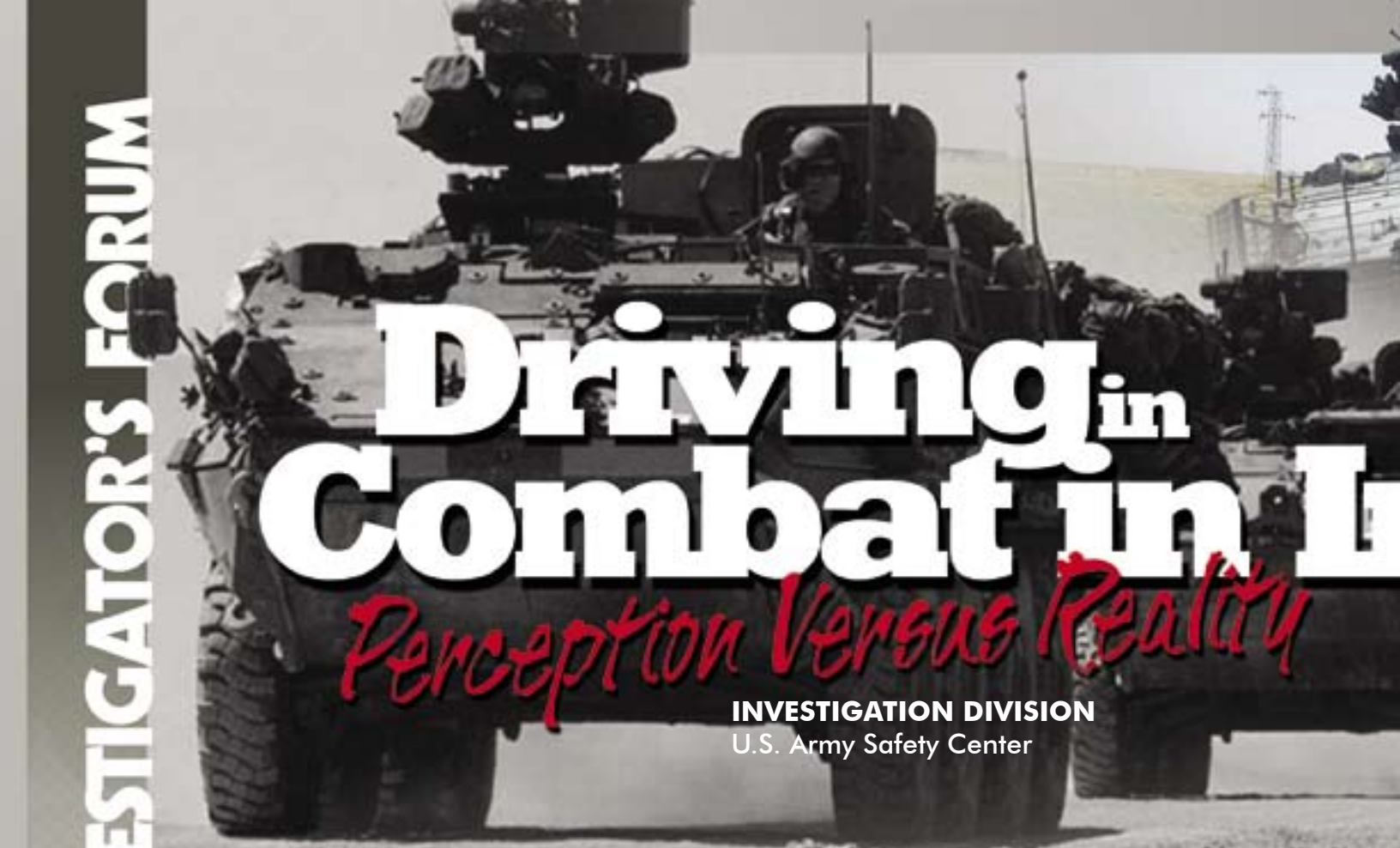
Randy Sipes, a safety specialist with the Maneuver Support Center Safety Office, is an MSF-certified instructor and rider coach and manages the program. Fort Leonard Wood's program provides the largest number of Experienced RiderCourse classes in Missouri, and has helped the state train an unprecedented 4,000-plus students for the first time ever. Fort Leonard Wood's program has developed its own motorcycle safety poster showing the required personal protective equipment, and also provided articles for the post's *Guidon* newspaper.

The program was upset at the beginning of Operation Iraqi Freedom as Army Reserve equipment staged on the only approved motorcycle training range. In spite of this a new range was found, marked, and MSF approved so training never ceased. Fort Leonard Wood also has taken its MSF program beyond that offered at many installations by providing training to family members and retirees at no cost. The program has reached beyond service boundaries to sponsor an instructor preparation course for the U.S. Navy, training instructors from as far away as Hawaii.

The post's instructors work very hard to maintain a focused and productive program, using their own motorcycles to demonstrate the exercises. They also must maintain, through training and instruction, their MSF certification and their Missouri Motorcycle Safety Program authorization.

However, an award-winning program means little if the students don't do their part—riding at the appropriate speed, wearing protective clothing, and never mixing alcohol and riding. Motorcycling is a popular sport, and Fort Leonard Wood's MSF program is successfully teaching Soldiers to both enjoy their sport and live to ride another day.

For more information on Fort Leonard Wood's award-winning motorcycle safety program, contact the author at (703) 601-2413 or e-mail fred.fanning@us.army.mil.



Driving in Combat in L

Perception Versus Reality

INVESTIGATION DIVISION
U.S. Army Safety Center

The accident sequence

The daytime 14-vehicle convoy pulled out of their forward operating base (FOB) with nine Strykers in the lead. The convoy was traveling 45 mph and had been on the road for five minutes when it encountered oncoming local national traffic. The first eight Strykers pulled to the right side of the road and had no trouble avoiding the oncoming vehicles. The driver of the ninth Stryker, however, pulled too far to the right and the right-side tires went off the road, dropping eight inches onto the hard dirt shoulder. Instead of slowing down and gradually steering back onto the road, the driver abruptly steered to the left, causing the Stryker to shoot across the road into oncoming traffic. The driver reacted by swerving to the right and running the right-side tires off the road again. He then overcorrected to the left, causing the Stryker to slide sideways. As the left-side tires began to lift off the ground, the squad leader yelled "Rollover!" and dropped into his hatch.

The vehicle rolled 2 ½ times and landed upside down. The driver was thrown outside the vehicle, which landed on him and caused fatal injuries. A Soldier riding behind the squad leader in the troop compartment came partially out of the squad leader's open hatch and was crushed and killed. The left-rear air guard was thrown from the vehicle and suffered a fractured back. The other squad members inside the vehicle suffered minor injuries.

Why the accident happened

- The driver had not received any sustainment training, including how to drive the vehicle in emergency situations during combat. He was not the primary driver and had driven the vehicle only around the FOB and on four combat missions—which were 20 miles round-trip—before the accident.
- The squad leader did not

direct the driver to slow down and gradually steer back onto the road.

• The unit chain of command viewed this combat mission as low risk. They had conducted this same mission 12 times in the past and had fallen into a routine. Therefore, they did not conduct a risk assessment, rehearsals, or a convoy safety briefing before the mission.

Why the severity of the injuries?

• The squad leader did not verify if the driver was wearing his seatbelt. He also permitted the driver to operate the vehicle outside the FOB with his hatch open. This was in violation of the battalion commander's orders.

• The squad leader did not require Soldiers riding in the vehicle to fasten their seatbelts. Soldiers and leaders viewed the seatbelts as difficult to use when they were wearing combat gear, and as a hindrance when quickly dismounting the vehicle in a combat situation.

• The chain of command had not ensured the squad rehearsed rollover drills in more than two months.

Recommendations

• Seatbelts save lives. All Soldiers operating and riding in Army vehicles are required by Army policy and CJTF-7/MNC-I to wear their seatbelts. First-line supervisors must make this happen for each mission.

• Local commanders, based on the risk assessment, decide whether drivers keep their hatch closed when operating outside the FOB as protection against improvised explosive devices and car bombs. During high summer temperatures, first-line supervisors must ensure hatches remain closed and that everyone consumes water on a regular basis.

• Experience gained while driving a vehicle is not a substitute for annual driver's training. Units operating in combat zones must make the time to take their primary and alternate drivers through an obstacle course and reinforce safe driving procedures, including operating in emergency situations.

• Vehicle crews must rehearse rollover drills, including evacuating the vehicle and accounting for all personnel, on a regular basis.

• There is nothing routine in combat. Leaders must conduct troop-leading procedures for each mission. Leaders must also perform a risk assessment at all levels to ensure first-line supervisors implement and supervise control measures.

One of the worst things that can happen to a unit in combat is losing a Soldier to an accident. For many leaders and Soldiers, the perception is that accidents are more likely to happen during the high point of the mission. However, the reality is that most accidents happen while en route to the mission or returning from it when leaders and Soldiers let down their guard and stop ensuring tasks are done to standard.

Comments regarding this article may be directed to the U.S. Army Safety Center's Investigation Division at (334) 255-3261 or DSN 558-3261.

Fiscal Year (FY) 2004 has ended and it is time to assess "how we did." The Army continues to have many of its Soldiers deployed, and this has an effect on the type and number of accidents. The good news is that the Army had a 28-percent decrease in Class A through C ground accidents in FY04 compared to FY03, and there also was a reduction in personal injury fatalities. The bad news is that as of this writing, 267 Soldiers have died in accidents—seven more Soldiers than last year, representing a 2-percent increase in fatalities from FY03. There also was a 4.5-percent increase in Class A accidents, most involving Army Motor Vehicles (AMVs) and privately owned vehicles (POVs). (Note: As in all previous years, Class C accident reports continue to arrive for FY04, and these will change the final numbers.)

FY04 Army Ground Accident Review

How Did We Do?

MAJ LARRY CHINNERY
Research Analyst
U.S. Army Safety Center

Privately Owned Vehicle (POV)

POV accidents, the leading cause of Army accidental fatalities, account for 49 percent of all Army accidental deaths. According to the reports received so far, 131 Soldiers have died. That's 21 more Soldiers than last year—an obvious movement in the wrong direction. There is a disturbing trend when you look at these accidents by POV type. Motorcycle accidents, which have claimed the lives of 28 Soldiers, have jumped by 50 percent compared to FY03. Automobile and van crashes rose by 30 from last year and resulted in 88 fatalities. The most commonly reported causes of fatal POV accidents are excessive speed, driving under the influence of alcohol, inattentiveness, and driving tired. While many Soldiers protect themselves with seatbelts and motorcycle helmets, other Soldiers still choose to ignore these life-saving pieces of equipment and pay for that choice with their lives.

Army Motor Vehicle (AMV)

In our "FY03 Army Ground Accident Review" article in the December 2003 *Countermeasure*, we showed 182 AMV Class A through C accidents. That number, however, jumped to 282 after all the reports came in. While FY04's current accident count of 215 represents a 24-percent reduction from last year, as delayed reports come in that number is likely to climb. Some 42 percent of these accidents involved HMMWVs, making them the biggest problem area. By comparison, government sedans and station wagons accounted for eight percent of AMV accidents.

Looking at AMV mishaps by accident class, Class A numbers remained relatively stable in FY04, with 47 compared to 46 during FY03. However, the number of Soldiers killed in these accidents has risen to 50, an increase of 39 percent from FY03. HMMWVs were involved in 24 of the 47 accidents, with the remaining accidents being scattered among the M915 series, HEMTTs, and several other vehicles. The majority of Class A AMV accidents happened in Afghanistan, Kuwait, and Iraq, where we had 38 mishaps.

Army Combat Vehicle (ACV)

As with AMVs, the number of ACV accidents remained fairly stable. We currently have 62 reported Class A through C ACV accidents for FY04, which is five less than FY03. The

ACVs that figured most prominently in these numbers were the M1A1 Abrams tank, with 29 percent of these accidents; Strykers accounted for 26 percent, and Bradley Fighting Vehicles (BFVs) constituted 24 percent. Five soldiers died in tank accidents, four in Stryker accidents, three in BFV accidents, and one in an M88 recovery vehicle accident.

Personal Injury-Other (PI-O)*

Personal Injury-Other accidents accounted for the largest number of Class A through C mishaps. So far, 743 Class A through C accidents have been reported for FY04 versus 1,104 for FY03. While this might seem a good news story, delayed reporting is a factor and we expect the numbers will climb. When all the reports are in, we estimate there will be a 15-percent overall decrease in PI-O mishaps, with Class A accidents and fatalities dropping by 10 percent. In FY04 the Army had 57 Class A PI-O accidents, which resulted in 53 deaths.

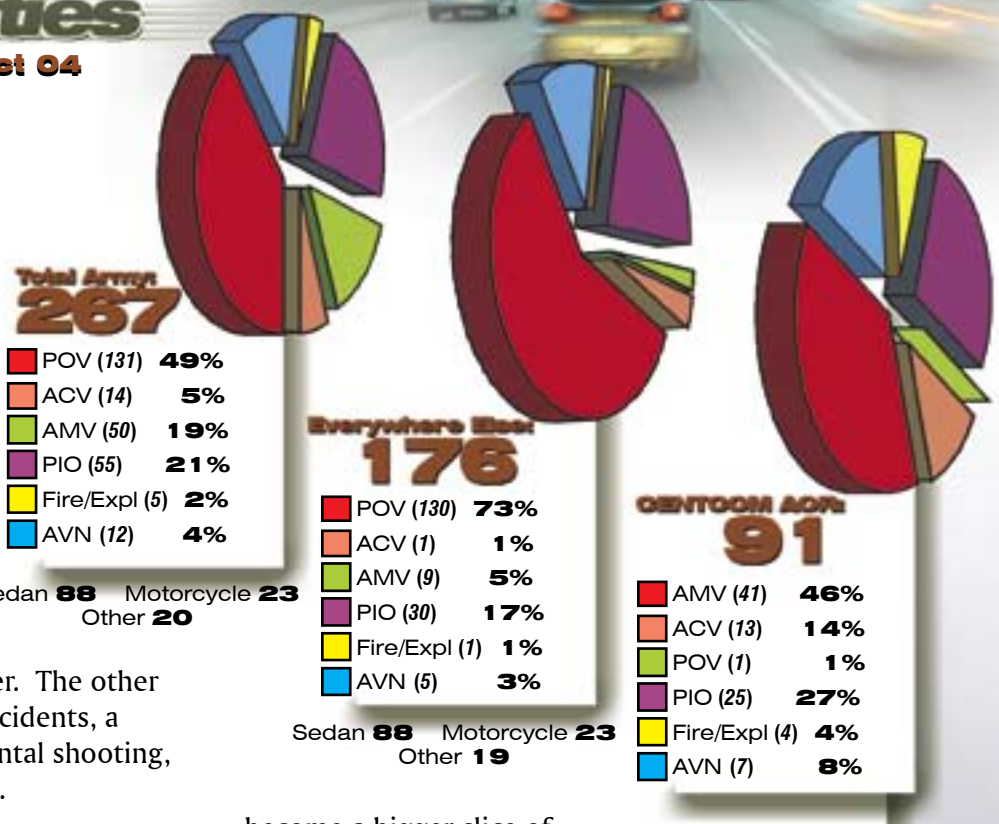
The primary activities Soldiers were involved in included parachuting, 19 percent; physical training, 14 percent; and "human movement"—including walking, running and climbing—14 percent.

On-duty Class A Accidents.

Of the 42 Class A PI-O accidents and fatalities, three of four happened on duty. Of those accidents, 15 involved physical training and road marches, eight involved weapons handling, and four were electrocutions. Although weapons handing accidents were down 50 percent from FY03, they still resulted in the deaths of seven Soldiers and one civilian. Additionally, the Army suffered one reported loss to fratricide. Twenty-four (57 percent) of these accidents involved Soldiers in Afghanistan and Iraq.

FY04 Army Military Fatalities

As of 31 Oct 04



Off-Duty Class A Accidents.

Falls and drowning were the primary causes of these 15 PI-O accidents, 14 of which resulted in a fatality. Of the four Soldiers who died in falls, two fell from window ledges, one fell down a stairway, and another fell while mountain climbing. Swimming and boating accidents accounted for another four fatalities, and two Soldiers were electrocuted while in water. The other fatalities involved pedestrian accidents, a privately owned weapon accidental shooting, and other miscellaneous causes.

Fire

Nine Class A through C fire-related accidents were reported for FY04, a decrease from FY03's 14 accidents. Four of this year's accidents were Class As, including one Soldier who died in a house fire.

Explosives

There were 30 explosives incidents in FY04, costing the Army lives, injured Soldiers, dollars, and a reduction in readiness. Four Soldiers were killed by explosives accidents, three of which involved handling captured enemy ammunition. The fourth fatality was attributed to indirect fire.

Conclusion

Overall, vehicle crashes continue to cause the majority of Army accidental deaths, regardless where a Soldier is stationed. Before the Army went to war, approximately 70 percent of accidental deaths were due to vehicle accidents. That number has remained relatively stable at 73 percent for FY04, the difference being that AMVs and ACVs have become a bigger slice of the pie because of our wartime deployments.

The U.S. Army Safety Center (USASC) has a number of tools to help leaders and individual Soldiers effectively manage risk in their everyday lives, especially when driving POVs. Check out USASC's Web site at **https://safety.army.mil** to learn about ASMIS-1, the POV Toolkit, and 5 Minute Safety Briefs. Accident reduction is not just a leader responsibility; it's something all Soldiers can do to help promote the Army's readiness and preserve its combat power.

* Personal Injury-Other accidents are Army accidents that involve injury to personnel not covered by any other accident type.

Editor's Note: These statistics are current from the USASC database as of November 1, 2004. Delayed reports and follow-up details on preliminary reports could change the statistics, figures and findings.

Contact the author at (334) 255-1496, DSN 558-1496, or e-mail lawrence.chinnery@safetycenter.army.mil.

What's in the Can?

JONATHAN D. MCKINNEY
Tactical Safety Supervisor
Marine Corps Base, Camp Pendleton, Calif.

A platoon of Marines gathered in a motor pool to perform preventive maintenance (PM) on vehicles used the previous week during a command post exercise (CPX). Each vehicle was placed on line and all equipment was removed. From the dispatcher's shack, the sergeant in charge of the maintenance used a loudspeaker to tell the Marines to begin checking the items in the PM manual.

Each vehicle carried a 5-gallon water can and a 5-gallon fuel can. However, when the vehicles were prepared for the previous week's CPX, two of the fuel cans were unserviceable, so the platoon sergeant decided to use two water cans instead. Unfortunately, that fact had been forgotten after the CPX.

As the young Marines performed their maintenance, it came time to check the winch on the commander's vehicle. This consisted of unwinding the cable and checking its serviceability. As the driver rewound the cable onto the winch, a small electrical fire started. The driver grabbed the Purple K fire extinguisher (intended for use on electrical fires), pulled the pin, and squeezed the handle—but nothing came out. He looked at the dial and saw it was empty. He then noticed two water cans to his right. Picking up one of them, he quickly unscrewed the lid and heaved the liquid onto the fire. Well, which water can do you suppose he grabbed? You guessed it—the one full of gas. The liquid hit the flames and ignited, making a loud POOF! In an instant a large cloud of black smoke hovered over the motor pool.

The startled driver was only about three feet from the explosion. He was lucky and only suffered minor burns on his face and arms. Other Marines saw what happened and rushed over with fire extinguishers and put out the fire.

In the story above, the platoon sergeant put the mission before safety when he decided to store fuel in the two water containers. That's not exactly good risk management at work. Luckily, the ignited fuel didn't follow the source back to the can and roast the driver, or cause additional fires and property damage.

We use every available resource when it comes to accomplishing the mission. However, in the process we must also use risk management in our planning. Not doing so in the name of "getting the mission done" can have terrible consequences for some unsuspecting Soldier.

Editor's Note: The Marine Corps uses the same type of water can as the Army. If you'll check the back cover of our June 2004 issue, you'll see a water can that was used to store antifreeze—a potentially deadly decision had anyone drunk from that can. Water cans are for storing water—nothing else!

Mr. Jonathan McKinney is a retired Marine Corps master sergeant currently serving at Camp Pendleton, Calif., as a tactical safety supervisor. In that role he ensures risk management is used in Marine training programs and provides occupational health and safety training. He is currently a member of the first joint-service CP-12 safety class conducted by the U.S. Army Safety Center.

Countermeasure
2004 Article Index

Accident Reporting
• ARAS Accident Reporting Made Easy—February

Accidental/Negligent Discharge
• It's Not Clear Until I Say "It's Clear!"—January
• Here's Joey!—March
• Mail Call—March
• Do You Really Know if That Weapon is Loaded?—April
• A Tent Can Be a Dangerous Battleground—May
• Weapons Handling Procedures (insert)—July
• A Live But Deadly Fire—August

Alcohol Breathalyzers
• The Breath of Life—August

All Terrain Vehicle Safety
• Here's Joey—April

Army Motor Vehicle (AMV)
• A Wild Truck Ride!—February
• Here's Joey!—February
• Lessons Learned—February
• Hurry Up And Get Hurt!—March
• Know Your Drive-Off Capabilities—April
• Mail Call—July
• A Little Hell on Wheels—July

Army Safety Campaign
• DASAF's Corner
Incoming! The Army Safety Campaign—April
• Operation Guardian Angel—April
• News and Notes—April
• Back Cover—April

Awards (Safety)
• SMA Safety Award—July
• Safety Sends—July

Best Practices
• Mastering the Master Driver Program—September
• Carrying Safety Into the Future—September
• An Award-Winning Motorcycle Safety Program—December
• Anatomy of a Safety Campaign—December

Bradley Fighting Vehicle
• The Gunner Got Gassed—March
• Between Hell And A Hot Place!—May
• Where's the Fire?—May
• Up in Flames!—August
• A Live But Deadly Fire—August

Captured Enemy Weapons
• Are Captured Weapons Safe to Shoot?—April
• Mail Call—July

Cold Weather Safety
• Cotton Kills—October
• Dressing for the Cold—October
• Stay Hydrated to Stay Safe—October
• A Long and Chilly Trail—October
• Don't be a burden on your battle buddy! (back cover)—October
• Snow Forts—Walls That Stop Steel—October
• Chillin' Out on the Slopes—November

Convoy Safety
• A Tale of Two Convoys—September
• The Flying Convoy Potty Break—November

Deployment Safety
• A Tale of Two Convoys—September
• Port Ops Getting There is Half the Battle—September
• Preparing for a Successful Deployment—September
• Tie It Down the Right Way!—September
• Weapons Handling 101 Large Bore—September

Driver's Training
• DASAF's Corner—October
• Skidding Your Way to Safe Driving—November

Electrocution
• Safety Alert Electrocution Hazard—August
• Electrocution: The Unexpected Killer—October

End of Year Report
• FY04 Army Ground Accident Wrap Up—December

Eye Injuries
• Eyes of Fire—March
• PPE? I Don't Need No Stinkin' PPE!—August
• Back cover: Why We Wear Ballistic Goggles—September

Fire/Burn Safety
• What's in that Can O' Air?—January
• Here's Joey Reader's Write—April
• Blazing Booties!—May
• Lighting Up the Tent—August
• My Extra Crispy Barbecue—August
• What's In the Can?—December

Forklift Safety
• In Danger's Lane—March

From the Editor's Desk
• Declaring the War on Accidents—January

GEN Schoomaker Sends
• Protecting Our Combat Readiness—January

Government Owned Vehicle (GOV)
• How Close is Too Close?—February
• An Unexpected Encounter—October

Hearing Safety
• Hearing Loss Equals Combat Casualty—September
• Mail Call—October

Heat Injury/Prevention
• CamelBaks Need Care Too!—January
• Peeing White, Ready to Fight!—April
• Here's Joey! More on CamelBaks—June
• Surviving When the Heat is On—July
• Beat the Heat!—July

Helmet Use—Tactical/POV
• Keep it Covered! (back cover)—March
• We Finally Got It—June

HMMWVs
• Here's Joey!—January
• A Turn for the Worse—March
• Safety Alert: HMMWV Electrical Fires—August
• The Great LT Adventure—July
• Am I My Brother's Keeper?—September
• Mail Call—September
• Warrior Stories: Hell on an Iraqi Highway—November

Improper Container Use
• Back cover—May
• What's In the Can?—December

Improvised Explosive Devices
• Hearing Loss Equals Combat Casualty—September
• Warrior Stories: Hell on an Iraqi Highway—October
• Explosives Safety DVD Available—October

Insect Bites/Diseases
• It's Not Just a Bite—August

Lightning Safety
• Zapped and Zinged—February
• Here's Joey! Mea Culpa—We Goofed!—June

Motorcycle Safety
• Saved by the Helmet—March
• When 18 Wheels Trumps Two—May
• McMurphy's Law—August
• An Unexpected Maneuver—August
• Mail Call—September

Occupational Safety
• Beside the Green: Be the VIP in VPP—October
• Beside the Green: Looking Back to Plan Ahead—December

Power Tools
• An Alabama Almost Chainsaw Massacre—August

Privately Owned Vehicle (POV)
• DASAF' Corner—ASMIS: Enhancing Safety Through Applied Knowledge—January
• Been There, Done That … Lucky to be Alive!—January
• ASMIS-1 Clearing the Road Ahead—January
• When the Leaders Weren't Looking—January
• From Slick to Schlep in One Easy Lesson—February
• Attacking Privately Owned Vehicle Accidents—April
• There I Was Being Stupid—April
• Doin' the 'Donut'—May
• Joelle's Story—June
• Surfing Down the Highway—June
• DASAF's Corner—June
• Wow Was That a Red Light I Just Ran?—June
• I'll Never Drive that Tired Again—July
• Safety Sends—August
• DASAF's Corner—November
• Complacency or Conditioning?—November
• A Close Call on a Slick Road—November
• Red Light Roulette—November
• Beside the Green: Car Speak—November
• No Curb Too Steep … It's a Rental!—November
• Recipe for Disaster—December

Range Safety
• To Live or Die on the Range—January
• It's Not Clear Until I Say "It's Clear!"—January

Recreational Safety
• A Leap Into the Twilight Zone—February
• Snowboarding Safety Tips—February

Redeployment Safety
• Redeploying Home—January
• USAREUR's Reintegration Program Eases Iraq Returns—April
• Operation Guardian Angel—April
• Letters to the Editor: Keeping Returning Soldiers Safe—May

Readership Survey
• Countermeasure Readership Survey—February

Riding Lawnmower
• In Just an Instant—June

Rollovers
• The Kid Was Right—June
• An Upside-Down and Deadly World—September
• Am I My Brother's Keeper?—September
• Investigator's Forum: Perception vs. Reality—December

Safety Editorials
• Declaring the War on Accidents—January
• Dust in the Wind—June

Safety of Use Messages
• Safety Messages are Serious Business—March

Seatbelt Safety
• A Different Seatbelt—March
• Saved by the Belt—March

Stryker
• An Upside Down and Deadly World—September
• Investigator's Forum: Perception vs. Reality—December

Subscription Information
• Back cover—June

Unexploded Ordnance
• Three Duds Looking for a Blast—April

Videos/DVDs
• "Letters from War"—July
• Explosives Safety DVD Available—November

Water Safety
• Unfulfilled Potential: Almost a Soldier—March

Weapons Handling/Safety
• Are Captured Weapons Safe to Shoot?—April
• Weapons Handling Safety Poster—July
• Keep It Shootin' In The Cold—October
• Mail Call—October

Writing Guide
• The "Write" Stuff—February

Looking Back to Plan Ahead

SUSAN JERVIS
Army Materiel Command
Fort Belvoir, Va.

Jack Cohen could hardly believe it was already December and his annual safety summary was due to the commander by the end of the week. As the supervisor for one of the depot's maintenance lines, he and his team had been extremely busy supporting maintenance requirements for Operation Enduring Freedom and Operation Iraqi Freedom. There'd hardly been a minute to stop and think about the events of the year, and even less time to stop and plan for the coming year. As he turned through the pages of his weekly log, Jack began recording the safety incidents his team experienced during the year. He'd forgotten about most of these incidents because he'd been so focused on completing the mission on time.

"February 11 – Andrea fell as she entered the building." It was a cold winter morning with icy patches around the walkways and buildings. Andrea didn't notice the icy spot near the bay door because it was still dark outside. She stepped on the ice, slipped, and fell. Nothing was broken, but Andrea did sprain her wrist. More troubling was the fact that a light bulb had been burnt out for several days and no one had taken time to fix it. Even though Andrea only missed a couple of hours of work that day, she wasn't able to efficiently handle and carry larger parts for several weeks. Her injury decreased the productivity of her work group until her sprained wrist healed.

"March 17 – Bill hurt his back lifting the parts bin." It was Saint Patrick's Day and everybody was hurrying to finish their last task for the day. Bill needed to stage the parts bin in preparation for tomorrow's shift. Rather than following the normal procedures of using a hand truck or getting a buddy to help, Bill lifted and moved the bin by himself. As a result, he pulled a muscle in his lower back and missed work for two weeks. He had restricted work activities for several weeks following his return. Bill's group really pulled together to juggle his work during his absence, but it did require working extra hours to meet the production

March 17

February 11

June 14

September 2

schedule.

"June 14 — James visited the clinic about his hand." During the weekly team meeting, James mentioned that his fingers were numb. Someone in the group suggested he visit the health clinic. The doctor diagnosed James as having Carpal Tunnel Syndrome. The doctor suggested that James talk to the safety office about redesigning his job area to decrease the potential for repetitive motion injury. The redesign seemed to help James' symptoms.

"September 2 — Cathy cut her hand." Cathy was using a file to smooth out a rough place on a metal fitting. The file slipped and cut her finger. Although the cut only required first aid treatment, her group did use the experience to discuss the importance of using personal protective equipment.

Jack leaned back in his chair and glanced over his notes. Wow, four of his 20 employees experienced safety incidents during the year. Even though none of the incidents were life threatening, his group did lose valuable production time and now use-or-lose leave was creating a management challenge. Jack was really bothered by this realization. Because of his unwavering focus on getting the job done as scheduled, Jack felt like he'd let down the members of his team. He hadn't fully discharged his key responsibility as a leader. He hadn't actively conveyed an attitude of safety to all his team members so they would have a safe working environment. As he began to finalize his annual summary, he decided to supplement his lessons learned with some safety goals for the coming year.

Make safety a priority. Jack vowed to use each and every trip onto the maintenance floor to look for potential safety hazards. If he spotted a problem, then he'd work with his team to correct it right away. He could also make safety a routine discussion point during his weekly team meetings.

Set up a buddy system. Jack set out to establish an informal "safety buddy system" to help his employees become a real team. "Safety buddies" could help each other with big jobs, remind each other about the correct procedures, and be focused on each other's safety.

Communicate that safety is productivity. Jack promised to make sure his team understood that the safe way is the right way to complete the job. He would work hard to maintain a safe workplace so each member of his team could make it home injury free at the end of each day.

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I heard the forecast for snow, looked out the window and didn't see so much as a single flake. Sure, the general had given us permission to leave early that day because of incoming bad weather, but hey—I was editor of a military driving safety magazine. If anyone could handle driving in crappy weather, who better than me? Besides, I had work to get done and my "accu-window" forecast convinced me the weather warning must have been wrong.

SLIP SLIDIN

BOB VAN ELSBERG
Managing Editor

Finally, 4:30 p.m. rolled around and I once again gazed out the window. I could normally see some 70 miles to the west across the desert. Now that had been shortened to perhaps 4 to 5 miles, and light snow flurries had begun. "No sweat," I thought. I'd head home—about 30 miles to the south of Albuquerque, N.M., and be there in 45 minutes to enjoy dinner.

I'd only gone a few miles south of town on Interstate 25 when I hit heavier snow. I exited onto Highway 47 and within a few miles was driving in a genuine blizzard. Because of the road conditions, I'd slowed down to 25 to 30 mph. My two-wheel-drive Toyota pickup could get very squirrelly on slick roads, so I wasn't taking any chances.

I turned off Highway 47 to drive the last seven miles on a two-lane country road. The road—nothing to write home about in the best of weather—got little attention from highway crews when it snowed. I'd forgotten about the hill I had to climb and soon found myself in a line of vehicles waiting at the bottom for a chance to try.

I sat there watching the cars ahead of me take their turn. The first driver almost made it to the top before panicking, hitting the gas and sliding into a ditch. "Hmm …" I thought, "he's 'parked' for the night." The next two drivers must have been related because both cars tried going up together. The lead car stopped first and began sliding backwards. The second car's brake lights came on, followed by the backup lights. I thought, "This is going to be interesting." Both cars looked like drunken ice skaters, sliding sideways and then doing donuts trying to avoid each other and not go off the road. You had to give them an "A" for effort—if not for results. The lead car got just enough traction on one of its loops to run into

the ditch, while the second car scored a direct hit on the only tree within 300 yards. Two more "parked" for the night!

I may not be the brightest light in the hallway, but even I could see the route home did not lie ahead. I carefully backed up, turned around, and decided to take a much longer but safer route. It added 23 miles to my trip and I got lost once, but I finally pulled into my driveway. Dinner was definitely late, but at least I was home to eat it.

G AWAY

I learned several lessons that night. First, don't ignore winter weather warnings. I don't care how many times the weatherman has been wrong, you're still NOT a better forecaster. Also, if you hate bad weather, you'll hate it even more after dark—especially if you live in the country. Your vision is limited to your headlights—maybe less if it's snowing heavily—so it's easy to get lost, go off the road, or maybe hit some other unfortunate soul trying to get home.

Second, while you probably don't relish the idea of spending a chilly winter's night in your vehicle, you might want to plan for it just in case. After my experience I took a cue from the American Automobile Association and started packing an emergency kit in my truck. Here are some things they suggest that might keep you from being stranded on the road or help you survive if you are:

JUST IN CASE

- **Ice scraper and snow brush.**
- **Extra bottle of winter (antifreeze type) windshield wiper fluid.**
- **Tire chains of the proper size for your vehicle. Practice putting them on during good weather so you won't have to learn while you're in the middle of a blizzard.**
- **Traction-improving material such as kitty litter, salt or sand.**
- **A tow chain or strap someone can use to pull your vehicle out of a snowdrift or ditch.**
- **Keep your gas tank at least half full.**
- **Snacks that won't freeze.**
- **Thermos with hot soup, coffee or tea.**
- **Cell phone so you can call for help.**
- **Chemically operated hand and foot warmers (available at many sporting goods stores).**
- **Jumper cables.**
- **Gloves, a blanket, and extra clothing such as woolen socks and waterproof boots to keep you warm and dry should you have to walk for help. If you do, walk only a reasonable distance and only AFTER the severe weather has passed.**
- **Candles, a candleholder and matches. A candle can provide warmth in your vehicle while you're waiting for help. Make sure you roll down the window slightly to ensure a supply of fresh air.**
- **A flashlight with extra batteries, flares or roadway reflectors.**
- **A basic first-aid kit containing bandages, antiseptic, scissors, and any needed prescription medications.**
- **Lock deicer for frozen locks, or a cigarette lighter to heat your car keys. Make sure you keep these on your person, not in your vehicle.**
- **A list of emergency phone numbers and points of contact.**

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Don't Toboggan on YOUR noggin

BOB VAN ELSBERG
Managing Editor

"COOL!" I thought as I watched my best friend slide down the hillside on an impromptu sled made from a piece of cardboard. One benefit of being in Germany was that unlike where I grew up in Southern California, I didn't have to drive hours to see snow.

I got my own piece of cardboard and hiked to the top of the hill. The run wasn't long—maybe 150 feet or so—but the slope was steep enough to make it fun. There were also some good bumps on the way down and a stand of trees at the bottom of the slope. With no means of steering the cardboard, each run concluded with a spectacular "bail out" before the tree line was reached. Or at least that was the plan.

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

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

That ended my impromptu cardboard sledding for the afternoon. And while the damage was confined to my pride and some sore back muscles, I did spend the next few days walking around rather stiffly. I looked more like an 80-year-old man than one in his 20s.

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

• Keep all equipment in good condition. Broken parts, sharp edges, cracks, and split wood invite injuries.

• Most injuries involve collisions with fixed objects such as trees, telephone poles, or fences, so steer clear!

• Dress warmly enough for conditions.

• Sled on spacious, gently sloping hills that have a level run-off at the end so the sled can come to a halt safely. Avoid steep slopes and slopes located near streets or roadways.

• Check slopes for bare spots, holes, rocks, tree stumps or other obstructions that might cause injuries. Bypass these areas or wait until conditions are better.

• Make sure the sledding path does not cross traffic, fences, rocks or telephone poles.

• Do not sled on or around frozen lakes, streams or ponds because the ice may be unstable.

• The proper position for sledding is to sit up or lay on your back on top of the sled with your feet pointing downhill. Sledding headfirst increases the risk of head injury and should be avoided. Sit upright if you're riding on a snow disc.

• Choose your sledding equipment carefully. Some, such as sleds and toboggans, offer a measure of control. Others, such as snow discs or inner tubes, can leave you completely at the mercy of inertia.

• Don't sled at night unless the area is well lighted.

• Never hitch or give a sled ride behind a vehicle.

• If a spill is unavoidable, don't fly off headfirst; instead roll off the sled to the side. One-third of all sledding injuries involve the head or face.

• Sledders should wear thick gloves or mittens, and insulated boots to protect against frostbite as well as potential injuries.

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

Are You WIRED for SAFETY?

BOB VAN ELSBERG
Managing Editor

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

Plugs and extension cords

- Polarized plugs have one blade wider than the other. The plug can only be inserted safely into an outlet one way. If it doesn't fit, use an adapter. Don't try to force it.
- Use safety caps on all unused wall and extension cord outlets, particularly when small children are around.
- When you are finished using a small electrical appliance or power tool, unplug it.
- Unplug extension cords that are not in use. The unplugged end in a child's mouth can lead to death or serious injury.
- Pull a plug from a wall socket by gripping the plug itself, not by yanking the cord.
- Untangle any twisted cords.
- Keep cords off steam pipes, furnaces, heaters or other hot surfaces.
- Replace cords that are cracked or frayed.
- Don't run cords where people walk, or under rugs or furniture.
- Insert plugs fully. The prongs should not be exposed when the extension cord is in use.
- Only use cords outdoors that are marked for outdoor use. Use three-pronged, grounded, heavy-duty extension cords.
- Do not overload a circuit. As a general rule, do not plug appliances into the same circuit if the combined wattage exceeds 1500 watts. If the wattage rating is not on the product, multiply the amps by 125.
- To avoid extension cord overload, add up the wattage rating of all the products plugged into the cord and compare it to the cord's wattage rating.

Other expert advice

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

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

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ACCIDENT BRIEFS

Information based on preliminary reports of ground accidents.

ACV

Class A

- Two Soldiers were killed when their Stryker ran off the roadway and overturned. The driver, who was killed, was reportedly attempting to avoid oncoming traffic at the time of the accident. Both the driver and the deceased passenger were ejected and crushed during the rollover sequence.

AMV

Class A

- Soldier died after the 5-ton truck he was riding in overturned. The Soldier, who was riding in the rear of the truck, was ejected and crushed after the vehicle's front tire blew during convoy operations.

- Two Soldiers were killed when their HMMWV hit a transport truck head-on during convoy operations. The truck commander and one passenger were killed; the driver was injured. No other details were provided.

Personnel Injury

Class A

- Soldier died after falling from a ninth-floor window ledge at a hotel. Several other Soldiers were having a party in the Soldier's room at the time of the accident. The Soldier apparently leaned too far out the window, causing him to fall.

- Soldier was killed when a .357 revolver discharged, hitting him in the back. The Soldier was packing a suitcase and his spouse was handing him the gun to pack as it fired.

- Soldier drowned after falling from a boat on a lake. The Soldier's body was found two days after the accident.

- Solider collapsed at a hydration point during a nine-mile road march and later died at the local medical facility. No other details were provided.

POV

Class A

- Soldier died after falling asleep at the wheel and rolling his truck three times on an interstate. The Soldier awoke and overcorrected the truck after it drifted into the median, causing the vehicle to overturn. The Soldier had finished a 14-hour duty day and had only four hours of sleep just before the accident.

- Soldier was killed after his motorcycle collided with a car and he was run over by a second vehicle. The first vehicle failed to yield to the Soldier and turned left into his path. The Soldier had no time to react and hit the rear of the vehicle, sending him into the opposite lane. The second vehicle was traveling behind the first and was unable to avoid hitting the Soldier.

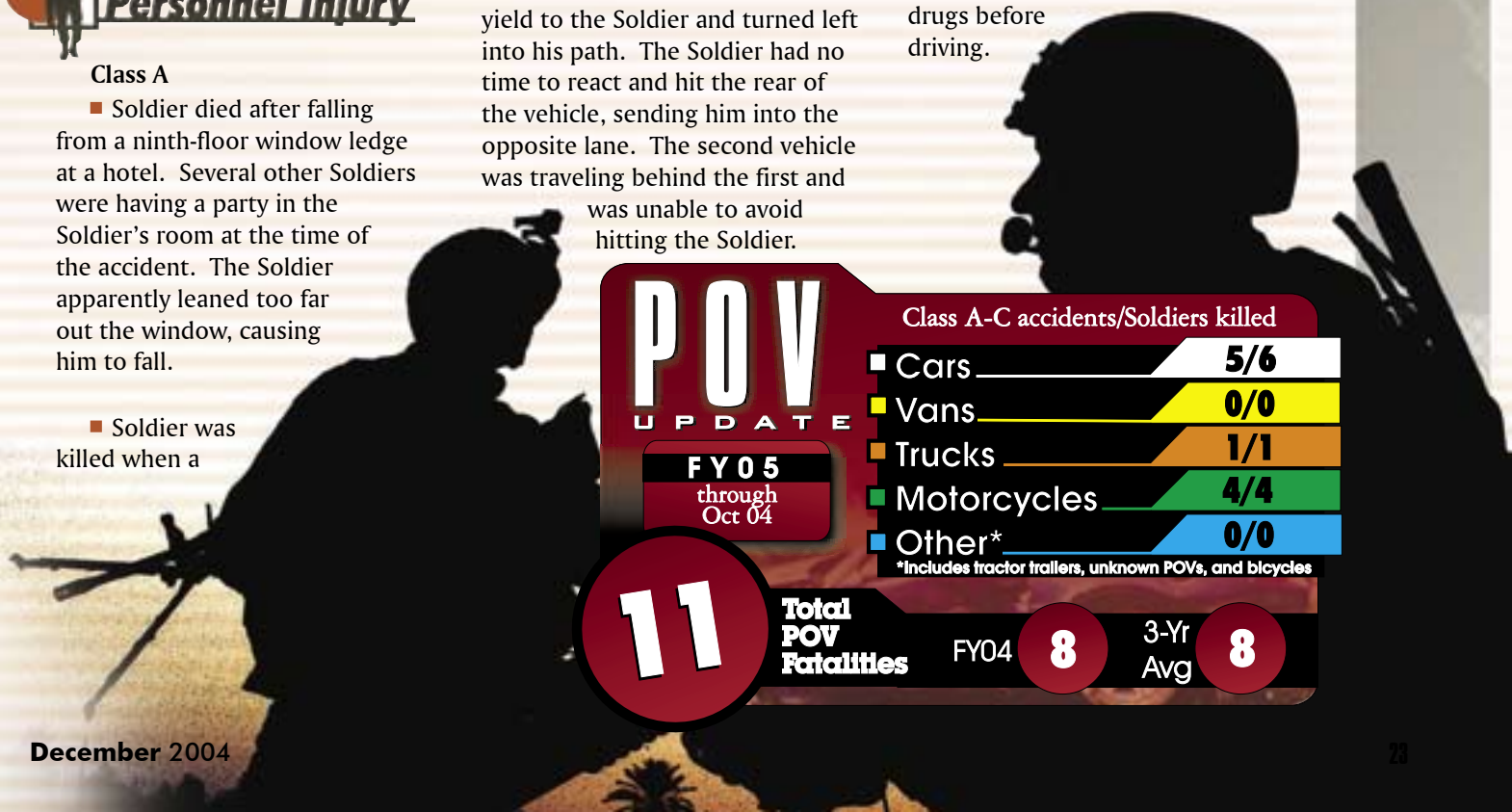
- Soldier suffered fatal injuries after his vehicle was broadsided by a logging truck that failed to yield at an intersection. No other details were provided.

- Soldier died after he lost control of his vehicle, struck another vehicle, then ricocheted into traffic and struck two more vehicles head-on. No other details were provided.

- Soldier was killed in a head-on collision while returning home from his Reserve center. No other details were provided.

- Soldier suffered fatal injuries after his motorcycle struck a curb, sending him airborne and causing him to strike a utility pole.

- Soldier died after his vehicle struck a pickup truck head-on on a two-lane highway. The Soldier's vehicle crossed the centerline after an S-curve into the truck's path just before the accident. The truck's driver hit the brakes and attempted to move to the roadway's side, but was unable to avoid the collision. Although the Soldier was wearing his seatbelt, it is believed he may have used drugs before driving.



POV UPDATE

FY05 through Oct 04

11 Total POV Fatalities

FY04 **8** | 3-Yr Avg **8**

Class A-C accidents/Soldiers killed

Cars	5/6
Vans	0/0
Trucks	1/1
Motorcycles	4/4
Other*	0/0

*Includes tractor trailers, unknown POVs, and bicycles

Coming Soon to a Post Near You

Check here to find out when the
U.S. Army Safety Center Mobile Training Team
will present the Risk Management Course at your facility.

Scheduled Visits

Location	Dates	Location	Dates
Fort Jackson, SC	14-18 March	Hohenfels, Germany	6-10 December
Fort Knox, KY	21-25 March	Hanau, Germany	13-17 December
Hiroshima, Japan (83rd Ord Bn)	11-15 April	Vermont ARNG	5-6 February
Camp Zama, Japan	18-22 April	Las Vegas, NV (63rd RRC)	8-10 February
Soto Cano, Honduras	18-22 April	Fort Drum, NY	7-11 February
Fort Custer, MI	23-24 April	Fort McCoy, WI	19-20 February
Fort Drum, NY	9-13 May	Ohio ARNG	23-27 February
PRARNG	13-15 May	Fort Lee, VA	28 February-4 March
PRARNG	16-20 May	Fort Bliss, TX	7-9 March
Fort Knox, KY	16-20 May	Fort Jackson, SC	9-11 March
Carlisle Barracks, PA	23-25 May		

Open Visit Dates (2005)

28 March-1 April
4-8 April
6-10 June
13-17 June
20-24 June
11-15 July
18-22 July
25-29 July

If you don't see your facility represented here, call your installation safety office and ask them to schedule a training visit. Visits are provided at no cost to your installation. For more information on the Risk Management Course or other safety courses, please contact:

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