

KNOWLEDGE

VOL. 3 SEPTEMBER 2009

OFFICIAL SAFETY MAGAZINE OF THE U.S. ARMY

BUILDING A CULTURE OF SAFETY

p. 4

▶▶ **THE OTHER ENEMY**

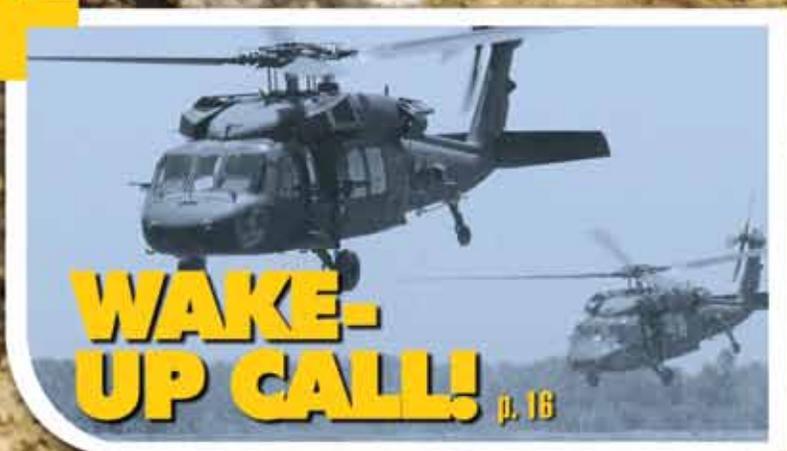
p. 8

▶▶ **SAFE "GUARDING" RIDERS**

p. 14

▶▶ **THE SILENT KILLER**

p. 26



ARMY STRONG

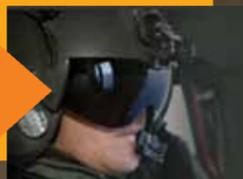


U.S. ARMY COMBAT READINESS/SAFETY CENTER
<https://safety.army.mil>

**ARMY SAFE
IS ARMY STRONG**



- 2 From the DASAF
- 4 Building a Culture of Safety
- 8 THE OTHER ENEMY — INDISCIPLINE
- 10 Tree Fallin'
- 12 Small Bullets, Large Statistics
- 16 Wake-up Call!



- 18 Beware of the Woods Hoods!
- 20 Injury: The Military's Modern Epidemic
- 24 The Summer of the 58



26 THE SILENT KILLER



14 SAFE "GUARDING" SPORTBIKE RIDERS

- 28 Life in the Fast Lane
- 30 30 Years After the Towers Fell
- 34 How Hot is Hot?
- 36 Accident Briefs

Plus: pull-out posters



U.S. ARMY COMBAT READINESS/SAFETY CENTER
<https://safety.army.mil>

Brig. Gen. William T. Wolf Commander/Director of Army Safety
Command Sgt. Maj. Michael P. Eyer Command Sergeant Major
James Yonts Director, Strategic Communication

Chris Frazier Managing Editor
Bob Van Elsberg Editor
Paula Allman Editor

Blake Grantham Graphic Design
Taryn Gillespie Graphic Design
Leslie Cox Graphic Design (Westar)
Kami Lisenby Graphic Design (Westar)

Mission statement: USACRC supports our Army by collecting, storing, analyzing, and disseminating actionable information to assist Leaders, Soldiers, Families, and Civilians in preserving/protecting our Army's combat resources.

We welcome your feedback. Please e-mail comments to safe.knowledge@conus.army.mil.

Knowledge is published monthly by the U.S. Army Combat Readiness/Safety Center, Bldg. 4905, 5th Ave., Fort Rucker, AL 36362-5363. Address questions regarding content to the managing editor at (334) 255-2287. To submit an article for publication, e-mail safe.knowledge@conus.army.mil or fax (334) 255-9044. We reserve the right to edit all manuscripts. Address questions concerning distribution to (334) 255-2062. Visit our Web site at <https://safety.army.mil>.

Knowledge provides a forum for Soldiers, Leaders and safety professionals to share best practices and lessons learned and

maintain safety awareness. The views expressed in these articles are those of the author and do not necessarily reflect the official policy or position of the U.S. Army, Department of Defense or the U.S. Government. Contents are specifically for accident prevention purposes only. Photos and artwork are representative and do not necessarily show the people or equipment discussed. Reference to commercial products does not imply Army endorsement. Unless otherwise stated, material in this magazine may be reprinted without permission; please credit the magazine and author.



ARE YOU REALLY READY?

STATISTICS show that when **SOLDIERS RETURN** from the **RIGORS** of the **BATTLEFIELD** they face an even **DEADLIER ENEMY** back home — **COMPLACENCY.**



The lazy days of summer are slowly winding down and holiday decorations are already appearing on store shelves. For some of us, the thought of frigid temperatures looming just around the corner is hard to imagine; but for many of our Soldiers and Families around the globe, the first snowfall is just a few weeks away.

This month, with temperatures dropping and days getting shorter, we will say goodbye to summer and officially bring the Army's Safe Summer 2009 campaign to a close. As our Safe Summer campaign wraps up following the Labor Day weekend, our Army Safe Fall/Winter campaign with online support materials will kick into gear. This year's campaign will focus on providing risk management information on a variety of cold weather topics, including winter driving safety and injury prevention. Using articles, posters, videos and more, the campaign will work to ensure that all members of our Army team understand the importance of being prepared for any situation when it comes to fall and winter safety. For this reason, we have selected "No Time to Chill" as this year's Army Safe Fall/Winter campaign theme. In an effort to



encourage Army Families to remain prepared for all potential hazards, the Ready Army campaign begins this month as part of the Department of Homeland Security's National Preparedness Month. Using the motto "Get a Kit, Make a Plan, Be Informed," the campaign identifies steps that are vital to emergency preparedness. These important steps, which are outlined at www.ready.gov, include getting an emergency supply kit, making a Family emergency plan, becoming informed about potential emergency situations and getting involved in local community preparedness and emergency response efforts.

The Ready Army and Army Safe Fall/Winter campaigns are just two programs that help every member of our Band of Brothers and Sisters play an active role in ensuring the safety of the Army team. Maintaining an active commitment to safety and avoiding complacency is extremely important today as our forces are stretched around the globe doing vital work to protect our nation.

Our Army is extremely busy and going through a huge rotation of forces. We continue to operate at a high OPTEMPO, with units simultaneously

moving in and out of two theaters of operation and CONUS. This heightened OPTEMPO places additional stressors on Soldiers, civilians and their Families and causes the probability and severity of risk to increase significantly.

When we are asked to perform the same tasks time and again, the simplicity and repetitiveness can lead us down the dangerous path of complacency. Nothing we do in the training for, or execution of, a mission should ever be taken lightly or executed as "routine." Make sure your head is always in the game and on a swivel and that you are aware of your surroundings and the dangers that are present. We have seen that risk, if not properly planned for with effective mitigation measures, can have tragic results.

Statistics show that when Soldiers return from the rigors of the battlefield they face an even deadlier enemy back home — complacency. Just when they think they can lower their guard, forget their battle buddy and get into a "normal" routine, that's when accidents will most likely occur. The Band of Brothers and Sisters must follow our Soldiers home, especially during off-duty activities. Families, friends

and peers are our Soldier's battle buddies at home. They must provide the watchful eye and appropriate intervention our Soldiers need when their guard is down. Look to the Family Engagement Kit and the BOSS Safety Factor kit at the USACR/Safety Center Web site at <https://safety.army.mil> to provide tools to assist you in having a meaningful and purposeful dialogue with your Soldier while they are home.

Finally, as many of you already know, the USACR/Safety Center has developed a safety "lite" version of its Web page. You are now able to access this site for many of our tools and programs at <https://safety.army.mil/lite>. Based upon feedback from users in the field, we continue to refine this site to ensure we are meeting your requirements. Please let us know if we are not hitting the mark.

Thanks for all the sacrifices you and your Families have made in the protection of our great nation.◀

Army Safe is Army Strong!

WILLIAM T. WOLF
Brigadier General, USA
Director of Army Safety

BUILDING a CULTURE of SAFETY

LT. COL. ROBERT ROOKER
2nd Brigade, 306th Field Artillery Battalion (TS)
Fort Stewart, Ga.



Building a positive safety culture within an organization is a challenge that blends mission accomplishment with minimizing risks. While those may seem like competing priorities in today's high operations tempo (OPTEMPO), they don't have to be. The Soldiers of the 2nd Battery, 306th Field Artillery Battalion, 188th Infantry Brigade train Army Reserve and National Guard Soldiers deploying to Iraq, Afghanistan and Kosovo. A recent Army Readiness Assessment Program (ARAP) survey showed a strong, positive safety climate in the unit. The unit didn't use "gimmicks" to get there. Rather, it followed a three-pronged approach to safety.

1. Leader emphasis on safety. Leaders in a training support battalion are always responsible for checking safety. Running training lanes and ranges along with situational training exercises for mobilizing reserve component Soldiers means nothing can be taken for granted. An infantry company might be on a live-fire range one day and a transportation company the next. Sometimes

2. Pay attention to the details. During training, the battalion uses a three-tiered risk assessment — a First Army standard. First, there is an overall composite risk management worksheet (changed frequently), followed by a daily unit-led risk assessment signed by the commander of the unit being trained, followed by a hasty risk assessment card filled out each morning by each observer

"What is the most dangerous thing I'm doing and what have I done to mitigate it?" These assessment sheets are laminated, reusable and, most importantly, dated.

3. Follow commander and higher headquarters directives. The First Army Division East and 188th Infantry Brigade already had effective, easy-to-follow safety programs. Maj. Gen. Mick Bednarek, Division East commander, provided clear and supportable guidance reinforced by brigade commander Col. George Geczy. Following that proven guidance was the best path to achieving safety while meeting the mission.

“**WHAT** is the most **DANGEROUS** thing **I'M DOING** and **WHAT** have I **DONE** to **MITIGATE IT?**”

the transporters shoot better than the infantrymen — anything can happen. The battalion command sergeant major's commitment to safety sets the tone for everything the unit's officers and noncommissioned officers (NCOs) do.

controller/trainer (OC/T). The hasty assessment gets the most attention. It's a "five-minute mental exercise" that simply asks,

Mid-level Leaders Play a Key Role

The safety NCO position is popular in the battalion.



Two years ago, one of the battalion's best sergeants first class volunteered to be the safety NCO. He felt it was important and Leaders supported him. The following year, he made the master sergeant list. Since then, there has been a long list of NCOs eager to do the safety NCO job. The battalion's targeting warrant officer — the subject matter expert on lethal and nonlethal targeting — serves as safety officer. He is empowered to develop new ideas and is fully supported by the commander when following or enforcing directives. Being a warrant officer gives him an edge, having experienced both NCO and officer training.

Dealing with High OPTEMPOs

Despite the high OPTEMPO of a training support battalion, the Soldiers didn't feel overworked. Six- and seven-day workweeks

are the norm while training a constant mobilization load of 30,000 to 80,000 reservists headed to Iraq, Afghanistan and Kosovo. Mobilizations typically last from 40 to 60 days, with units varying from postal detachments through infantry brigade combat teams. The battalion's Soldiers view their training mission with the attitude of a sports team approaching a championship game. Rather than focusing on how hard the challenge, they focus on the satisfaction they'll feel when they have succeeded. For them, "winning" is helping deploying Soldiers be trained and ready.

Composite Risk Management Training

Risk management tools provided by First Army and the U.S. Army Combat Readiness/Safety Center — including the Travel Risk Planning System (TRiPS), Risk Management Information System

(RMIS) and Ground Risk Assessment Tool (GRAT) — are used to reduce accidents. To meet Division East, brigade and battalion standards, Soldiers assigned to the unit must complete the Commander Safety Course and Accident Avoidance Course, which many follow up with the Additional Duty Safety Course. The battalion also conducts quarterly safety training and participates in the brigade quarterly safety councils.

Off-duty is Included

Losing Soldiers to off-duty accidents impacts the battalion's mission. Below are a couple of ways off-duty safety is emphasized to Soldiers and their Families.

- **Brigade Safety Day.** Family safety days are held twice a year and cover a variety of topics. Earlier this year, the 306th Battalion organized a Family safety day. This included the organization's motorcycle club, along with local

fire and police departments, giving safety classes to Soldiers, spouses and their children. Families were helped to understand the way motorcycles operate on the road and how important it is to watch out for them while driving. Using "drunk driving" goggles provided by the police and a unit-provided golf cart allowed drivers to replicate the effects of driving under the influence. The fire department conducted fire safety training with an emphasis on summer activities. The day culminated with a sports day and barbecue picnic.

- **Motorcycle Safety Program.** This actually began in the 306th Battalion but became a brigade-wide initiative with the arrival of brigade Command Sgt. Maj. Joseph Mayfield. The "Front Runnerz" motorcycle club is composed almost entirely of brigade Soldiers. The 306th Battalion's motorcycle training goes beyond garrison requirements in two ways. First, senior mentors are assigned to ride with junior riders. This allows new riders to talk to another rider who is more experienced about safety and riding. In addition, the battalion mandates check rides, which are mostly voluntary and well-supported by Soldiers who are given time during training days (usually lighter work days) for the ride. Second, the brigade command sergeant major started an additional safety course matching Soldiers to the bikes they actually own — machines often more powerful than the 250cc machines used in garrison training. The brigade's parking lot is turned into a driver's course, complete with extra lines painted on the asphalt that riders must successfully execute before they can ride.

The Proof is in the Pudding

The battalion's emphasis and training on safety resulted in the survival of a senior NCO in a motorcycle crash. The rider, a sergeant first class, was riding to a club charity function when a hit-and-run driver sent him sliding across the asphalt, ultimately dislocating his elbow. The ensuing accident investigation showed he had been wearing all of his required personal protective equipment, was properly trained and licensed and was riding with another rider. The fact he suffered a Class C injury accident rather than a Class A fatality demonstrated the effectiveness of the battalion's safety programs.◀

“ Rather than **FOCUSING** on how hard the **CHALLENGE**, they **FOCUS** on the **SATISFACTION** they'll feel **WHEN** they have **SUCCEEDED**. ”



Get the tools and information necessary to be an engaged Leader



<https://safety.army.mil>

Keep your Soldiers safe on and off duty. Log on TODAY!



The Other Enemy

CHIEF WARRANT OFFICER 4 JOHN R. ASHLEY
 Headquarters and Headquarters Company,
 3/238th General Support Aviation Battalion
 Michigan Army National Guard
 Grand Ledge, Mich.

INDISCIPLINE

From the first day of flight training and throughout our careers, aviators are taught that indiscipline and flying are incompatible. Every year, though, accident reports prove the consequences of indisciplined behavior, whether showboating in an aircraft or willfully violating regulations and/or other standards. There's probably a statistic somewhere to reflect that most Army aircrew members have demonstrated indiscipline at one time or another in their careers. This is my story.

As a young warrant officer UH-60A co-pilot on my first assignment, I was flying with a well-respected chief warrant officer pilot in command (PC). The mission was to conduct an air assault, inserting combat loaded troops with rucksacks into a landing zone (LZ). En route to the LZ, the PC wanted to give our passengers "a ride" by executing a negative G.

I had previously flown with this PC and he had done the same maneuver under similar conditions. Although I was a bit apprehensive about his performing zero or negative Gs in the aircraft, I said I was OK with him doing another one. The PC maneuvered the aircraft, pushing over and lowering the collective to achieve the desired outcome. Everything within the aircraft that wasn't tied down was flung through the air, including the dust and dirt on the floor.

The master caution light unexpectedly illuminated and the oil pressure gauges on the central display unit flashed yellow. I promptly scanned the caution advisory panel, noting all the oil pressure lights had illuminated. Out of the corner of my eye, I caught movement in the cabin. I turned to see a flying rucksack coming forward between the gunners' seats. I quickly raised my hand to block the rucksack's path, simultaneously shouting, "Stop!

Stop! Stop!" into the integrated communications system.

The PC, unaware of the hazard, increased the collective and the rucksack dropped to the floor behind the center console. I communicated to the PC what had happened and the prospect

to reason away the necessity to comply with whatever regulation or standard applies to their situation. Indiscipline is prevalent in the cockpit and behind the wheel of privately owned vehicles. Leaders at every echelon — unit commanders,

“EVERYTHING within the aircraft that **WASN'T TIED DOWN** was **FLUNG** through the **AIR**, including the **DUST** and **DIRT** on the floor. **”**

of what could have happened had the heavy rucksack actually made it into the cockpit. Regardless of rank, I told the PC this was the last "ride" we would be doing.

In 2004, a UH-60 aircraft crashed while performing a similar low-G flight maneuver when the wheel chocks entered the cockpit and jammed the collective. One crewmember suffered a fatal injury, three received serious injuries, 11 others experienced minor injuries and the aircraft was destroyed. When I reflect back to my incident from years ago, I realize how lucky I was.

Even today, Soldiers exhibit confidence beyond their experience level and are willing

platoon leaders, warrant officers or NCOs — should impose strict standards and discipline and remain vigilant about safety in all daily activities, both on and off duty. Don't tolerate indiscipline; make consequences known if Soldiers disobey orders. Those who tolerate indiscipline unwittingly breed an environment ripe for more of the same.

Take a proactive approach to accident prevention and preserve our Band of Brothers and Sisters in combat and back home. Demonstrate to peers and subordinates the same type of disciplined behavior you want them to emulate. Don't let the enemy win.◀

TREE FALLIN'

SGT. MAJ. TRAVIS L. STERNER
Headquarters, 1st Battalion, 109th Infantry Regiment
Scranton, Pa.

The next time you enter the woods for a hunting trip, ask yourself an important question: Did I execute composite risk management (CRM)? For my father, the answer to that question was a resounding “no.” As a result, he barely escaped death when he fell 22 feet from his treestand while deer hunting during the Pennsylvania archery season.

Several years ago, I was attending the Bradley Leaders Course at Fort Benning, Ga., when I received a frantic, late-evening call from my mother. “Your father hasn’t come home from hunting,” she cried. I calmed her down and explained there wasn’t much I could do since I was 972 miles away. I told her that I was sure everything was fine, but if he didn’t return within an hour, call one of his friends and then call me when he gets to the house.

She proceeded to question my rationale, but I explained that she wasn’t familiar with my father’s hunting area and would have problems finding his treestand location. I figured it would be a lot easier if I explained the directions to one of my father’s friends, who would be more familiar with the area.

About 11:30 p.m., my phone rang again. This time, however, it was my father calling from the hospital. He told me he dozed off while hunting and fell out of his treestand. He landed on his back, breaking four ribs, knocking out two front teeth and tearing off the tips of two fingers. He also received 27 stitches on the side of his head. Although he was pretty banged up, he said he’d survive. Relieved that he was OK, I decided to get to the bottom of how the accident really occurred.

“Dad, there is a big difference between falling asleep and passing out drunk,” I said.

“I know,” he replied. “Just don’t tell your mother.”

Every year, about 100 people are killed in hunting accidents. Many of these deaths might have been avoided if the victim had just used the five-step CRM process when planning their trip. Here’s how CRM could

have prevented my father’s accident:

- My father should have identified the hazards he would encounter on his trip. Although there are several hazards associated with hunting from a treestand, there were two major ones in my father’s case. Of course, being elevated 20-plus feet above the ground is the first one that comes to mind. And while it might seem obvious to some, drinking any amount of alcohol while perched in a treestand is also a very bad idea.

- Next, my father should have assessed those hazards. Getting drunk in a treestand could lead to a fall. Failure to wear a safety harness could lead to a serious injury, or even death, if he fell from the treestand.

- He then should have developed controls for those hazards and made risk decisions. Leaving the alcoholic beverages at home would have been a great place to start. Wearing the safety harness would have kept him safely in the treestand, not sprawled on the ground 22 feet below.

- Next, my father should have implemented those controls. What good is a plan if you’re not even going to bother following it?

- Finally, he should have supervised and evaluated his plan. Did he fall from the treestand? Did he pass out drunk? If so, then it’s back to the drawing board.

I share this information because no matter how or where you hunt, exercising CRM before you go into a field could possibly save your life. My father was lucky. His injuries could have been far worse. When he enters the woods nowadays, he carries a safety harness in his pack. We’re still working on the drinking part.◀



Ten Commandments of Hunting Safety

1. Treat every firearm with the same respect due a loaded firearm.
2. Control the direction of your firearm’s muzzle.
3. Be sure of your target and what is beyond it.
4. Be sure the barrel and action are clear of obstructions.
5. Unload firearms when not in use.
6. Never point a firearm at anything you do not want to shoot.
7. Never climb a fence or tree, or jump a ditch or log, with a loaded firearm.
8. Never shoot a bullet at a flat, hard surface or water.
9. Store firearms and ammunition separately.
10. Avoid alcoholic beverages or other mood-altering drugs before or while shooting.

Source: New Hampshire Fish and Game Department

TREESTAND SAFETY GUIDELINES

- Always use a haul line to pull up your gear and unloaded firearm or bow to your treestand. Never climb with anything in your hands or on your back. Before descending, lower your equipment on the opposite side of the tree.

- Always select the proper tree for use with your treestand. Select a live, straight tree that fits within the size limits recommended in your treestand’s instructions.

- Always read and understand the manufacturer’s warnings and instructions before using the treestand each season.

- Always hunt with a plan and, if possible, with a buddy. Let others know your exact hunting location, when you plan to return and who you are hunting with.

- Always carry emergency signal devices — such as a cell phone, whistle, walkie-talkie, signal flare and flashlight — on your person at all times and within reach, even when you are suspended in your treestand.

- The recommended height for an elevated tree stand is less than 10 feet above the ground.

- Know your physical limitations and don’t take chances. If you start thinking about how high you are, don’t go any higher.

- While climbing with a treestand, make slow, even movements of no more than 10-12 inches at a time. Have proper contact with the tree and/or treestand every time you move and follow the three-point rule.

Source: Minnesota Department of Natural Resources

SMALL BULLETS, LARGE STATISTICS

TIM MAAS
Risk Management Division
U.S. Army Technical Center for Explosives Safety
McAlester, Okla.

Any current analysis of Army injuries and fatalities resulting from the unintended functioning of ammunition over a significant period of time will highlight one trend — the number of incidents related to the mishandling of small-arms ammunition and weapons.

Larger rounds may have greater explosive weight and inherent lethality and may result in more casualties when they detonate unexpectedly. However, the preponderance of accidents injuring troops involves rounds on the lower end of the size scale. Many of these accidents are attributable to preventable human errors rather than problems with the ammunition or weapons.

Perhaps one factor contributing to the high level of small-arms accidents is how often Army personnel come into contact with these weapons and rounds compared to larger systems. Using these smaller weapons and rounds is a primary task for most Soldiers, as well as their most readily available first line of defense against hostile forces.

This familiarity and availability

can lead to complacency in dealing with these items. The stress often associated with their use can also pose added hazards if safe handling procedures have not been reinforced through repetitive training. Some of the more common varieties of incidents involving these items include:

- Improper setting of headspace and timing on .50-caliber machine guns prior to firing, leading to

FYI

In fiscal 2008, the Army experienced 51 Class A-C negligent discharge incidents, 21 of which occurred off duty and 30 on duty. Of these accidents, 10 resulted in fatalities, with five occurring off duty. Three of the five on-duty accidents occurred in sleeping/living quarters in theater. To combat negligent discharges, Leaders must change the way Soldiers think about and handle weapons. Both Leaders and Soldiers have a responsibility to set the example for others and make on-the-spot corrections. Drill home that your Soldiers must THINK weapons safety!

- **T**reat every weapon as if it's loaded.
- **H**andle every weapon with care.
- **I**dentify the target before you fire.
- **N**ever point the muzzle at anything you don't intend to shoot.
- **K**ep the weapon on SAFE and your finger off the trigger until you intend to fire.

explosions that damage weapons and injure personnel with blast force and metal fragments.

- Failure to properly clear weapons of ammunition after use, leading to unexpected firing when handling or cleaning weapons that were mistakenly thought to be empty.
- Pointing loaded weapons at personnel when performing clearing or checking procedures.
- Dropping loaded weapons.
- Horseplay or known improper handling actions with weapons Soldiers believed were unloaded, either out of boredom or an overly casual attitude.
- Placing a hot weapon barrel on live rounds, causing a cook-off.
- Failure to perform weapon maintenance or barrel changes at prescribed intervals, resulting in cook-offs.
- Failure to wear required personal protective equipment when firing.
- Failure to remove components, such as cleaning rods, from weapons before firing.

It is unlikely we will be able to prevent all small-arms accidents. However, making Soldiers more alert to the dangers involved when handling weapons and ammunition will significantly reduce injuries and fatalities and protect the weapons upon which Soldiers depend.◀

ARE YOU A SHARP SHOOTER?

RANGE & WEAPONS SAFETY TOOLBOX

<https://safety.army.mil>



The Range & Weapons Safety Toolbox is a collection of resources to help commanders and leaders establish and maintain an effective range and weapons safety program.

CHECK IT OUT TODAY!

DID YOU KNOW?

Since the launch of the U.S. Army Combat Readiness/Safety Center's Range and Weapons Safety Toolbox in October 2008, users have provided some great feedback. In addition to positive comments, we have received

additional materials and recommendations for improvement. Based upon user input and some changes in information technology, the toolbox can now be accessed via Common Access Card (CAC).

If you've never visited the toolbox, or if it has

been a while since you last checked it out, give it a look. In addition to being CAC-enabled, the toolbox now contains additional features, including new tabs dedicated to categories such as privately owned weapons, shotguns and optical and laser

attachments. As we continue to improve the toolbox, we ask that you keep using the feedback button to share your ideas and training materials. The Range and Weapons Safety Toolbox is available at <https://safety.army.mil/rangeweaponssafety/>.



JOHN L. CICILESE
National Guard Bureau, Army National Guard
Arlington, Va.

The Army National Guard (ARNG) has opened a new front in its battle against sportbike fatalities by graduating 10 guardsmen from the first ARNG Military Sportbike RiderCoach Certification course. The certification augmented their existing Motorcycle Safety Foundation (MSF) certification as rider coaches for the MSF's basic and experienced rider courses.



Sportbike accident prevention became a top priority for Lt. Gen. Clyde A. Vaughn, director of the ARNG, when he reviewed fiscal 2008 Army motorcycle accident statistics and saw 37 Soldiers died on sportbikes. He tasked Maj. Gen. James Nuttall, deputy director of the ARNG and an experienced rider, with creating a safety program to make the ARNG self-sufficient in motorcycle safety training.

To implement that, Vaughn mandated that all guardsmen who ride motorcycles wear Army-required personal protective equipment (PPE), regardless their duty status or location. He also mandated they complete MSF training as required by Army Regulation 385-10, The Army Safety Program. The foundation of that training is the MSF Basic *RiderCourse*, designed for novice riders and comprising about five hours of classroom instruction and 10 hours of riding exercises in a controlled environment. The Experienced *RiderCourse* provides riders with follow-on education and training. A more recent development, the Military Sportbike *RiderCourse* (MSRC), combined the efforts of the U.S. Army and Navy safety centers to provide a one-day training course designed for sportbike riders.

The ARNG Motorcycle Riders Club was established in 2008. Guardsmen were encouraged to register online to help state motorcycle safety program managers plan effective training for them. As of June 2009, about 1,250 Soldiers and civilian employees have registered.

Nuttall has twice participated in the National Capitol Region Motorcycle Safety Event held at the Pentagon. He believes proper training and PPE are the right weapons to combat fatalities. In June 2008, he asked all Guard riders to actively assess their risks

when riding and encouraged experienced riders to mentor those who were less experienced. He challenged them to ask themselves, "Who will be the next rider in my formation to have a motorcycle accident?"

Nuttall tasked the ARNG Aviation and Safety (AVS) Division to develop a plan to enhance sportbike safety training. In April 2008, Lt. Col. Craig Lambert of the West Virginia ARNG became the first ARNG Soldier to be MSF-certified to train both riders and rider coaches in the MSRC. As a veteran motorcycle rider, he already had extensive track time on sportbikes.

A member of the AVS Division approached the U.S. Army Combat Readiness/Safety Center, Lambert and the MSF about providing Sportbike RiderCoach Certification Course training for

- Possess an exemplary driving record.

- Received continuing motorcycle riding education.

After the applications were reviewed, the guardsmen selected for the training were notified.

The three-day certification course was conducted on Fort Rucker. On the first day, Lambert and Glen Picklesimer, a motorcycle trainer affiliated with the MSF, trained the candidates. On the second day, Lambert and Picklesimer watched them practice teaching each other. On the third day, the candidates provided the MSRC to sportbike riders serving in the Alabama ARNG.

These newly certified MSRC rider coaches constitute the core of trainers who will provide the MSRC to their Soldiers. As such, they will provide training in their respective states and in those

IMPROVING rider SAFETY will reduce FATALITIES, INJURIES and LOST DUTY TIME ...

guardsmen already serving as rider coaches. The result was a plan recommending rider coaches who were also sportbike riders be trained to serve as MSRC rider coaches. After the plan was approved, application forms were sent to state safety offices for nomination of qualified rider coaches.

The applicants had to meet the following qualifications:

- Ride a sport motorcycle.
- Be an existing rider coach.
- Have taught the Basic *RiderCourse* and/or the Experienced *RiderCourse* at least six times.
- Have extensive riding experience.

states lacking qualified rider coaches. Currently, plans are being developed to expand rider coach training in the Guard, ultimately allowing the training of even more rider coaches to teach the MSRC. Each rider coach will be encouraged to become a rider coach trainer.

The Guard's goal of being self-sufficient in providing motorcycle safety training to its Soldiers will be achieved as soon as possible. Improving rider safety will reduce fatalities, injuries and lost duty time and prevent the terrible impact on Families and units when Soldiers — each needed for their unit's mission — are lost to preventable accidents.◀

WAKE-UP CALL!

CHIEF WARRANT OFFICER 2 PATRICK MURRAY
A Company, 5th Battalion, 158th Aviation Regiment
Katterbach, Germany

The unit had been in country for nine months, flying the top commanders in Iraq. The mission was ever-changing and unique, but had become very familiar for the crews flying them. The company was young, with half the flying experience of the other companies in the battalion.

Despite this, they were given the missions with the most visibility. This would be one of the leading factors in the accident on this particular day.

Like any other day in Iraq, it was hot and the sun was just on the horizon. The two Black Hawk crews woke up early and had morning chow. The crews preflighted their aircraft, conducted performance planning, obtained the company commander's approval on the risk assessment and then returned to the aircraft. Since this was a routine mission, the crew calculated the risk assessment as low, when, in fact, it was a medium-risk mission. The company commander did not correct this mistake.

The air mission commander was a junior captain with about 400 flight hours. Flight lead was a middle grade chief warrant officer with 850 flight hours. This made up the crew for Chalk 1. Chalk 2 consisted of a pilot in command (PC) that was a middle grade chief warrant officer with 700 flight hours and a pilot who was a junior chief warrant officer with about 400 flight hours.

The mission was to fly a general officer to a forward operating base in northern Iraq from Baghdad. The general planned to conduct a market

walk and then have the crews pick him up at a helicopter landing zone (HLZ). The crews had not been to that particular HLZ before; however, it was not out of the ordinary for the crews to land at these remote sites. Most landings in Iraq were accomplished in dusty conditions — it was the nature of the beast.

The mission was going well until it was time to pick up the general. To land at the HLZ, the crew had to enter from the east and land to the

from Chalk 1 stated a flyover wasn't necessary. The ground unit declared the HLZ was hot and there were improvised explosive devices (IED) found on the road. The aircrews waited for the ground unit to clear the HLZ and for the general to arrive.

Once given the confirmation, Chalk 1 turned to the east and Chalk 2 followed on his left. Both aircraft had planned to land in a loose formation to minimize brownout conditions, especially for the trail aircraft. The

6 MOST LANDINGS in IRAQ were ACCOMPLISHED in DUSTY conditions — it was the NATURE of the BEAST. 55

north because of the multiple hazards surrounding the area. The PC in Chalk 2 asked to do a flyover of the HLZ while they were orbiting to the east, waiting for confirmation from the ground unit that the boss was en route. The PC

winds were out of the northwest, which meant the trail aircraft had to land to the left and rearward from lead. This scenario was no surprise since it had been pre-briefed on the ground.

The flight turned to the north

and began their descents from altitude in preparation for landing. On approach, Chalk 1 slowly slid to the left and cut off the trail aircraft. The PC from Chalk 2 was on the controls and initiated a go-around to the left with the intention of making a turn back to the HLZ. However, when turning left, the PC noticed lead had stirred up a lot of dust and sand by the rotor downwash during landing.

Chalk 2 completed the go-around and began an approach to the southeast portion of the HLZ. The PC was on the controls with the crew chiefs in the back calling the dust. The aircraft was 10 to 15 degrees nose up with airspeed of 40 knots or less when it touched down. The PC had expected a big dust cloud and planned to roll out once the main landing gear contacted the ground. However, this didn't happen. The tail wheel struck the ground and sank about a foot. It then became a pivot point, causing the UH-60 to impact the ground hard with some forward momentum. The main landing gear was unable to absorb the initial impact, and the underside of the aircraft's nose sustained most of the impact damage.

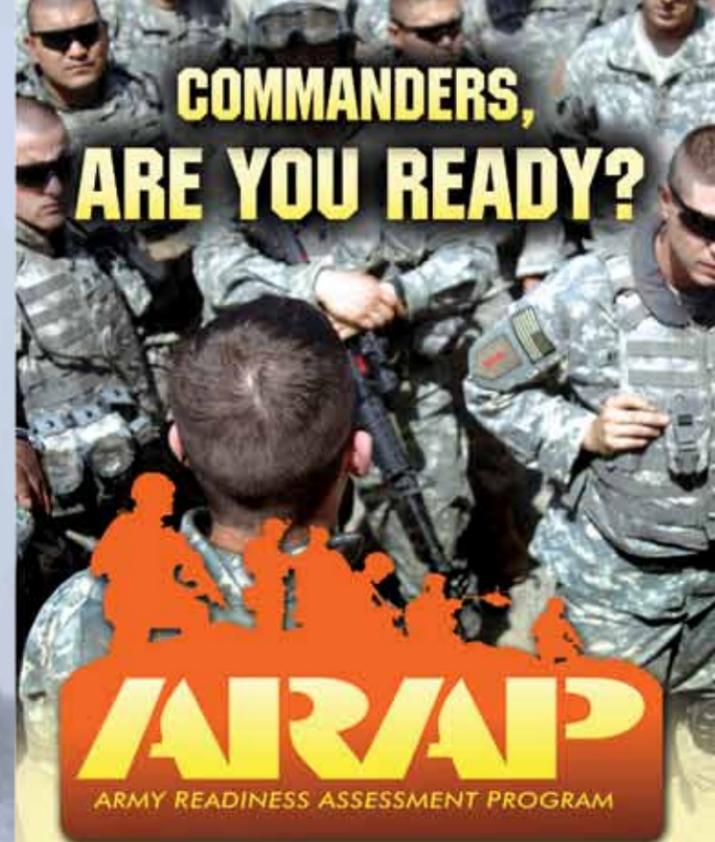
After landing, the crew analyzed the damage. They detected cracks at several points in the upper and lower cockpit area. In addition, both chin bubbles and overhead view ports were damaged. Both the systems and flight controls were functioning properly. As a result, the crew elected to fly the damaged aircraft to a secure location before shutting down.

Lessons Learned

This was a mission the crews had repetitively flown for nine months. The crews had performed many dust landings and considered this approach and landing to be a routine task. This goes to show how fast a situation can develop and how quickly things can go wrong.

Many factors played a key role in the accident. We discovered later that a vehicle-borne IED attack had ruptured a water line, causing water to leak into the HLZ. This condition caused the tail and main wheels to sink into the ground and bring the aircraft to a sudden stop. In addition, debris and surface irregularities littered the HLZ and forced the aircraft landings to be done in constrained spaces, ultimately compromising the safety of the crew and aircraft. Although the aircrews had experience flying in theater and in dusty conditions, they had minimal experience in flying a high-priority and high-visibility mission.

All of these factors essentially served as a wake-up call for our unit leadership. This influenced the command to reevaluate its crew mix policy and operating procedures. The unit was able to complete the remainder of its 15-month rotation accident-free. Sometimes, it takes a wake-up call like this to get your attention and possibly save a life or an aircraft down the road.◀

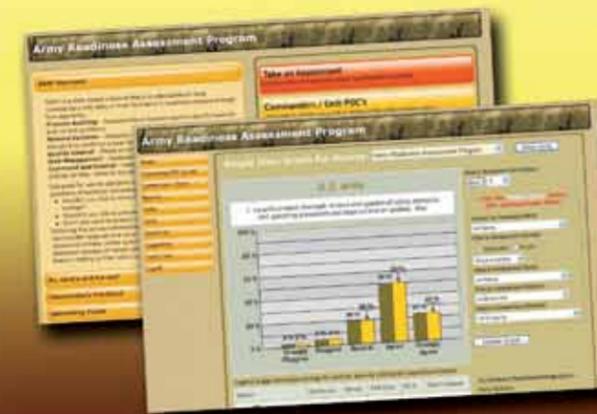


Wouldn't you like to know if your unit is about to experience a mishap?

Wouldn't you like to prevent the loss of personnel and equipment?

Don't you want to protect your combat power?

ARAP is a Web-based initiative that provides battalion-level commanders with data on their formation's readiness posture.



Sign up for your assessment today!
<https://unitready.army.mil>

BEWARE OF THE WOODS HOODS!

BOB MELOCHE
Robins Air Force Base, Ga.

You're cruising down the road when suddenly there is a loud crash and you're stopped, the victim of an ambush. There is no getting away. You might as well just hand over your wallet and everything in it. With a knot in your stomach, you know you might lose your car too. Although you'd heard about gang violence, you never thought it could happen to you. Nevertheless, even "Dateline NBC" hasn't dared to unveil the truth about America's most widespread street gang.

Think you're the only one? Not hardly! This has been going on for years. Chances are some of you have encountered these woods "hoods" and know the portrayal they received in movies like "Snow White" and "Bambi" is nothing more than Hollywood hype. I've had the chance to talk to some of their victims and here are a few of their grisly stories. I've changed their names to protect their privacy.

Cletus, 32, said, "I was driving down the road, minding my own business, when this cute little deer went scampering across the road in front of me. I slowed down and watched the little creature as it entered the woods and thought everything was fine. Suddenly, I heard a loud crash and lost control of my car. As I skidded to a halt in the gravel, I saw a very large deer jump up and run into the woods. I don't mind tellin' you I was scared! Later, I found out there was about \$1,000 in damages to my car."

It seems Cletus was a victim

of the infamous "bait-and-switch" tactic. That's where a decoy deer is sent across the road to distract a driver while a mega-deer waits for just the right moment to blindside you. Here's another case-in-point.

Eunice, 26, told her tale. "I was driving along when I saw a deer run into the road," she said. "I was alert and swerved hard to the right to miss the deer. I missed it all right, but I succeeded in hitting three trees and doing almost \$4,500 damage to my car in the process."

Eunice wanted to be a good person and not hurt the "cute little deer." She got what she wanted and the deer went unscathed. However, she did succeed in hitting three perfectly innocent trees and crunching her car. Perhaps the deer would have done less damage? We'll never know. However, many insurance companies count an animal strike under the comprehensive portion of the policy, potentially saving you the cost of the

deductable. The point is, once again the Woods Hoods have succeeded in making motorists like Eunice take for granted a challenging place to drive.

Take the case of another poor soul who was returning home after a long road trip. He was so excited about seeing a herd of deer near his house that he stopped and backed up to watch them in his headlights. This worked amazingly well, and everything would have been fine if he hadn't forgotten he was towing a trailer. You know, it's amazing the amount of damage a trailer can do when it's slapped against the side of a car. In this example, the "sweet, innocent deer" had lured an unsuspecting motorist into trouble.

Some folks believe "deer whistles" placed on the front bumper of their vehicle will scatter the deer to the four winds, keeping them clear of the road. Tom related an incident where his deer whistles so enraged a deer that it ran

directly in front of his truck. He struck the deer, launching it into the air to perform the infamous "Kamikaze Kilroy" dive (with 3 1/2 twists) before landing on the windshield of an oncoming vehicle.

Now, as anyone vaguely familiar with the laws of physics can tell you, if you launch a 200-pound deer 30 feet in the air, it doesn't just "come to rest" on the windshield. It actually lands in the lap of whoever happens to be unlucky enough to be driving the vehicle. This tends to upset that person quite a bit, and we'll obtain a written statement as soon as the driver is allowed to handle pencils and other sharp objects again.

I SLOWED DOWN and WATCHED the little CREATURE as it ENTERED the WOODS and THOUGHT everything was FINE.

When dealing with the Woods Hoods, keep a few simple things in mind:

- Keep an eye out for deer, especially during the cooler months of the year, when they become more restless and

tend to be "on the move." It's inevitable they'll be crossing the roadways more frequently.

- Deer do not care if you're in a 3,000-pound car. Given half a chance, they'll run straight in front of — into the side of — or across the top of — your vehicle.

- Deer tend to follow the same path, returning to where they started from. If you see deer on the side of the road, there is no guaranteeing which way they are going or even if

they're all headed in the same direction. Slow down until they figure out where they're going.

- There are three things you should do whenever you encounter deer — first, slow down; second, slow down some more; and, if that doesn't work, slow down to a crawl! This gives you more time to think and react.

- There may be times when you have to make a split-second decision to either hit a deer or steer for the trees. This may sound heartless, but a deer has a lot more "give" to it than your average tree. Fight against instinct and don't aim for the trees.

OK, so the deer aren't really out to get you. They do, however, add another exciting dimension to driving on roads with folks who believe the turn signal is just a place to hang the litterbag.

Take care and happy motoring!◀



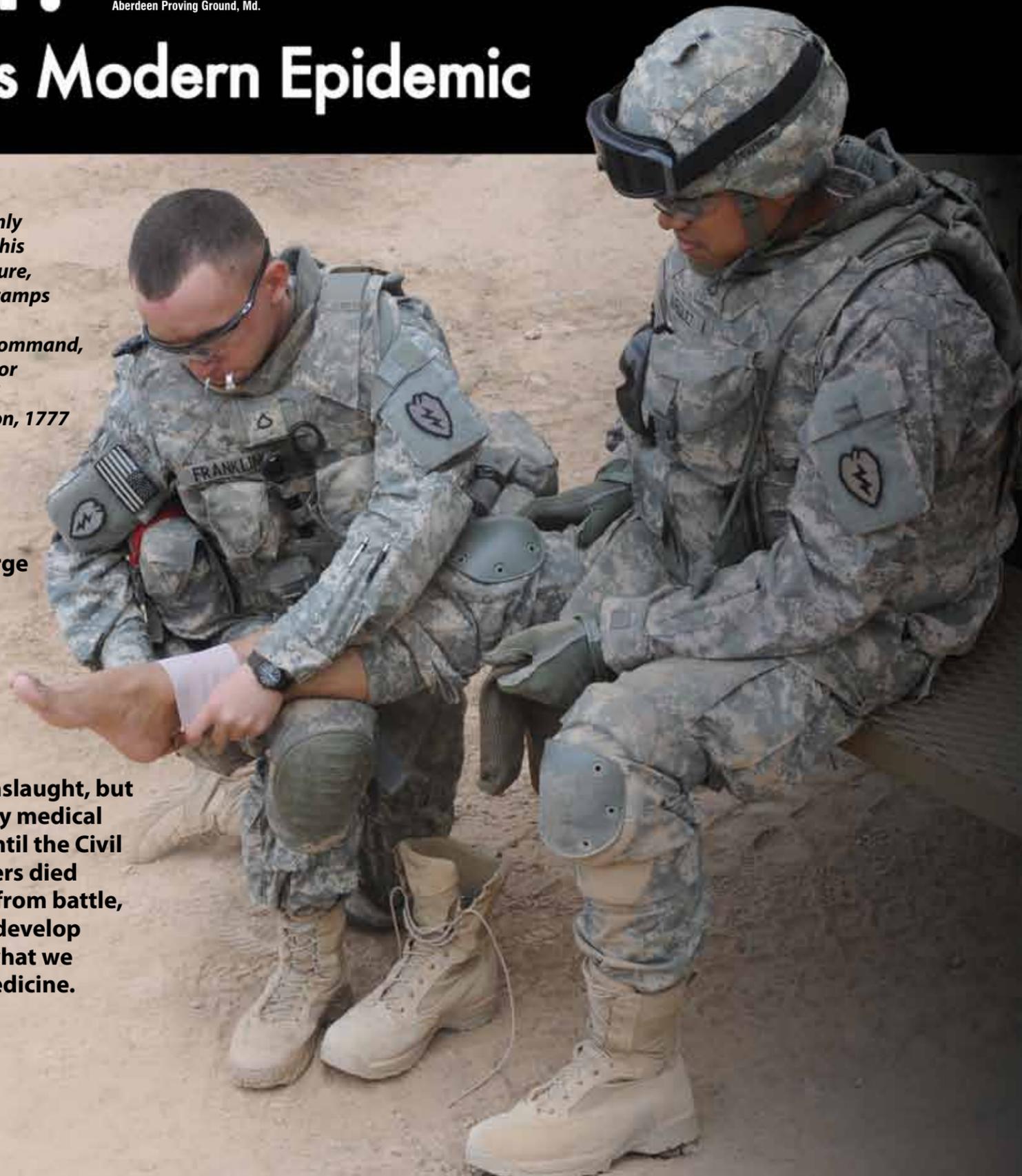
INJURY: The Military's Modern Epidemic

CAPT. VANCIL MCNULTY
U.S. Army Center for Health Promotion and Preventive Medicine
Aberdeen Proving Ground, Md.

"For every Soldier by his neglect not only endangers his own life, but the lives of his companions. Nature, or the God of nature, has commanded that men who live in camps should be cleanly: Whoever proves too obstinate, or too slothful to obey this command, may expect to be punished with death or suffer under some dangerous disease."

~Gen. George Washington, 1777

This dire warning illustrates how seriously Gen. George Washington took disease prevention in his troops. He experienced firsthand the crippling effects disease and sickness caused to his ranks and was aware how ancient armies would crumble not by enemy onslaught, but by disease. According to an Army medical historical document, it wasn't until the Civil War, where twice as many Soldiers died from sickness and disease than from battle, that the Army began to further develop and modernize the concept of what we know today to be preventive medicine.



Over the next century, the fledgling U.S. Army Medical Department would make monumental advances in medicine to protect our Army against disease threats such as cholera, malaria, dysentery, yellow fever, smallpox and typhoid fever. Medical advances and a dedicated medical department have all but eliminated these once deadly threats to our military.

It's astounding that with such breadth and depth of experience in identifying and defeating threats to our readiness that a progressive, silent and seemingly unimportant foe has emerged as the No. 1 health threat to our armed forces. This problem is caused by neither virus nor germ, but by a tradition to perform, excel and exceed. Its name is injury and it represents the greatest threat to our military readiness.

Injuries are a burden to the U.S. armed forces in that they degrade health, fitness, morale and military operational effectiveness of servicemembers. They also consume a large portion of our limited healthcare dollars for treatment, rehabilitation and disability compensation.

So how common is the injury problem in the military? Here are some staggering Department of Defense statistics from 2007:

- Injuries accounted for more hospitalizations than any other adverse health condition except mental disorders; however, injuries were the leading cause of

outpatient clinical visits.

- There were 2.1 million injury-related medical visits affecting 900,000 servicemembers.

- Strain and sprain injuries required almost 110,000 days in the hospital, the second greatest for any condition.

- Twice as many servicemembers received medical care for injuries than for any other category of conditions.

- Musculoskeletal injuries accounted for 68 percent of all limited duty dispositions (profiles or limited duty slips) and amount to an estimated 25 million limited duty days per year.

The injury rate for the Army alone is 2,500 reported injuries for every 1,000 Soldiers. Think about that statistic for a moment and realize that this means that every Soldier can expect to go to sick call more than twice a year for a musculoskeletal injury. Injuries affecting the lower back, knee, ankle and shoulders account for most of the visits and are among the top seven diagnoses across the armed forces.

Think again if you believe these numbers are inflated due to the Iraq and Afghanistan conflicts. These numbers are all taken from the garrison, not the deployed, environment. If the definition for an epidemic is "extremely prevalent, widespread, affecting many persons at the same time," then the military and, specifically, the Army has an epidemic of injuries.



Referring to our injury problem as an epidemic is not new. Retired Col. Bruce Jones, M.D., a pioneer in the study of military injury and prevention, wrote a technical report in 1996 titled "Injuries in the Military: A Hidden Epidemic." The conclusion was "injuries have greater impact on the health and readiness of the U.S. armed forces than any other category of medical complaint during peacetime and combat." The most common type of injury identified was overuse related to physical training (PT) and sports that mostly affected the knee and back.

Unfortunately, more than a decade later, the trend continues. According to recent data, more than 50 percent of our injuries in the Army are a direct result of strenuous load- and impact-bearing exercise caused by PT and sports-related activities. More Leaders in the military must appreciate the magnitude and scope of the problem, as well as understand

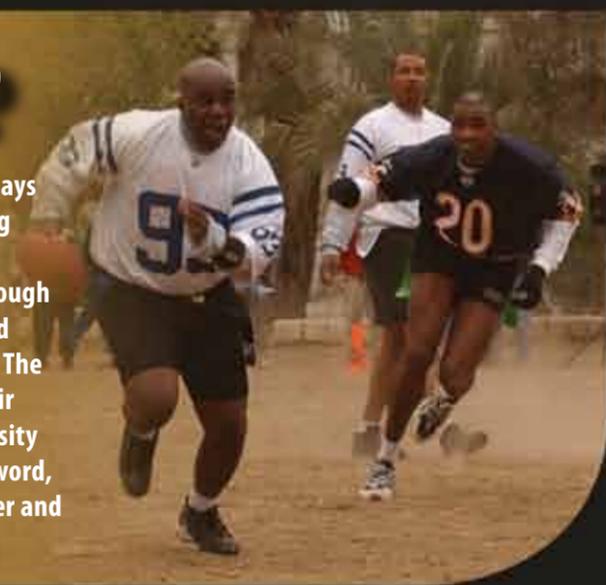
their role in prevention.

The efforts by both military and civilian agencies to understand the injury process and provide solutions have been ongoing for the last 25 years. As a result, we now have numerous scientific studies that tell us where all the injuries are coming from, as well as who is most at risk. A recent technical report developed for the armed forces by the Joint Services Physical Training Injury Prevention Work Group (JSPTIPWG) examined the available scientific data and presented intervention strategies that can potentially reduce PT and overuse injuries by 25 to 50 percent when implemented.

All the information in the world, however, will do nothing to reduce injury's threat to readiness unless action is taken. Every member of our armed forces, especially Leaders, must be educated on the basics of injury prevention. This is because unit Leaders, not the medical community, are in the position

DID YOU KNOW?

Across the U.S. armed forces, more than 25 million limited-duty days occur annually due to injuries, with physical training/sports being a top injury category. Leaders are in the best position to prevent injuries. The one-hour, interactive, online "Injury Prevention Through Leadership" course provides Leaders with concise, evidence-based information and guidance they can use to prevent many injuries. The course also teaches practical strategies to help Soldiers meet their fitness goals. To access the course, visit Combat Readiness University II at <https://crc.learn.army.mil>. Log in with your AKO ID and password, select the Courses tab, open the Joint Forces Safety Training folder and enroll today.

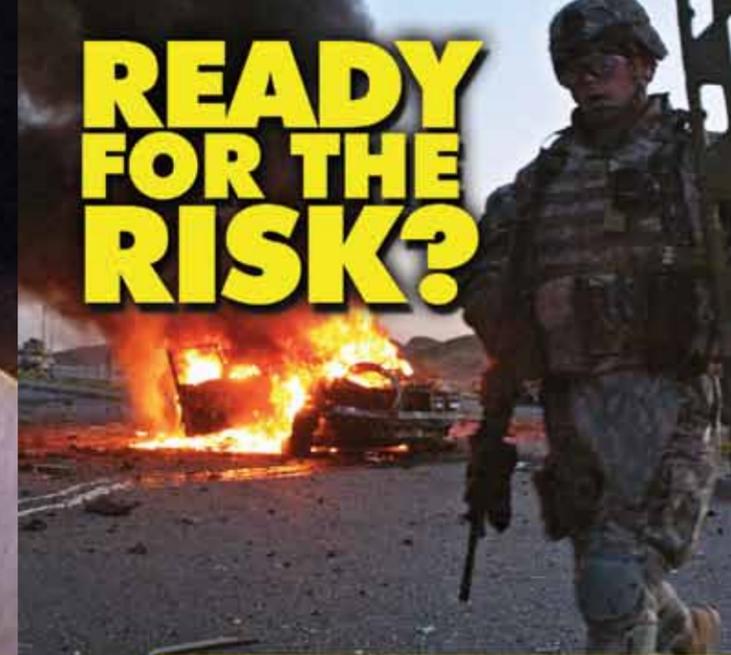


to effectively implement and enforce change.

Where can a Leader find injury prevention information? Fortunately, the JSPTIPWG technical manual "Injury Prevention Through Leadership" is available as an interactive online video course at <https://crc.learn.army.mil>. This short course will introduce the viewer to the causes and extent of injury in the armed forces and then offer practical, evidence-based strategies. It can also be the foundation for proactive Leaders to start injury prevention

programs in their units.

The No. 1 threat to readiness is identified and can no longer remain hidden. Just as George Washington required basic sanitation to prevent disease, all Leaders must learn and implement basic injury prevention if we are to reduce that threat. It will take time and effort, but the result will be Soldiers who remain Army Safe and Army Strong.◀

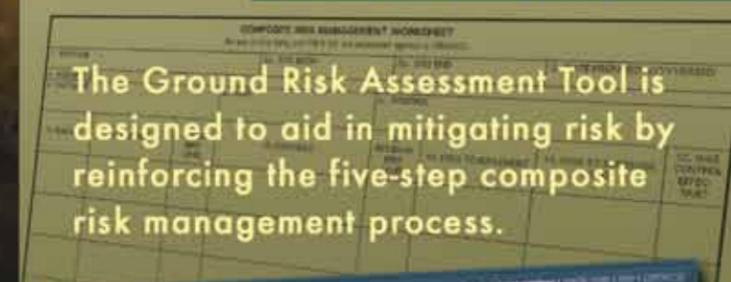


READY FOR THE RISK?

GRAT

GROUND RISK ASSESSMENT TOOL

<https://safety.army.mil>



GRAT-S

<http://safety.army.smil.mil>

GRAT-S is now available and allows Leaders in forward-deployed units access to GRAT on the SIPRNET.





The Summer of the 58

CHIEF WARRANT OFFICER 3 JAMES A. NIX
 1-135th Attack Reconnaissance Battalion, 20th Aviation Brigade
 Missouri Army National Guard
 Whiteman Air Force Base, Mo.

I can remember that summer day like it was yesterday. Although it's been a few years since I nearly flew an OH-58 aircraft into the ground, I often reflect on that incident to remind myself of the things I did wrong and, more importantly, the lessons I learned from my mistakes.

The day started out like every other: readiness level (RL) progression training. In this case, I was the instructor pilot teaching RL-3 to RL-2 students. It was a great summer day — warm on the ground, but cool in the air. The doors were off and we were looking forward to flying.

We started with some basic

maneuvers at the airfield and then headed for our training area. The training area was a great place to fly. It was a panorama of nature, wildlife and clear water.

There were several landing zones (LZs) to choose from; some were large and flat, others small, sloped and challenging.

We started with the challenging

ones, of course. Things were going great and I couldn't have been more pleased with my student. No problems controlling the aircraft and, more importantly, he had the ability to think, fly and talk on the radio simultaneously.

We were "in the groove" and doing our thing. My student was doing so well that I chose

to take the maneuvers up a notch to simulated engine failures (SEF) at altitude. Sure, you're thinking, "SEFs in a 58 ... piece of cake!" You're correct. It's a simple maneuver — one we've performed many times in many places. Well, that's what I thought.

We set up for the maneuver, surveyed the winds and recited the emergency procedures verbatim from the dash 10. We executed the maneuver by the textbook. It was flawless. In fact, it was so good that we began repeating the maneuver, incorporating more of my "techniques" with every SEF.

Soon, my overconfidence and complacency caught up with me. I initiated the maneuver by rolling the throttle to idle and announcing, "Simulated engine failure." I then reduced collective in order to maintain rotor rpm and began an autorotation. My intent was to terminate with

power. Things were going good and I can remember thinking, "This is going to be a good one."

Well, as the ground quickly rushed into view, I had a sinking feeling that I had forgotten something. Indeed, I did; I forgot to roll the throttle back to 100 percent from idle! Amid my racing thoughts and, perchance, saying, "Oh, sh*t!" I somehow managed to get the throttle back to 100 percent to terminate the maneuver with power.

I landed the aircraft and remember looking at my student as he said, "Dude, that was close!" I said, "Yes, it was!" We both realized that we had just come close to dying.

Lessons Learned

Pilot confidence is a good thing; however, in Army

aviation, the saying, "You can't have too much of a good thing," isn't always the case. The message I would like to impart to my fellow aviators is that it is easy to become overconfident while performing what most would consider simple tasks. We all have a comfort zone that expands as we become more proficient.

I encourage you to take a look at your comfort zone. Overconfidence leads to complacency, just as familiarity breeds contempt. Next time you're flying and things are going great and your confidence is high, just remember ... that's when things go wrong.◀

The Silent Killer

CAPT. RUBEN I. ORTIZ
Headquarters Company, 1st Medical Brigade
Fort Hood, Texas



CO detector. The device should be installed near sleeping areas. Additional detectors should be placed in living areas or near, but not in, the furnace room. The detector should be in an area where everyone in the house will hear it — even those sleeping. The Environmental Protection Agency (EPA) warns, however, that CO detectors should never be considered as a replacement for properly using and maintaining fuel-burning appliances.

If you suspect you are experiencing CO poisoning, get fresh air immediately. Open the windows and doors for more ventilation, turn off any combustion appliances and leave the house. Once away from the source of exposure, seek prompt medical attention and call your fire department for CO detection. For more information about CO poisoning prevention, visit the EPA's Web site at www.epa.gov.

As the weather turns colder, many of us will rely on furnaces and portable heaters to stay warm. Some will also unknowingly invite a killer into their home.

The winter months are when individuals are most at risk for carbon monoxide (CO) poisoning. Known as the "silent killer," CO is a colorless, odorless, tasteless and nonirritating gas. It kills more people annually in the United States than any other type of poisoning.

Carbon monoxide is produced from the incomplete combustion of wood, coal, oil, kerosene, natural gas, gasoline and propane. People are also poisoned when they heat their homes with outdoor grills, hibachis or gas

ovens with the oven door opened. The poisonous gas emitted from burning fuels or from car exhaust can build up very quickly and overcome you without warning, even in areas that seem to be well ventilated.

At lower levels, the initial symptoms of CO poisoning may include fatigue, headache, dizziness, nausea, visual disturbances, irritability and confusion. Unfortunately, diagnosis is problematic because these symptoms are nonspecific and may be mistaken for the flu or food poisoning. If you experience any of these symptoms in your home but feel better when you go outside — and then find the symptoms reappear once you're back inside — you may have CO poisoning.

As exposure levels increase, the symptoms of CO poisoning become more severe. At moderate levels, individuals may experience

tightness across the chest, severe headaches, dizziness, drowsiness and nausea. Prolonged or high exposures may result in vomiting, confusion, muscle weakness, collapse and even death. Earlier this year, a Soldier and his wife were found dead in their home as a result of CO poisoning. The police investigation into the deaths revealed the home had high levels of CO.

Many of the deaths from CO poisoning might have been prevented with regular maintenance of heating systems and the installation of CO detectors. There are a variety of CO detectors on the market, and all monitor the air for high levels of CO. The CO detector is designed to detect CO from any source, but it will not detect smoke, fire or any other gas.

For safety's sake, homes with portable heaters or gas or oil furnaces should have at least one

FYI

To reduce your chances of carbon monoxide (CO) poisoning, take the following precautions:

- Have your fuel-burning appliances such as furnaces, water heaters, ranges, ovens, dryers, space heaters, fireplaces and wood stoves inspected and serviced by a trained professional before the onset of cooler temperatures.
- Purchase appliances that vent fumes to the outside of your home. Have those appliances installed and maintained by professionals. Ensure you read, understand and follow the safety precautions for

- each of these appliances.
- Never sleep in a room with an unvented fuel-burning space heater.
- Never use a gas oven to heat your home — even for a short period of time.
- Never idle your vehicle inside your garage — even if you have the door opened. Doing so can allow CO to build up and enter your home. Also, be sure not to operate other devices powered by combustion engines such as generators, chain saws, lawn mowers, etc., in an enclosed space.



Family engagement kit

<https://safety.army.mil>

Army Safe is Army Strong and that starts with a Soldier's Family. Have the information to help you and your Family stay SAFE.



Be prepared and get your own Family Engagement Kit TODAY!

Life in the Fast Lane

NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

Are you tired of slow drivers blocking the fast lane? Do you believe it is the slow driver in the fast lane, not the aggressive driver, who is the real menace to society?

Perhaps no other aspect of road travel is so laden with myth as the "fast lane." The truth is, life in the fast lane can be deadly unless everyone knows the rules. So, here's the scoop:

- The posted speed limit is a law that applies to all lanes. Technically speaking, there is no fast lane or slow lane. Slower traffic is generally expected to keep right. However, only emergency vehicles are permitted to exceed the posted speed limit and only when their lights and sirens are operating.
- Speed surveys indicate that the majority of drivers are exceeding the posted speed limit. The "slow driver" in your way may, in fact, be obeying the speed limit. Check your speedometer.
- Your speed, even when passing, should not exceed the posted speed limit. If you are driving the speed limit and the vehicle in front of you is driving the speed limit, there is no need to pass.
- Generally speaking, it is safest to stay out of the left lane except when passing. Twenty states have laws that reserve the left lane for passing, although states vary as to the types of roads and vehicles for which the restriction applies. Thirty states and the District of Columbia have no such law. Do you know the law in your state?◀◀

TEST YOUR KNOWLEDGE

True or False

1. The speed limit applies to all lanes, including the far left lane on a multilane highway.
2. In some states, the left lane on divided highways is only for passing.
3. The left lane on divided highways is for left-handed drivers.
4. In some states, motorists who drive the speed limit in the left lane are breaking the law.
5. Your speed, even when passing, should not exceed the posted speed limit.
6. The left lane is reserved for motorists who wish to drive faster than the posted speed limit.
7. Drivers should pass on the left because it is safer than passing on the right.

- Answers**
1. **True.** The following states reserve the left lane for passing: Arkansas, Connecticut, Hawaii, Idaho, Illinois, Indiana, Kentucky, Maine, Massachusetts, Michigan, Mississippi, Missouri, Nevada, New Jersey, Ohio, Oregon, Rhode Island, Tennessee, Utah, Virginia and Washington. However, restrictions may vary from state to state. Check with your motor vehicle department.
 2. **True.** In states that reserve the left lane for passing only and apply that restriction to all vehicles, no one is permitted to cruise in the left lane, regardless of speed. In states that allow motorists to cruise in the left lane, no one is permitted to exceed the speed limit.
 3. **False.** The speed limit applies to all lanes.
 4. **True.** The speed limit applies to all lanes.
 5. **True.** The speed limit applies to all lanes.
 6. **False.** Passing on the right is more risky because it places you in the blind spot of the vehicle you are passing.
 7. **True.** Passing on the right is more risky because it places you in the blind spot of the vehicle you are passing.



30 YEARS After the Towers Fell

MELANIE CARNEY
Armament Research, Development and Engineering Center
Picatinny, N.J.

Few Americans will forget where they were when they first heard about the Sept. 11, 2001, terrorist attacks on our country. Like most, I was glued to the developing television news coverage. I watched as the World Trade Center towers crumbled to the ground, spewing clouds of debris through the New York City streets. With my environmental laboratory background as an asbestos sample analyst, I knew what was in those clouds and what it meant to the people exposed to them.

Asbestos was just one of the hazardous materials released that day. For those exposed either as a worker, responder or bystander, or if you're just intrigued by hazard exposures, the following are a few facts about asbestos and the occupational diseases caused by exposure to its fibers.

What is Asbestos?

Asbestos is a common name for six distinct, fibrous mineral silicates. According to the Environmental Protection Agency (EPA), the current federal

definition of asbestos is "the asbestiform varieties of chrysotile, crocidolite, amosite, anthophyllite, tremolite and actinolite." These naturally occurring silicates, resistant to both heat and chemicals, became a popular fire retardant in industrialized countries.

Asbestos is found in asbestos-containing materials (ACM), which are used to make thermal insulation, fireproofing, brake linings, paint additives and building materials. Workers came into contact with ACM in

shipyards, paper mills, foundries, chemical plants, garages, building construction and the telephone industry — virtually any area involved in construction or design.

ACM are a health risk when they are friable, which means the material can be crumbled, pulverized or reduced to powder by the pressure of an ordinary human hand. Asbestos fibers may be released from friable ACM and become airborne and potentially inhaled.

Asbestos fibers of

concern to human health are hundreds of times thinner than human hairs and too small to be seen with the naked eye. The Occupational Safety and Health Administration (OSHA) defines fibers of concern as at least five micrometers long and at least three times as long as their diameter. The microscopic fibers enter the body undetected by respiratory defenses and lodge in the lungs' air sacs. This foreign material is impervious to chemical degradation and remains permanently

ARE YOU BEING EXPOSED TO ASBESTOS?

Employees may be exposed to asbestos during the manufacture of asbestos-containing products or when performing brake and clutch repairs. In the construction industry, exposure occurs when workers disturb asbestos-containing materials (ACM) during the renovation or demolition of buildings. In addition, custodial workers may be exposed through contact with deteriorating ACM in buildings. Consult your safety office if you have any concerns.



“ The **MICROSCOPIC** fibers **ENTER** the body **UNDETECTED** by respiratory defenses and **LODGE** in the **LUNGS'** air **SACS.** ”

trapped in the exposed individual's respiratory tract.

The fibers irritate the surrounding cells and cause the four common asbestos diseases: pleural plaques, which is scarring in the lungs; asbestosis, a noncancerous lung disease; mesothelioma, cancer of the lung lining; and lung cancer. These diseases have a long latency period and may remain dormant for 10 to 60 years after exposure. Symptoms normally develop 20 to 30 years following exposure.

Protecting Against Asbestos

So how do we protect workers from asbestos hazards? An asbestos safety management program requires several controls and procedures to prevent exposures to the potential carcinogen. Both U.S. Army regulations and OSHA standards mandate engineering controls, specific worker practices, training and personal protective equipment in asbestos-containing areas.

The controls include



High-Efficiency Particulate Air (HEPA)-filtered fume hoods, wetting agents, respirators and protective clothing. Asbestos workers also receive an initial medical exam, annual exams and job termination exams. In addition, medical surveillance program standards require personnel records be maintained for 30 years after employment ends. Asbestos abatement technicians, supervisors, project managers and inspectors must be trained and certified before they are authorized to perform their duties. They must also attend refresher courses to maintain their certifications.

What does the future hold for those at ground zero the day the towers fell? It's not possible to accurately predict, but in the coming decades, they may show symptoms of an asbestos disease or other respiratory ailments. OSHA regulations pertain only to occupational injuries/illnesses, and our government still must address the possibility of nonoccupational compensation for respiratory disease of bystanders. One thing is for certain; the emotional scars from that day will be slow to heal, if at all.◀

»» **FYI**

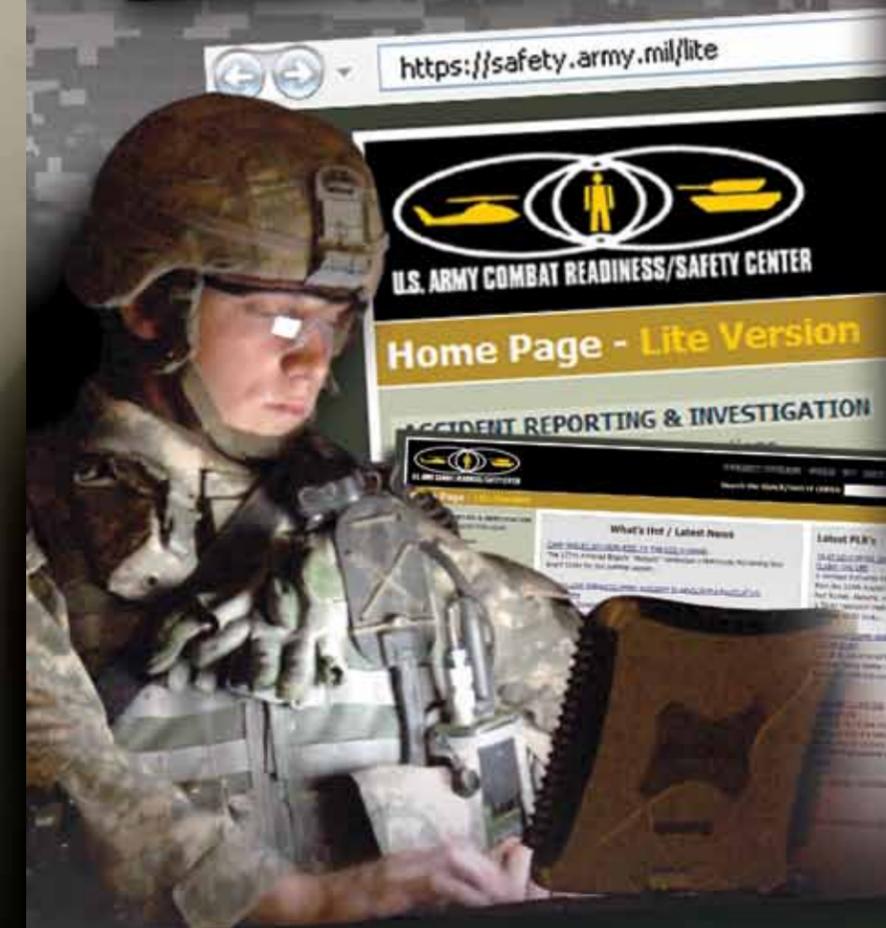
The regulations governing worker exposure to asbestos are extensive. For additional information and a complete listing of policy and guidance, visit the U.S. Army Center for Health Promotion and Preventive Medicine's (USACHPPM) lead and asbestos Web site at <http://chppm-www.apgea.army.mil/ihs/labp.aspx>.

The Deployment Health Clinical Center has additional information for those who deployed to Operation Noble Eagle at http://www.pdhealth.mil/deployments/noble_eagle_WTC/background.asp.

Other resources include:

- USACHPPM Fact Sheet 64-004-0302: Health Information for World Trade Center Support Personnel, <http://chppm-www.apgea.army.mil/documents/FACT/64-004-0302.pdf>.
- OSHA Safety and Health Topics: Asbestos, <http://www.osha.gov/SLTC/asbestos/index.html>.
- OSHA Safety and Health Topics: Respiratory Protection, <http://www.osha.gov/SLTC/respiratoryprotection/index.html>.

SLOW CONNECTION?
LIGHTEN UP!



U.S. ARMY COMBAT READINESS/SAFETY CENTER

<https://safety.army.mil/lite>

The Safety Center's home page is now available in a lite capacity to allow forward-deployed Soldiers with limited Internet connectivity access to the risk mitigation tools and resources they need.

HOW HOT IS HOT?

How hot is hot? Only the countless number of Soldiers who have deployed to Iraq and Afghanistan can answer that question. One might think I'm talking about the environmental conditions we deal with on a daily basis. However, I'm referring to the daily conditions our aircraft operate in while deployed: the dust storms, heavy rain that immediately turns to mud upon contact with the airframe and, of course, the heat.

The amount of flight time each aircraft has logged is staggering. Our battalion logged more than 20,000 hours in Operation Iraqi Freedom 06-08 in every environmental condition imaginable. Airframes were operating to the point that simple knobs were vibrating loose. Parts that had never been replaced during the life of the aircraft failed. This required maintenance personnel to increase their knowledge of those combat platforms.

I was just one of the maintenance test pilots (MTPs) in our battalion assigned to Logistics Support Area Anaconda in Iraq. I logged more than 100 hours of maintenance test flights (MTF) using night vision goggles (NVG). I was quite skeptical of this when I arrived, but I quickly realized the benefits would allow our battalion to meet the daily aircraft requirements. We conducted more than 300 ground runs, 94 engine flushes and countless trips to the flightline on this rotation.

To reduce the risk of flying MTFs under NVG, our battalion mandated two test pilots. This worked well, not only from an MTF standpoint, but from a training aspect as well. On this particular morning, 0430 hours to be exact, the other MTP and I completed the necessary paperwork for the test flight. The preflight, run-up and necessary checks were completed without any noted deficiencies. We entered closed traffic and began our in-flight checks.

During our second traffic

pattern on downwind, the strangest odor filled the cockpit and cabin. Being an experienced MTP, I knew something was burning. After a few moments, the failure advisory panel began to illuminate with various caution lights. Several cautions were blinking, mainly the No. 2 hydraulic pump light. The right-side crew chief extended his seat belt and observed a red glow coming from underneath the hydraulic deck cover. "We're on fire!" is one thing you are never prepared to hear over the intercom system while flying at 100 feet above ground level and 120 knots under NVG.

Turning base, I began a descent and determined that a roll-on landing would allow me to get the aircraft on the ground faster. The pilot (PI) contacted tower and informed them of our situation. Looking back, I thought it was

amusing to hear the tower respond with, "Are you declaring an emergency?" with the PI responding, "Yes, we're on fire!"

After the aircraft came to a stop, I performed an emergency engine shutdown. The crew chief and I exited the aircraft to find smoke and

the hydraulic deck. The rotor system was coasting down, reducing the hydraulic pressure. This reduced pressure slowed the loss of hydraulic fluid and, in turn, reduced the fire.

During this time, the fire truck was en route to our location. At least we thought they were until they turned the wrong way down the taxiway. The good news is the fire was out and everything was under control. After further inspection, two hydraulic lines were found touching and the vibrations had worn a hole in one line. While operating at 3,000 psi, hydraulic fluid atomizes and becomes highly flammable. The total damage included the No. 2 hydraulic pump, transfer module, primary servos, hydraulic deck cover and all the wiring associated with these components.

Three weeks later, I departed for Kuwait to oversee the washing of aircraft for port operations at Udari Army Airfield. The greatest

“ AIRFRAMES were OPERATING to the POINT that simple KNOBS were VIBRATING loose. ”

flames billowing out of the hydraulic deck. The crew chief attempted to extinguish the fire, but he couldn't reach the flames. I climbed upon the gunner's window and pushed the fire extinguisher underneath

lesson I learned was that even after a year of countless maintenance operations, auxiliary power unit fires, engine overspeeds and troubleshooting, Soldiers should always be prepared for the worst.◀

CHIEF WARRANT OFFICER 4 RONALD G. SKIPPER
Army Aviation Support Facility No. 1
Alabama Army National Guard
Montgomery, Ala.

LOSERS

AVIATION



CLASS A

During a security mission, the aircraft crashed for unknown reasons. The pilot in command suffered fatal injuries; however, the pilot was able to egress. A postcrash fire consumed the aircraft.

CLASS B

During simulated single-engine failure, the aircraft contacted an obstacle while landing. Postflight inspection revealed damage to the lower portion of the tail boom.

CLASS C

Preflight inspection of the aircraft revealed the tail rotor connecting links sheared. The aircrew from the previous flight reported a "slight" tail rotor vibration during flight.



CLASS C

The aircraft was one in a flight of two conducting sling load operations when a crewmember inadvertently released the center hook. A pallet of ammunition fell to the ground and exploded.

As the aircraft landed to a simulated military operations on urban terrain site, rotor downwash from the helicopter blew a set of bleachers onto another set, resulting in injuries to seated onlookers. One spectator suffered a broken arm.



CLASS C

The engine cowling separated from the aircraft during departure and made contact with the main rotor system. All four main rotor blades (MRB) and the right-side crest fairing received damage.



CLASS C

While the maintenance test pilot (MTP) was conducting a simulated engine failure for an MTP standards checkride, the aircraft contacted the ground. The main landing gear spread, one MRB made contact with the tail rotor driveshaft and the left windshield popped out.



CLASS A

The aircraft crashed on the runway during a maintenance test flight (MTF).

The MTP was executing an autorotation as part of a post-MTF when the aircraft's tail stinger struck the ground. Subsequently, the aircraft overturned and its tail rotor separated.

After a shudder and low rotor indication, the crew initiated an autorotation. The tail stinger contacted the ground and the aircraft overturned.

CLASS B

The aircraft contacted the ground during night vision goggle environmental training. Damage included spread skids, the wire strike protection system separated and the box beam buckled.

CLASS C

During manual throttle operations, the aircraft experienced an engine overspeed (124 percent for three seconds).



CLASS A

Following a hot refuel, a flight of three UH-60 aircraft were ground taxiing out of a

forward arming refueling point when Chalk 2's MRBs struck the tail rotor of Chalk 1.

CLASS C

The blade root fairing became detached from the aircraft, incurring damage to the tail rotor and attaching points.



CLASS B

The aircraft touched down hard during troop insertion to a pinnacle. The aircraft sustained damage to the fuselage, one MRB tip cap and one engine.

UAS



CLASS B

The unmanned aircraft (UA) experienced an uncommanded deployment of the recovery chute following takeoff. The chute intertwined with the propeller and the UA impacted the ground.

The UA experienced loss of engine power shortly after takeoff and descended into trees.

GROUND



CLASS A

The gunner in an M117 Armored Security Vehicle suffered fatal injuries when the vehicle overturned. The accident occurred when the driver lost control while trying to avoid an obstacle on the road. The Soldier was not wearing a gunner's restraint system.

A Department of the Army civilian (DAC) was killed during armored vehicle weapons testing when a round detonated in the

ARMY AVIATION LOSSES

Fiscal 2009
as of Aug. 6, 2009



ATTACK	1/1
RECON	9/4
UTILITY	6/2
CARGO	1/0
TRAINING	2/0
FIXED-WING	0/0
UAS	3/0

TOTAL 22/7

ARMY GROUND LOSSES

Fiscal 2009
as of Aug. 6, 2009



AMV	15/14
ACV	14/4
PERSONNEL INJURY <small>includes weapons-handling accidents</small>	23/16
FIRE/EXPLOSIVE	5/1
PROPERTY DAMAGE	2/0

TOTAL 59/35

gun tube, resulting in a backfire/explosion. A second DAC and a contractor suffered unreported injuries in the incident.



CLASS A
 A Soldier suffered fatal injuries when his privately owned vehicle was struck head-on by an M1165 HMMWV operated by an authorized crew. The Soldier was wearing a seat belt.

A Soldier was killed when the nontactical vehicle he was driving overturned as he swerved to avoid an oncoming local national vehicle. The Soldier, who was ejected, was not wearing a seat belt.



CLASS A
 A Soldier suffered a permanent total disability injury when he dived into a 5-foot-deep above-ground swimming pool and struck his head.

A Soldier's body was recovered from a river two weeks after he fell from a recreational raft that overturned when it struck an underwater obstruction. The Soldier was not wearing a life preserver even though one was available. Three others on the raft were able to safely make it to shore.

A Soldier was paralyzed from the waist down when he was struck in the abdomen by an M9 round from another Soldier's weapon. At the time of the accident, the Soldiers were wrestling.

CLASS B
 A Soldier suffered a permanent partial disability injury when he was struck in the face with an illumination round. At the time of the accident, the Soldier was carrying an M203 launch tube and reportedly spinning it in his hand when it fired. The Soldier is expected to have permanent loss of sight in his right eye.

A Soldier suffered a permanent partial disability injury to his hand after it was struck by a round from his personal .40-caliber handgun. The Soldier was dismantling the weapon and failed to properly clear the chamber after removing the magazine. The weapon discharged into his hand, resulting in the amputation of a finger.



CLASS A
 A Soldier died after suffering second- and third-degree burns to his legs, arms and face when a commercial propane stove exploded as he tried to ignite it.



CLASS A
 Five Soldiers were traveling in a rented vehicle when it left the road, overturned and crashed into a wooded area. The driver and two of his passengers were ejected and killed.

A Soldier was traveling 91 mph in a 65-mph zone in wet conditions when he lost control and drove into a ditch. After steering out of the ditch, he skidded across the highway into another ditch and struck two trees. Although he was wearing his seat belt, he suffered fatal injuries.

A mobilized National Guardsman was driving his pickup in rainy weather when he lost control and struck a tree. The Soldier, who was not wearing his seat belt, died at the scene.

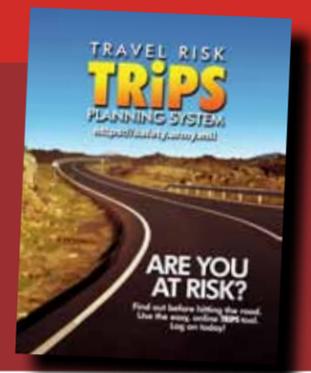
ALWAYS WEAR YOUR BELT



A mobilized National Guardsman was driving his pickup in rainy weather when he lost control and struck a tree. The Soldier, who was not wearing his seat belt, died at the scene.

MAKE SURE YOU AND YOUR PASSENGERS BUCKLE UP!

ALSO, DON'T FORGET:
 Plan for that road trip and complete a quick and easy **TRIPS** report.



speed under the influence of alcohol when he struck a street pole, was thrown from his bike and crashed through a privacy fence. The Soldier was transported to a local medical center, where he later died. Although the Soldier had taken the required Motorcycle Safety Foundation (MSF) training, he was not wearing a helmet or other required personal protective equipment (PPE). Witnesses reported he had been racing his sportbike up and down the street prior to crashing.

to negotiate a turn on an exit ramp, locked his front brake and lost control. Witnesses said the bike's rear tire lifted off the ground as the Soldier was catapulted onto the road, where he lost his helmet. He was pronounced dead at the scene. The Soldier had not attended the required MSF training, having only obtained his motorcycle learner's permit earlier that day.

A Soldier was operating his motorcycle when, for unknown reasons, he collided with another vehicle and suffered fatal injuries. The Soldier had received MSF training, but was not wearing his helmet at the time of the accident.

Editor's note: Information published in the accident briefs section is based on preliminary loss reports submitted by units and is subject to change. For more information on selected accident briefs, e-mail safe.knowledge@conus.army.mil.

A National Guard Soldier was speeding while driving home from duty when he lost control, left the road and struck a tree. Emergency personnel used the Jaws of Life to remove him from his vehicle. He was flown to a local medical center, where he died from his injuries.



CLASS A
 A Soldier was operating a borrowed motorcycle when he lost control, went off the road and struck a fence post. The Soldier was thrown from the motorcycle and severely damaged his spinal cord. He was diagnosed with a permanent total disability.

A Soldier was killed when he lost control of his motorcycle on a curved highway access ramp, slid and collided with a flatbed truck.

A Soldier was riding at high

POV DRIVING LOSSES
 Fiscal 2009

as of Aug. 6, 2009

CAR	33/33
SUV/JEEP	13/13
TRUCK	10/10
MOTORCYCLE	27/25
PEDESTRIAN	6/6
OTHER*	3/3

90 TOTAL DEATHS

Fiscal 2008: **107** 3 year average: **101**

*Includes: vans and ATVs

**Don't ride alone
this summer. Mentor
a battle buddy!**



MMP

MOTORCYCLE MENTORSHIP PROGRAM



**Mentoring can be fun and set
up in various ways.**

- Unit-level one-on-one mentorship
- Unit-level riding groups
- Private organization
- Combination unit program and private organization at the installation level
- Non-appropriated fund instrumentality



**Check out the USACR/Safety Center MMP Web site
for some examples of active mentoring programs:**

<https://safety.army.mil/mmp/>



**ARMY SAFE
IS ARMY STRONG**

