

ARMY GROUND RISK-MANAGEMENT INFORMATION

# Countermeasure

VOL 26 NO 2

<https://safety.army.mil>

FEBRUARY 2005

## Keeping the Drama Out of Theater



HEADQUARTERS  
U.S. ARMY  
COMBAT READINESS CENTER  
4905

Plus, Introducing the  
**Combat Readiness Center**

# Countermeasure

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on the web  
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Countermeasure is published monthly by the U.S. Army Combat Readiness Center, Bldg 4905, 5th Avenue, Fort Rucker, AL 36352-5363. Information is for accident prevention purposes only and is specifically prohibited for use for punitive purposes or matters of liability, litigation, or competition. Address questions about content to DSN 558-2688 (334-255-2688). To submit information for publication, use FAX 334-255-3003 (Julie Shelley) or e-mail [countermeasure@safetycenter.army.mil](mailto:countermeasure@safetycenter.army.mil). Address questions about distribution to DSN 558-2062 (334-255-2062). Visit our Web site at <https://crc.army.mil>.



# DASAF'S CORNER

From the Director of Army Safety

## Change is in the air... the U.S. Army Combat Readiness Center is headed your way!

Thanks for your service to our Nation! We are a team, all working to get the job done—military, civilian, and contactor—in theater and at home. Each and every one of you is an important part of our combat power. High tempo and limited resources make it very difficult to replace you. We simply cannot afford the loss of you or your buddies, because it impacts our combat readiness.

One of the greatest leaders of World War II, GEN George S. Patton was rough around the edges. But he fully understood the importance of protecting combat power to fight our Nation's wars. His words below have more meaning when you consider our recent statistics. Since the beginning of FY04 we've lost a Soldier every 9 hours—nearly a squad each week, a platoon each month, a company each quarter, or a battalion each year! That's combat power we cannot afford to lose. Think of the energy expended to recruit, train, and retain a battalion. We must find a way to "connect the dots" on all these losses (accident + enemy + illness + suicide/other) and preserve our combat readiness. It will require aggressive change in our thinking, processes, and culture.

To enable this expanded approach, the Honorable Francis J. Harvey, Secretary of the Army, and GEN Peter J. Schoomaker, Chief of Staff, Army, signed a mandate directing the Army Safety Center to recast as the Army Combat Readiness Center (CRC) effective immediately. The new focus is on sustaining readiness and managing ALL risks—those posed by the enemy, the environment, materiel and systems, and human error. This broader focus is a logical shift from being accident-centric to Soldier-centric. The Army Safety Office will remain in Washington, DC, and support the accident and safety aspects of the CRC.

Composite Risk Management (CRM) is the fundamental element of the CRC. "Safety Sends 11," published in the January 2005 *Countermeasure* ("What It's About: Composite Risk Management"), explains how training this concept is vital to keeping our forces ready and winning our Nation's wars. We are going to improve and expand our interactive Web-based tools, give you more "There I was" stories through our magazines and Web site, and develop predictive

**"Take calculated risks.  
That is quite different from being rash...  
No bastard ever won a war by dying  
for his country. He won it by making  
the other poor dumb bastard die for  
his country."**

**—GEN George S. Patton**

analyses through data mining with other DA agencies and “close call” reporting. Within 48 hours of a reported loss, the CRC will share with the Army the five “Ws,” as well as the trends, tactics, techniques, and procedures, and lessons learned. In short, we are going to connect the dots to help keep you and your team alive at home and in the fight.

Our Army needs your help. We need a cultural shift for the CRC to be successful. The Safety Center’s mobile focus groups and the recent Inspector General’s report confirmed the message must change to one that counteracts the negative stigma the word “safety” now invokes. These studies emphasize that safety has become a four-letter word in many circles because it does not mesh well with the level of risk or exposure. A captain in combat told me, “The first thing that goes in combat is admin, immediately followed by safety.” We want that captain and others like him to shift from compliance to aggressive CRM—to stop thinking of safety as a constraint and use CRM as a combat multiplier. Our leaders must focus on teamwork, unity, mission, risk management for readiness, and proactive planning to preserve combat power...CRM. This change will allow our junior leaders to say, “I know Soldiers depend on me, and I’m not going to let the unit down.”

The Army is fortunate to have a wealth of expertise within the Improvised Explosive Device Task Force, the Army Shootdown Assessment Team, the Center for Army Lessons Learned, and various other DA agencies. However, we can no longer afford to categorize loss by individual areas

such as combat, accident, and medical. The next logical step is to matrix the Army’s knowledge and attack hazards at home, during training, and in combat. This nested information through new processes will facilitate a more comprehensive look at threats, hazards, and controls, and also provide



DEPARTMENT OF THE ARMY  
WASHINGTON

31 JAN 2005

MEMORANDUM FOR Commanding General, United States Army Safety Center, Fort Rucker, Alabama 36362-5363

SUBJECT: Transformation of United States Army Safety Center

1. Personnel and equipment losses adversely affect the combat readiness of our Army. The loss of even one member of the Army Team – Soldier, civilian, or supporting contractor – is unacceptable.
2. Transformation is a multi-dimensional process that requires significant organizational, technological, and cultural changes to keep the Army relevant and effective for the future. As we adapt new technologies to war-fighting and business operations, we must also develop better joint operating concepts and business processes that use these technologies. We must integrate our functional initiatives and shape relevant information and trends into actionable knowledge that will preserve combat readiness.
3. To these ends, we are directing the United States Army Safety Center to transform and redesignate itself as the United States Army Combat Readiness Center (CRC) to advance the principles, understanding, and practice of Composite Risk Management (CRM). CRM will focus on sustaining readiness and managing all risks – those posed by the enemy, the environment, materiel and systems, and human error – logically shifting from accident-centric to Soldier-centric.
4. As with the United States Army Safety Center, the CRC will function as a Field Operating Agency of the Chief of Staff, Army. The Army Safety Office will continue to exist but will expand its responsibilities in Washington, DC, focusing on compliance, policy, and field liaison with Headquarters, Department of the Army. The Commander of the CRC will also retain the role of Director of Army Safety, reporting to the Director of the Army Staff. The CRC will be the Army’s focal point for analyzing accident, serious incident, and combat loss reports, identifying lessons learned and tactics, techniques, and procedures (TTPs) to mitigate and prevent future losses. Accident investigation processes remain unchanged. The CRC will establish new processes leveraging information from Army organizations to collect, distill, and distribute knowledge about losses that affect our combat readiness. The prerogative of commanders to investigate losses and other incidents remains unchanged. The CRC mission will include:
  - a. Primary responsibility for investigation of Army accidents, subject to command, criminal, and other investigatory functions;





**"Our leaders must focus on teamwork, unity, mission, risk management for readiness, and proactive planning to preserve combat power...CRM."**

empirical data to support investment strategies, doctrine, and digital tools. The CRC's focus is knowledge, not empire building. Our goal is for the Army to have a single voice—information we can all share—when it comes to the loss of a Soldier. The CRC will consider a loss as a loss, no matter

what the cause. Regardless of whether that loss was in combat or by accident, we are going to find out why. These new processes will require extensive teamwork and provide commanders with significantly more information about the combination of circumstances that surround our ever-mounting losses.

Tomorrow's mission depends on the readiness of our Army today. GEN Schoomaker has explained that our Army at war will fail without transformation. Accelerating future force capabilities and viewing Army losses holistically will enhance the current force and transform safety culture. The CRC will play a critical role in total Army transformation and will continue to support all of you—our warfighting units, our installation flagships, and our civilian workforce. ★

**The Army Combat Readiness Center—transforming safety processes to improve combat readiness and preserve combat power, one boot print at a time.**

**BG Joe Smith  
Director of Army Safety  
CG, CRC**

**SUBJECT: Transformation of United States Army Safety Center**

- b. Coordination on selected combat loss investigations;
  - c. Focal point for instigating the necessary cultural changes and developing the processes, structure, and training necessary to implement CRM Army-wide;
  - d. Support to Functional Proponents to develop policy and doctrine for loss prevention through CRM;
  - e. Development, coordination, and facilitation of a single-entry, multiple use automated reporting system for processing loss reports;
  - f. Development of predictive trend analysis using digital technology and data mining (with due regard to protecting private and privileged information) in order to identify loss trends and preventive measures;
  - g. Analysis and prompt dissemination of situation reports to the Army leadership;
  - h. Interaction with other military services; federal, state, and local agencies; and industry to identify best practices and loss prevention strategies.
5. The expanded scope of the new Combat Readiness Center and safety transformation will enable our Army to preserve combat power and enhance combat readiness with cutting edge effectiveness.

**Peter J. Schoomaker  
General, US Army  
Chief of Staff**

**Francis J. Harvey  
Secretary of the Army**

**CF:  
The Director of Army Staff  
Assistant Secretary of the Army (Installation and Environment)**



# SAFETY SENDS

From the Director of Army Safety

# 13



# Transforming to Preserve Combat Power

**T**he U.S. Army Safety Center recently transformed to the U.S. Army Combat Readiness Center. The Combat Readiness Center is a knowledge center that “connects the dots” on all information that pertains to the loss of Soldiers... our combat power!

Knowledge is power. This simple truism is echoed in our adoption of Composite Risk Management (CRM). The more you know about the total hazards you face, the more effectively you can manage the risk. Real power comes from sharing actionable knowledge from the top to the bottom of your formation.

CRM recognizes that a loss is a loss—no matter where it happens—and every loss degrades combat power. During Fiscal Year (FY) 2004, our Army lost a Soldier every 32 hours to

an accident. FY04 was our worst year for accidental fatalities in the last 10. You can see from the red in the FY05 chart below that we are outpacing last year in almost every category.

Curbing this upward trend is a big challenge for our Army. Former President Dwight D. Eisenhower said, “If you can’t solve a problem, enlarge it.” In our case, enlarging the problem translates to viewing accidental and other losses in a larger context...ALL Army losses. We are developing the capabilities to take a more holistic look at how and why we are losing Soldiers.

To date, no single agency collects, analyzes, and reports such holistic data to allow commanders to apply CRM and reduce or prevent losses. In recognition of this void, GEN Peter Schoomaker, Chief of Staff, Army, and the Honorable

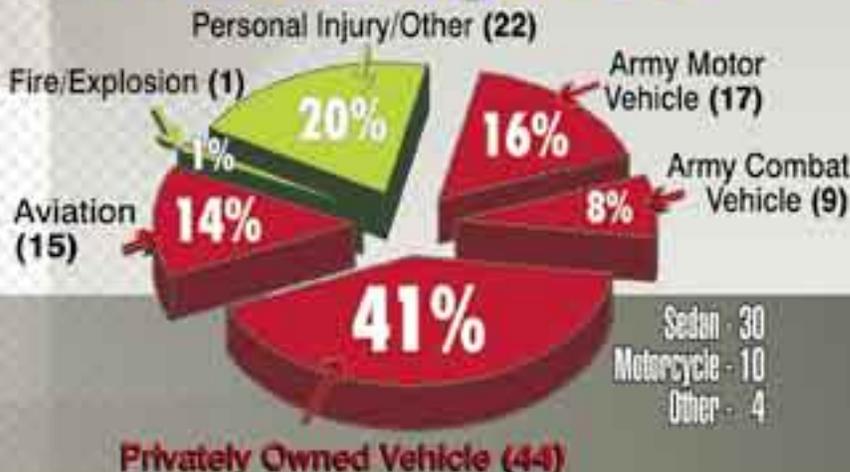
Francis J. Harvey, Secretary of the Army, expanded our mission and redesignated us as the Combat Readiness Center on 31 January 2005.

When we look at ALL losses—accident, combat, medical, and criminal—the true impact on our readiness emerges: We are losing a Soldier every 9 hours. Not only do we lose a precious life and comrade, but we also lose combat power and are required to recruit and train a replacement. This adds to the challenge of an Army at War that is transforming.

This name change signifies our role in enhancing combat readiness and, to be frank, frees us from the negative connotation the word “safety” holds for young Soldiers—those who are at highest risk. We will retain all our core competencies in safety,

## If a problem

## Total Army: 108



## Everywhere Else: 65



**FY04 to Present**  
(13 February 05)

**1,325 Total Fatalities**



Source: Military Casualties Division, USARPAT & AOR

We are losing Soldiers in accidents every 32 hours. When we take a holistic look at Soldier fatalities — ~~combat & non-combat~~ — we find a Soldier dies every 9 hours.

but our emphasis on CRM and readiness will increase. This strategy will be effective since all generations understand the importance of a fully functioning unit and strive toward that goal. What does this mean to you?

efforts, we will have the capabilities to report actionable knowledge back to you. Our goal is to be fast, holistic, digital, preventive, and predictive. Knowledge is power, but sharing this knowledge is what makes it actionable and powerful. We will gather data on all losses, but our primary attention will be on accidental

do. We also are collaborating with other organizations to connect the dots, not own them or do their jobs.

Shortly, we will go hot on a new program of quick-turn situation reports. These “preliminary loss reports” will contain a brief summary of losses and a near real-time synopsis of what we know so you are aware of the issue quickly. Whenever possible, we will alert you to trends as well. This service is in its infancy, and I look forward to your feedback as we refine it. We also have ambitious plans in the coming weeks and months to look at those things beyond fatalities that lead to lost workdays for both our Soldiers and DA civilians.

We continue to evolve to meet the needs of our transforming Army. When asked, “What can you do to enhance readiness?,” we want to be there with the knowledge and tools to help. Knowledge IS power ... combat power! ★

*Joe Smith*

**BG Joe Smith**  
Director of Army Safety  
CG, CRC

**cannot be solved, enlarge it.”**

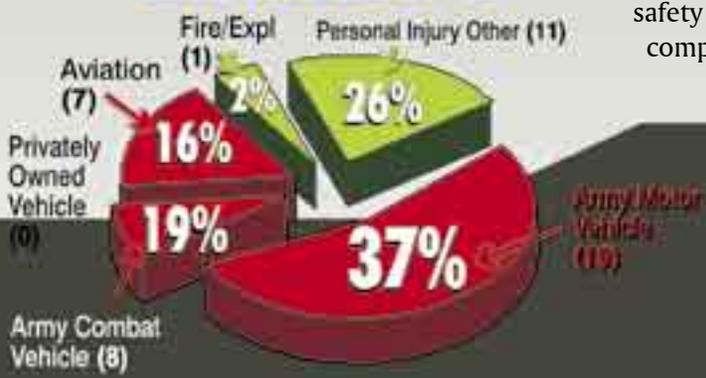
**Dwight D. Eisenhower**



We are taking a more holistic look at loss and providing you with a greater awareness of its overall impact on readiness. We also are accelerating our reports to you on what we know after a loss occurs. We are gearing up as your knowledge broker and data warehouse. By collecting loss information from disparate sources to distill and pass on, and along with our data mining

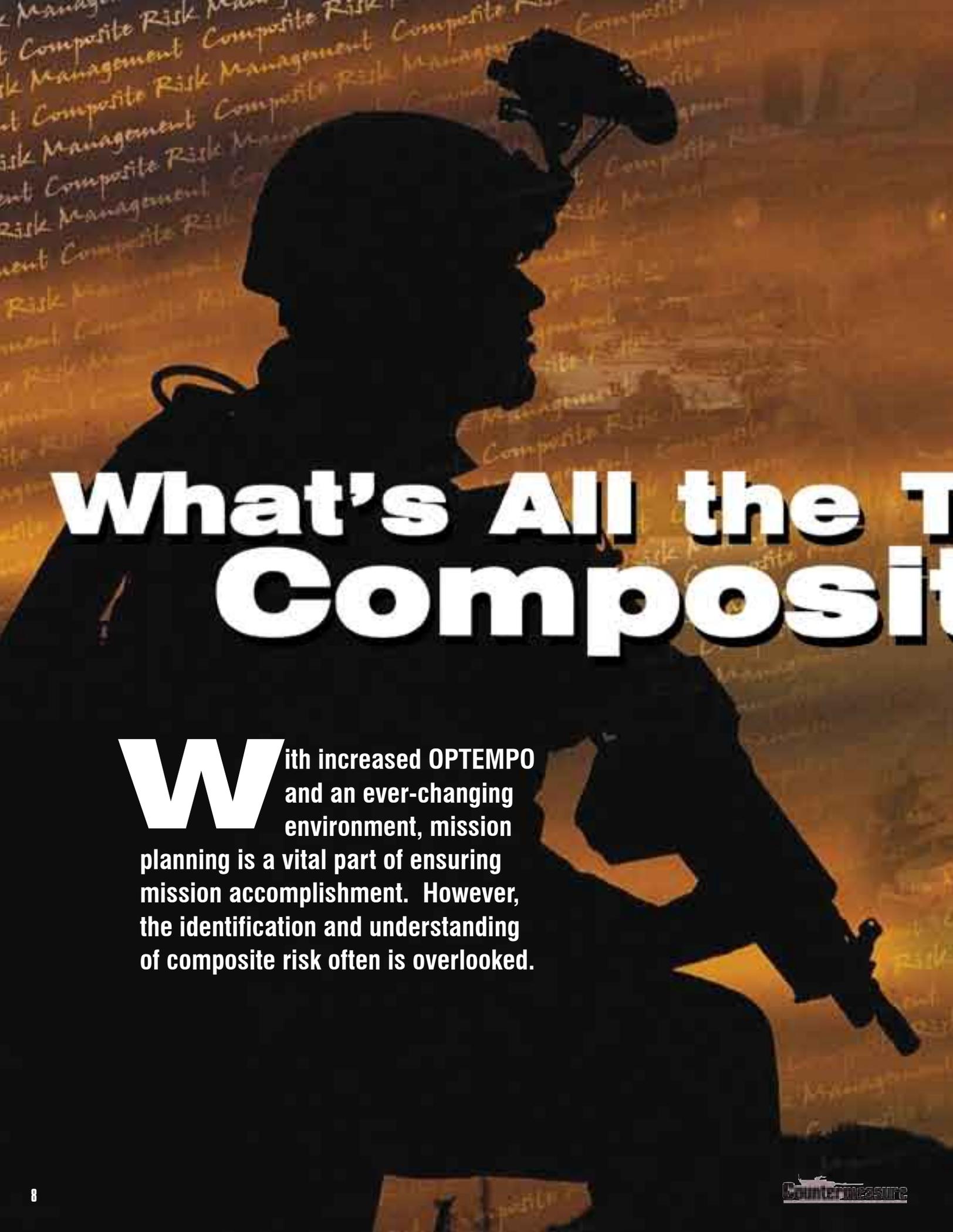
and selected combat situations where the specific cause or reason for the loss is unknown. The Combat Readiness Center will apply its own assets and leverage the capabilities of other relevant organizations to provide you with trends; lessons learned; applications for tactics, techniques, and procedures; and usable tools. Two items of note: We are not throwing the baby out with the bath water—safety is still a strong component of what we

**CENTCOM AOR-43**



**FY05 Soldier Accidental Fatalities**

As of 13 February 05



# What's All the T Composite

**W**ith increased OSTEMPO and an ever-changing environment, mission planning is a vital part of ensuring mission accomplishment. However, the identification and understanding of composite risk often is overlooked.

Risk management is an integral part of mission planning at all levels. As part of the planning process, leaders and staff sections continuously try to identify hazards. Historical accident data provide planners with tools to assist in identifying hazards and implementing controls to mitigate those risks. But what about tactical hazards? Does tactical risk outweigh accidental risk? Or is there a composite of both tactical and historical hazards that can better prepare Soldiers for mission execution?

A review of combat and accident fatalities across the Army since the beginning of the Global War on Terror reveals an alarming trend. Accidents caused 57 percent of all Army fatalities, while combat-related activities accounted for the remaining 43 percent. Soldiers and Army civilians understand combat loss is a potential

us well. However, we must emphasize the need to assess all risks associated with any given mission. CRM does just that and builds upon the risk management process by including combat threats with accidental hazards. Mitigating existing hazards is not possible if they are not first identified, and individual Soldiers are a vital part of this process. CRM presents the question, “What’s going to kill me and my buddies—the enemy or an accident?” The CRM process allows commanders to choose another course of action when faced with excessive composite risk.

How can identifying composite risk aid Soldiers and leaders during mission execution? First, you must understand hazard-based risks versus threat-based risks. For example, the decision to operate Army motor vehicles without requiring all occupants to wear seatbelts

# Talk About the Risk?

**MAJ RON JACKSON**  
Accident Investigator

**BRETT BLOUNT**  
Safety Specialist  
U.S. Army Combat Readiness Center

outcome during war. Accidental fatalities are a different matter altogether—we must consider accidental loss of life as preventable and without purpose or merit. We experience a decrease in combat readiness whenever a Soldier or civilian is killed or injured, regardless of whether the loss is due to accident or combat. Does it matter if the death or injury was the result of combat or an accident? No—we only see the turmoil that accompanies the loss.

Composite risk management (CRM) is the next step in protecting our readiness. CRM gathers all hazards into one package and enhances combat power by enabling leaders and individuals to identify risk in all endeavors that could cause injury or death. The Army adopted the 5-step risk management program years ago and incorporated this process into our warfighting curriculum. This process produces excellent results and serves

represents a hazard-based risk. Although the use of seatbelts in and of itself does not cause an accident, by not using seatbelts Soldiers run an increased risk of flail injuries or being ejected from the vehicle during an accident sequence. Threat-based risks are those risks where enemy action has been reported and generally can be categorized by color-coding routes and locations within the area of operation. These areas are designated as high, medium, and low, with each category representing a composite risk factor.

Here’s an example. A convoy is required to upload and transport equipment within Forward Operating Base (FOB) X and then, when finished, relocate to FOB Y. The entire mission is expected to take 6 hours, with 2 hours at FOB X and 4 hours en route to FOB Y. Soldiers are required to wear seatbelts at all times while operating in the FOB areas; however, the unit instructs the Soldiers not to use seatbelts once they depart

# Composite Risk Applications

**“CRM gathers all hazards into one package and enhances combat power by enabling leaders and individuals to identify risk in all endeavors that could cause injury or death.”**

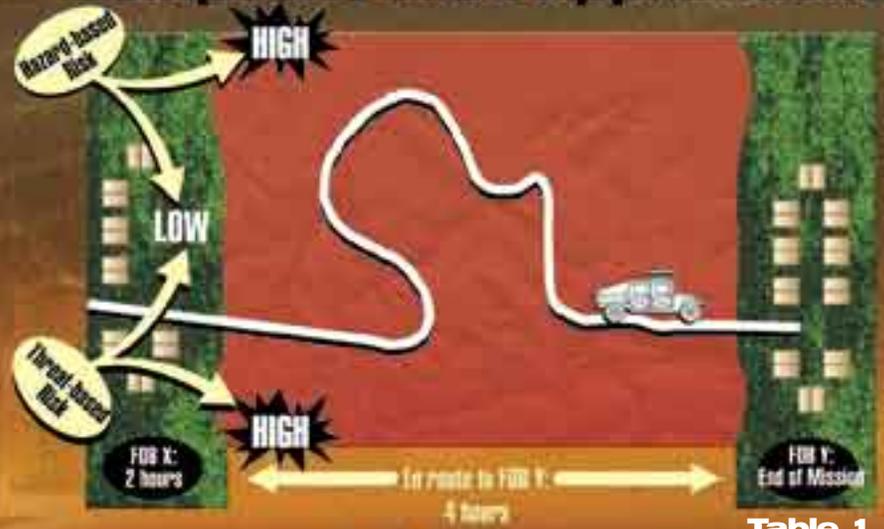


Table 1

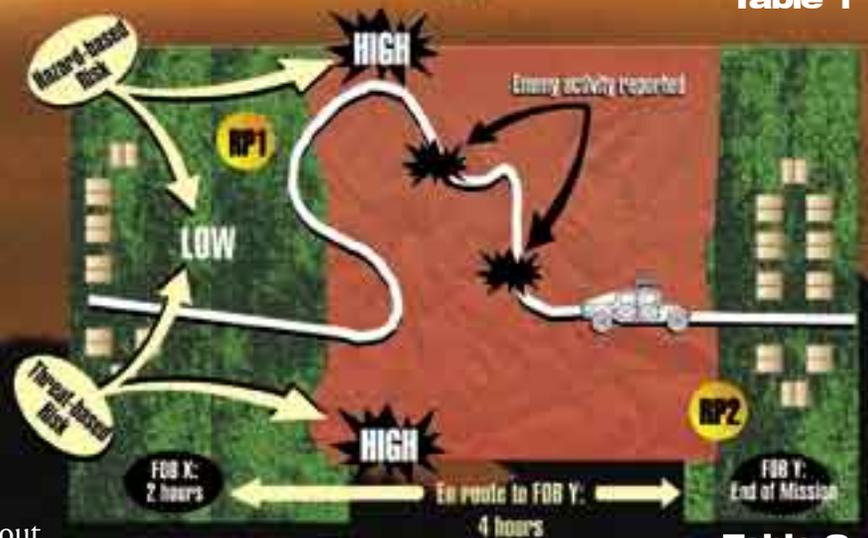


Table 2

the FOB. The decision to operate without seatbelts is based on the necessity to egress the vehicle in the event of an ambush. However, additional accidental hazards facing the vehicle occupants—accidental rollover or collision—are not considered. This decision places the convoy in a high risk-based operating environment, even without considering the tactical risks.

By analyzing the hazard-based and threat-based risks, we can determine that only certain areas of the route are known to have enemy activity. After applying threat analysis to route selection and mission planning, we can determine an alternate route or identify release points where the Soldiers can fasten or unfasten their seatbelts versus continually operating without them. As a result of combining these two elements, only a small segment, if any, of the mission might be conducted with a high hazard-based risk factor.

In the big picture, knowing and understanding composite risk assists leaders

and planners in applying risk management throughout the planning process. CRM provides adequate safety from the threat environment and also minimizes the impact of hazard-based risks encountered during operations. Combining these elements enables leaders to analyze mission parameters and helps to reduce all risk factors, thereby preventing Soldiers from continually operating in high risk-based profiles. Leaders should not limit risk assessment to combat threats; rather, they must expand their scope to include accidental hazards. Remember, CRM preserves combat power! 🚗

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# Route Clearance Saves Lives

**CPT CHRISTOPHER BUDIHAS**  
Brigade Assistant S-3  
2nd Brigade, 25th Infantry Division

Improvised explosive devices (IEDs) are to Soldiers in Iraq what booby traps were to Soldiers in Vietnam. The popularity of these devices has spread among insurgents for a number of reasons. It's easy for the enemy to plant these devices and blow them up from a distance. IEDs are relatively easy to construct from the ordnance found all over Iraq, left from the fall of the former regime. All it takes to build an IED is a simple radio or electronic controlled device such as a cell phone; a blasting cap or fuse; and some type of explosive. Also, our Army is bound by the highways and roads that move our supplies, personnel, and equipment. We are often predictable targets on main supply routes (MSRs) and alternate supply routes (ASRs).

One of the ways to prevent or reduce IEDs from being employed in your area of operations is route clearance. What is route clearance? Generally, route clearance looks something like this: driving at a slow rate of speed (10 to 20 mph), scanning for suspicious items along the route, and then dismounting to clear those suspicious items or areas. Soldiers also must

dismount and clear all bridges, overpasses, signs, culverts, and guardrails.

To protect the dismounted troops, it's important that the force clears the area of any hiding ambushers. Always clear far to near. Keep your Soldiers in overwatch to cover the clearing element. If the clearing element is engaged, the Soldiers on watch can react quickly. Also keep the enemy's other weapons in mind. A 152 mm artillery shell has an effective casualty radius of up to 50 meters, so it's important for vehicles to stay at least 150 meters or further from the area being cleared.

While in Iraq, our company performed route clearance on all major MSRs and ASRs in our sector at least once a day. We also had Iraqi National Guard (ING) troops execute route clearance operations at sunrise, mid-morning, 2 hours before sunset, and in the evening to supplement overall coverage of the main roads. Because of the frequency and thoroughness with which we cleared the roads, we were attacked zero times in 5 months and found less than 10 IEDs in our sector. The police, ING, and locals said we cleared the roads so often

that insurgents did not want to risk being caught.

Sometimes even the best screening can't prevent an IED attack, however. We were fortunate, but keep the following tips in mind. Soldiers in a vehicle hit by an IED should drive through and get out of the area, if possible. If the vehicle is disabled, the Soldiers should provide immediate perimeter security and then spread out to a safer-size perimeter.

Rehearse these patrols, because they will save the lives of your fellow Soldiers in the end—and maybe your own. IEDs have taken far too many of our Soldiers already. Be smart, be safe, and make it home from the fight! —

*Editor's note: This article originally appeared in its entirety under the title "So, You're Going to Iraq?" in the September-October 2004 issue of Infantry and was edited for content before its publication in Countermeasure.*

**Comments regarding this article may be directed to the editor at (334) 255-1218, DSN 558-1218, or by e-mail at [julie.shelley@safetycenter.army.mil](mailto:julie.shelley@safetycenter.army.mil).**

**The accident sequence**

The platoon was returning to their forward operating base when they received a follow-on mission to clear a route of possible enemy ambushes. It was midnight, and they proceeded along unimproved roads under blackout conditions. As the convoy began to cross an aqueduct, the platoon leader noticed a 20-foot drop-off into a spillway to his right. He did not feel it was necessary to pass this information on to the other vehicles in the convoy.

Behind the platoon leader, the driver and platoon sergeant in the trail vehicle were focusing on the vehicle in front of them. The seven Soldiers riding in the HMMWV's cargo area were scanning their sectors for enemy insurgents. They did not notice the drop-off as the vehicle began to cross the aqueduct. Their HMMWV drove too close to the aqueduct's edge and rolled over into the spillway. The vehicle landed upside down and trapped four of the seven Soldiers. Two Soldiers were freed and evacuated immediately, but the other two were not removed until a wrecker lifted the vehicle 3 hours later. One Soldier was fatally crushed by the weight of the vehicle.

**Why the accident happened**

- The platoon leader did not conduct a risk assessment for the mission, which should have included driving over unimproved roads during limited visibility.
- The platoon leader did not tell the other vehicles' crews about the drop-off.
- The driver and senior occupant were not scanning the road for hazardous conditions.

**Why the severity of the injuries**

- An armor plate added to the back of the cab during the unit's deployment was missing three bolts before the accident. Checking the plate for loose or missing bolts is not included in the normal preventive maintenance checks and services (PMCS) for the HMMWV. The plate broke off when the vehicle hit the bottom of the spillway and was lodged on top of the deceased Soldier.
- A 70-pound, locally manufactured armor plate that slid onto the cargo rail fell off during the

accident and landed on another Soldier. The unit fitted the cargo beds of their HMMWVs and LMTVs with these plates, but did not bolt them to the vehicles.

**Why the recovery took 3 hours**

- The platoon sergeant was trapped upside down in the passenger's seat. The vehicle could not be lifted until he was removed from his compartment. The unit did not have a pre-accident plan that listed who to call in case Soldiers were trapped in their vehicles. The brigade tactical operations center summoned an Air Force downed rescue aircraft team from a distant base, where the local firefighters had Jaws of Life equipment.
- The unit chain of command was on top of the aqueduct coordinating evacuation and security. Once the platoon sergeant was removed from the vehicle, medical personnel did not tell the wrecker crew it was safe to lift the vehicle. Instead, they were focused on treating the two remaining Soldiers who were trapped under the HMMWV. This lack of a central point of command and control overseeing the recovery and evacuation at the spillway's bottom resulted in a 40-minute delay in lifting the vehicle.

**Recommendations**

- Commanders and leaders must conduct a risk assessment for each mission, including follow-

**Why Didn't**

**LTC JOSEPH MILLER**  
 Ground Accident Investigator  
 U.S. Army Combat Readiness Center



on missions. They must conduct a composite risk assessment and incorporate tactical, threat-based risks with accidental, hazard-based risks. This composite risk assessment is a living document that will become the commander's running estimate for each mission.

- Convoy commanders must relay hazardous road conditions to their subordinate leaders. Losing a vehicle and Soldiers to a rollover is a loss of combat power that jeopardizes the mission.

- Senior occupants in the passenger seat must continually scan for hazardous road conditions. This is especially true while driving in blackout conditions, where night vision goggles can affect depth perception.

- Supervisors and drivers must ensure all armor, including add-on armor plates (level II) and locally manufactured armor plates (level III), are bolted securely to their vehicles. They must incorporate a bolt check in their before-operation PMCS.

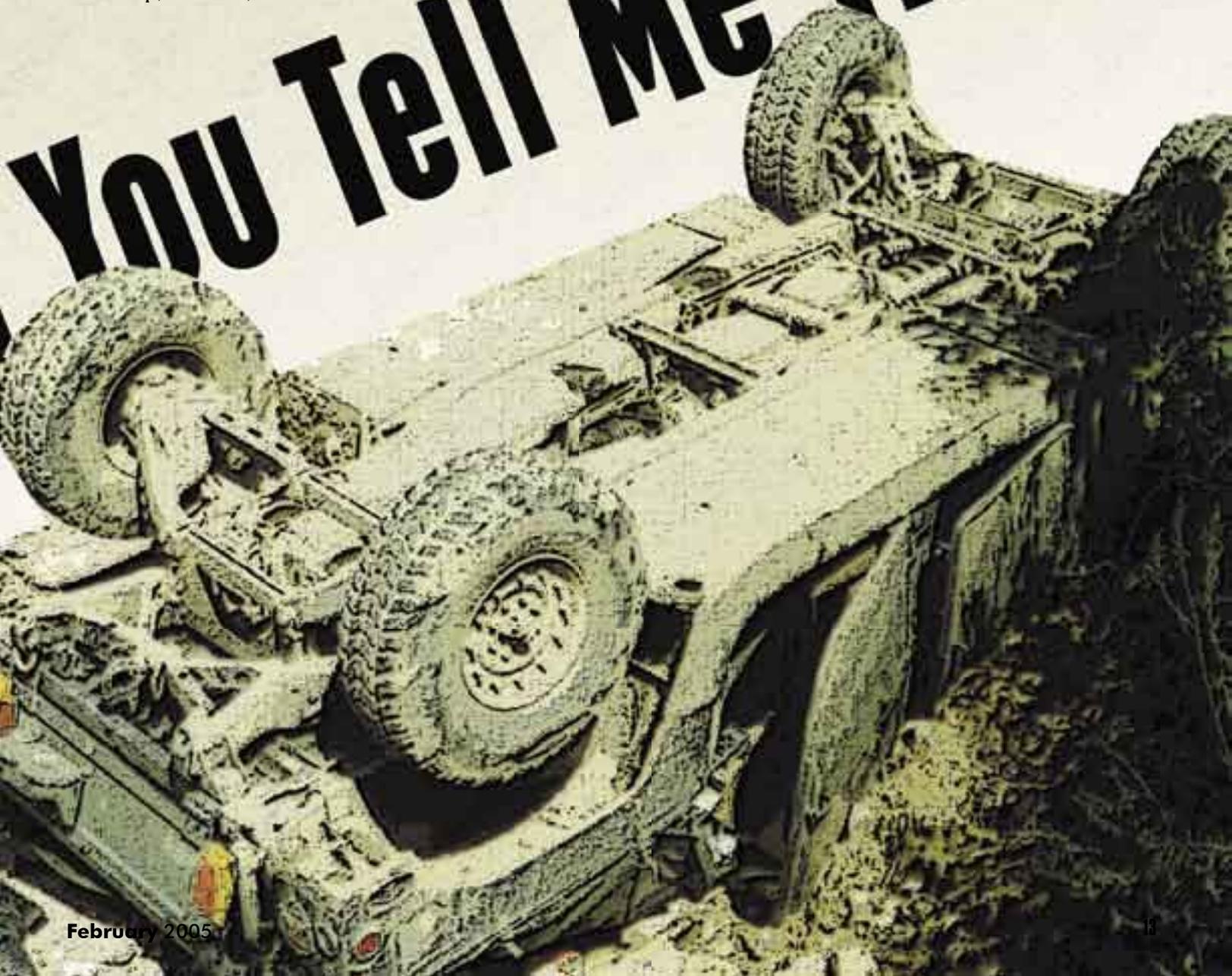
- Units at all levels must develop, rehearse, and

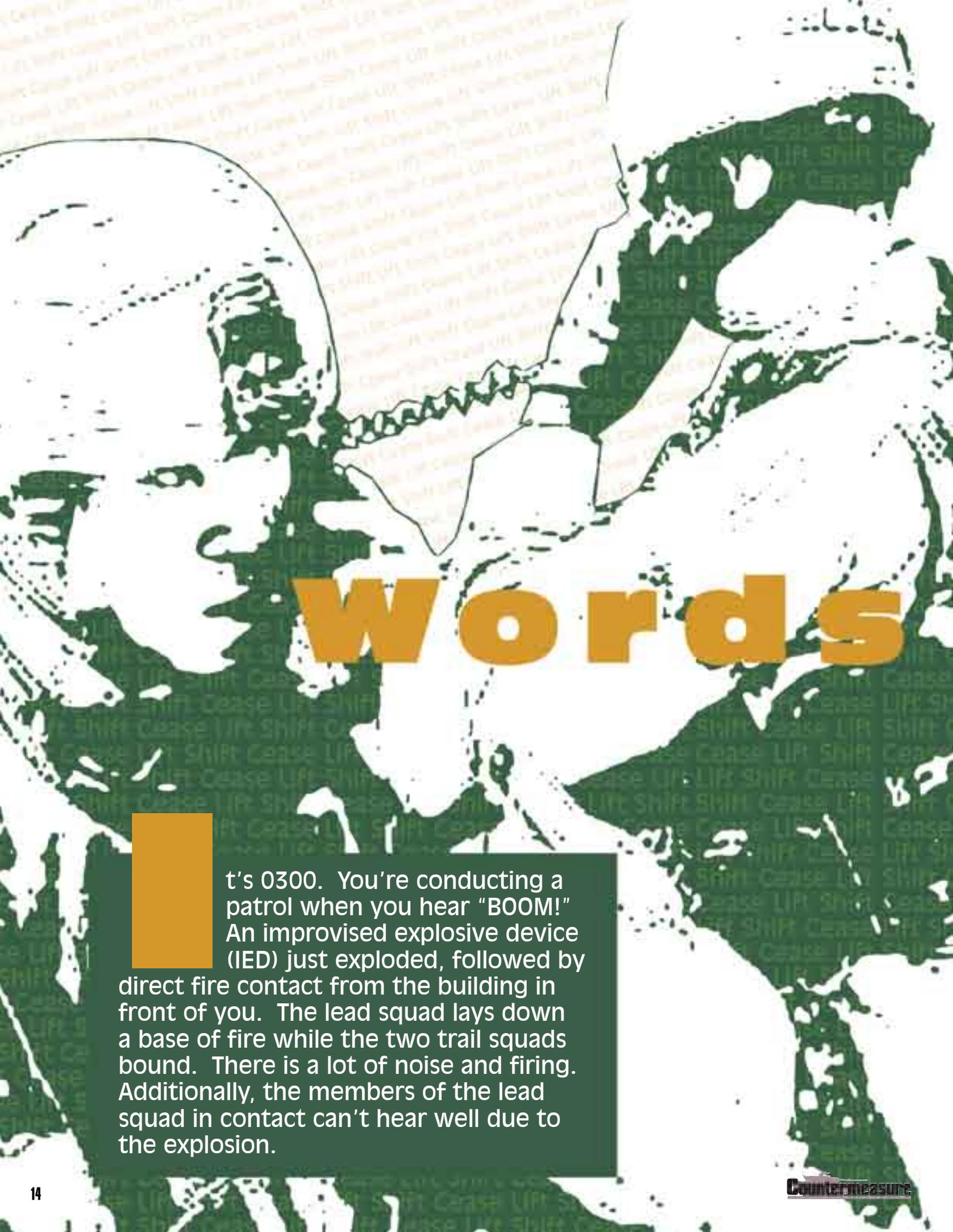
evaluate their pre-accident plan. The executive officer or battle captain of a unit without a pre-accident plan must think off the top of their head as to who should be notified, and vital support may be omitted unintentionally. A unit with a pre-accident plan, however, has a checklist to follow with all necessary points of contact listed. The pre-accident plan then can be passed to the next deploying unit.

Be safe and make it home from the fight!

Contact the author at (334) 255-3261, DSN 558-3261, or by e-mail at [joseph.miller@safetycenter.army.mil](mailto:joseph.miller@safetycenter.army.mil).

# YOU Tell Me That!





# Words

**I**t's 0300. You're conducting a patrol when you hear "BOOM!" An improvised explosive device (IED) just exploded, followed by direct fire contact from the building in front of you. The lead squad lays down a base of fire while the two trail squads bound. There is a lot of noise and firing. Additionally, the members of the lead squad in contact can't hear well due to the explosion.

You move with the assault element. As you approach the objective, you radio the base of fire squad leader and ask him to shift fire. The squad leader yells “shift fire,” but several of his squad members mistake his words for “lift fire”—the prearranged signal to stop firing—due to the noise and their damaged eardrums. As a result of this miscommunication, two of the assault element’s members are killed.

What went wrong? Did the base of fire confirm the signal? Could they see? Were they receiving effective fire? Here’s another question: Why did the platoon leader use “lift fire” instead of “cease fire?”

The bottom line is that words matter. About every 3 years we discuss the topic of “lift” and “shift” fires. It has come to our attention, and we believe it is necessary to highlight some key definitions to clear up a few fairly ingrained misconceptions.

Field Manual (FM) 101-5-1, *Operational Terms and Symbols*, provides common language for all Army forces to use. As long as these terms are used correctly, there are few problems.

However, when these terms are used incorrectly—or worse, when we don’t know we’re using them incorrectly—we run into problems.

Shift, lift, and cease fire are defined in FM 101-5-1 as follows:

**Lift fire**—In direct fire, “lift fire” is the command to raise the cone of fire so the beaten zone strikes the target, but the space between the target and the firing weapons is safe for maneuver by friendly forces.

**Shift fire**—“Shift fire” is the command to

move the cone of fire in a direction away from a friendly maneuvering force so enemy forces continue to be struck by the beaten zone at the same time the friendly unit moves.

**Cease fire**—“Cease fire” has two purposes. One is a command given to any unit or individual firing any weapon to stop engaging the target. The phrase also is given to air defense artillery units to refrain from firing on, but continue to track, an airborne object. Missiles already in flight will be permitted to continue to intercept.

You might be thinking this is just language and not important. But let’s look at some practical reasons for keeping your words straight. “Shift” sounds a lot like “lift,” and the two could be confused during noisy combat operations. We use “cease fire” on the range in training. Therefore, it makes sense to use the same terminology in combat that every Soldier hears in training. Also remember the value of visual signals in training. FMs 7-0 and 7-1 contain excellent guidance on visual signals.

# Matter

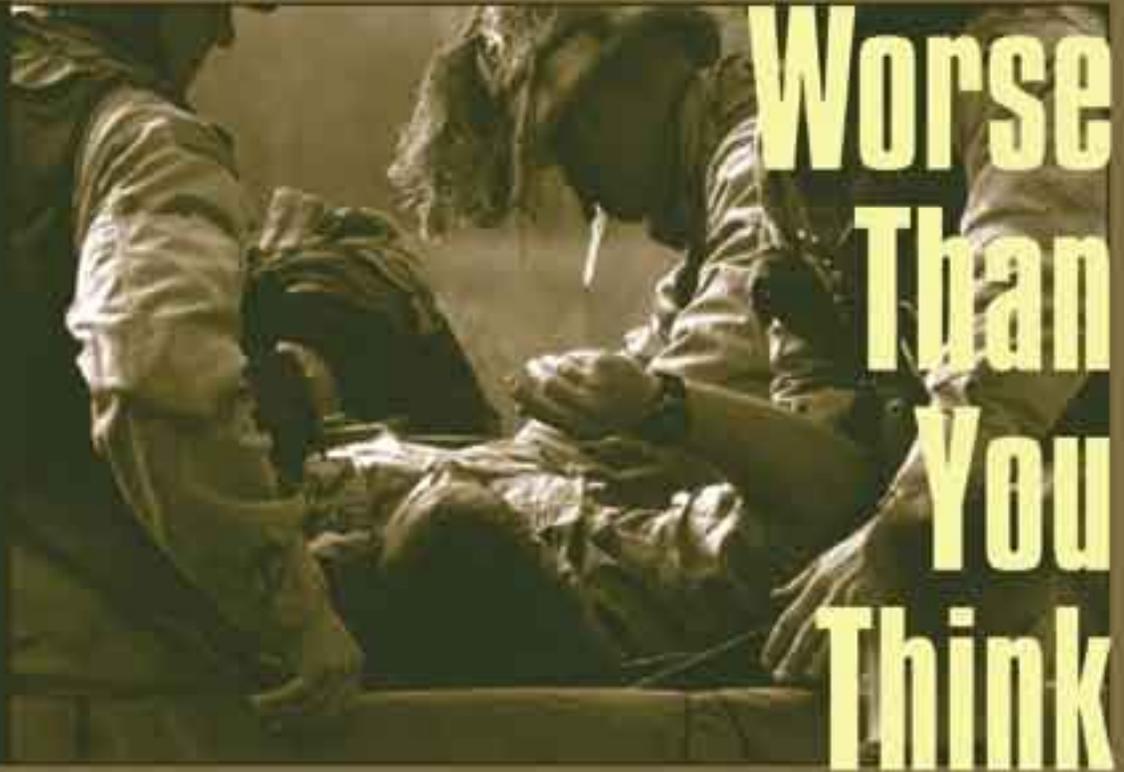
**MAJ MICHAEL ACORD**  
C Co., 2-11 Infantry  
Fort Benning, GA

Be careful with the words you choose, especially in combat. And remember to enforce the wearing of the yellow-red earplug during combat operations to protect your Soldiers’ hearing. Your life and the lives of your Soldiers depend on good communications. Words matter! 

*Editor’s note: This article originally appeared in its entirety in the May-June 2004 issue of Infantry and was edited for content before its publication in Countermeasure.*

**Comments regarding this article may be directed to the editor at (334) 255-1218, DSN 558-1218, or by e-mail at [julie.shelley@safetycenter.army.mil](mailto:julie.shelley@safetycenter.army.mil).**

**W**ith traumatic injuries, such as those seen in combat or vehicle accidents, it's hard to know which injured Soldier needs care first. However, sometimes the Soldier that looks okay is the one who's in most desperate need of help. Although the situation below didn't occur in combat, it happened on duty and under circumstances similar to many accidents in theater—a vehicle rolled over while the driver was speeding. Read on for the lessons this Soldier learned the hard way.



# Worse Than You Think

**ROBERT WOODHAM**  
Safety Specialist

It was a cold, windy day in November, and the snow was blinding as we drove downrange on an ammunition training mission. Everything was running smoothly, and the weather was actually normal for that time of year in Alaska. However, things were about to take a tragic turn.

As my partner and I were rounding a curve on a steep grade, we noticed a vehicle from another company had rolled over at an apparent high rate of speed. We saw that two young Soldiers—the vehicle's only occupants—had been thrown clear of the vehicle, which was beginning to burn. One of the Soldiers was trying to help the other, who was bleeding badly and screaming in obvious pain. I covered and dressed that Soldier's injuries as best I could. The other Soldier did not appear to be as badly injured and was walking and talking clearly. However, there were two things about him I will never forget. He had several deep cuts, but they weren't bleeding

badly. Additionally, his eyes were big, black, and vacant. However, since he was walking and talking, I didn't think he was hurt badly.

Our radio wasn't working well enough to give emergency personnel our location, so we loaded the men into our vehicle and headed for the emergency room. Both men were placed on gurneys and rushed inside. The doctor treated the screaming and bloody Soldier first. The other Soldier was told to wait.

My partner and I went back to work. Later that day we returned to the emergency room to check on the men. We were shocked to learn the Soldier who hadn't appeared badly injured died while waiting for treatment. The other Soldier was doing well in the recovery room.

I was crushed. What did I do wrong? What happened? I knew that man—we weren't great friends, but he was a fellow Soldier. One of the nurses took me aside and explained what had happened. Apparently the

Soldier died from internal bleeding, trauma, and shock. If the doctors had known he wasn't bleeding from his wounds, they would've treated him differently. I told the nurse I knew he wasn't bleeding, but I didn't think it indicated anything serious. A man died because I didn't know what to tell them.

I was a young, impressionable buck sergeant then. In the 30 years after that accident, I never failed to share this story with my Soldiers in the hope they wouldn't repeat my mistake. Many of you are in combat now and will see things even worse than I did that cold winter day. Learn the signs of shock and basic first aid for combat injuries. Take care of yourself and your fellow Soldiers, and remember that sometimes things are worse—much worse—than they appear. 

Contact the author by e-mail at [bob.woodham@us.army.mil](mailto:bob.woodham@us.army.mil).

**E**ditor's Note: The following narrative is one of the first stories submitted to the Combat Readiness Center's new Warrior Stories Web site. This site allows Soldiers to share their "war stories" and near-miss experiences with other Soldiers just like them, whether they are in combat or in garrison. Selected Warrior Stories submissions will be published in each month's *Countermeasure*. Please visit the site at [https://safety.army.mil/warrior\\_stories/](https://safety.army.mil/warrior_stories/) and share your story today!

# A Juggling Fool

ANONYMOUS

The mission was simple: drive to Baghdad from Kuwait. All necessary preparations were made, stop and rest areas were mapped, and alternate drivers were designated and appointed. However, one topic that was omitted from the safety briefing was "driver distraction."

I was tired when I began my 0300 to 0700 driving shift. I was only somewhat rested from riding in the HMMWV's backseat, waiting for my turn to drive. It was pitch black when I started driving, so when the sun came up between 0530 and 0600 my eyelids were beginning to get heavy. I fought to stay alert, and my "shotgun" (truck commander) was helping me by keeping the conversation up.

It was then that I realized I'd left my 30-round magazine lying on top of the SINCGARS. But it wasn't there now! I tried to find the magazine while at the same time attempting to drive and maintain a safe convoy distance between vehicles. I looked around the radio and between the gear shift level and floor for my magazine, but without success. In a blink of an eye, I looked up and saw that the vehicle in front of me was now on my left and someone was waving at me. I realized I'd inadvertently sped up and the

driver had swerved to the left so I wouldn't hit him. My highway juggling act had almost ended in disaster. I decided to stop looking for the magazine and focus on driving until the next stop.

The 30-round magazine was right where I'd left it—between the radio and the radio support bracket. I'm grateful that as I searched for the magazine I unknowingly steered slightly to the right. If I hadn't, I would've slammed into the vehicle ahead of me and compromised the mission or, even worse, put my life, my truck commander's life, and the lives of the other guys in jeopardy. I was already tired, and when my focus shifted to finding the magazine, I very nearly did just that. Imagine an accident in the middle of nowhere with a 57-vehicle convoy carrying more than 200 Soldiers (and my lost magazine!). That situation definitely is not acceptable anytime. Stay alert to stay alive! 🙌

Comments regarding this article may be directed to the editor at (334) 255-1218, DSN 558-1218, or by e-mail at [julie.shelley@safetycenter.army.mil](mailto:julie.shelley@safetycenter.army.mil).

# Weapons Safety:

On the Range, Around the Arms Room, and In Bet

**2LT ERIK JOHNSON**

Safety Officer, Task Force Protector

Camp Bondsteel, Kosovo

**W**eapons safety is a big issue in our Army today for every Soldier, whether in garrison or in theater. Negligent discharges and range accidents continue to kill and injure far too many of our irreplaceable troops. 2LT Johnson recognized this trend and wrote the following article for his unit's newsletter before passing it on to *Countermeasure*. Please read on for a good lesson in the "basics" of weapons safety.

## On the range

The first priority in range operations is to assign an officer in charge (OIC) and range safety officer (RSO). Ensuring safe operations on the range is the OIC's primary responsibility. The OIC, who is required to be qualified on the weapon system being fired, must be present during firing. Ultimately, the OIC determines when it is safe to fire, and also supervises misfire and cook-off procedures. The OIC also ensures standard communications are maintained during the range exercise.

A commissioned officer typically serves as OIC and designates the RSO.

The RSO may be an officer, warrant officer, or E6 and above. A qualified civilian also may serve as an RSO. The RSO must complete a range safety program of instruction developed by the battalion. Like the OIC, the RSO must be qualified on the weapons being fired. Both the OIC and RSO must be certified by range control and receive a safety briefing before assuming command of range operations.

Several important "housekeeping" items must be completed by the OIC before the range exercise begins. A current copy of the technical manual for the weapons being fired should be on hand and easily accessible for Soldiers who might encounter a problem with their weapon. All personnel must be briefed on MEDEVAC and cease-fire procedures, and vehicle operators must be trained in radio operations to call for help in an emergency. Medical personnel also should be briefed on the best route to the nearest hospital.

etween

At the conclusion of range operations, the OIC and RSO must ensure weapons are cleared of ammunition and that ammunition is turned in properly to the ammunition point. Once the range is cleared, it's back to the unit arms room for weapons turn-in. The arms room requires as much attention to detail and safety as the range.

### In between

Three primary dangers exist between the range and arms room: fratricide, physical injury, and poor weapons maintenance. Horseplay must be prohibited at all times. Weapons should be kept on safe, and Soldiers must consider their weapons as loaded at all times. Soldiers also should practice



“Weapons should be kept on safe, and Soldiers must consider their weapons as loaded at all times.”

### Around the arms room

High-explosive ammunition—along with flame-producing items such as blow torches, flammable clothing or linens, and combustible liquids including gasoline—should never be stored in the arms room. A serviceable fire extinguisher must be available in the arms room at all times. The extinguisher's chemical agent should be rated for the appropriate categories of fire that could erupt in the room—ABCD-category is the preferred chemical agent.

Ammunition containers should be marked properly. A complete inventory of items stored in the arms room should be on hand for review at all times. If hazardous chemicals are stored in the arms room, the appropriate hazard symbols must be posted in plain view.

safe weapons lifting, carrying, and balancing techniques, which are especially important with heavier weapons like the medium machine gun. Rest halts should be scheduled and taken on time; heavy loads should be rotated among the unit's troops. A weapon should never be used as a supporting or pulling device, and muzzles should be covered to prevent clogging. The OIC and RSO must establish a weapons lubrication policy and enforce cleanliness standards.

Working with weapons is an inherently dangerous job. Consider all the risks involved, and perform your missions with due precaution. By doing so, you will help ensure the safe return home of not only yourself, but your fellow Soldiers as well. Be safe! 🖱️

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No weapons of mass destruction may have been found in Iraq, but that doesn't mean they're not there. Nuclear, biological, and chemical (NBC) weapons from many different countries continue to proliferate throughout the Middle East and Southwest Asia.



The possibility of an NBC attack is an ever-present threat to our Soldiers in these regions. As such, it is very important that Soldiers know how to inspect, clean, and store their respirators in the event of an NBC attack.

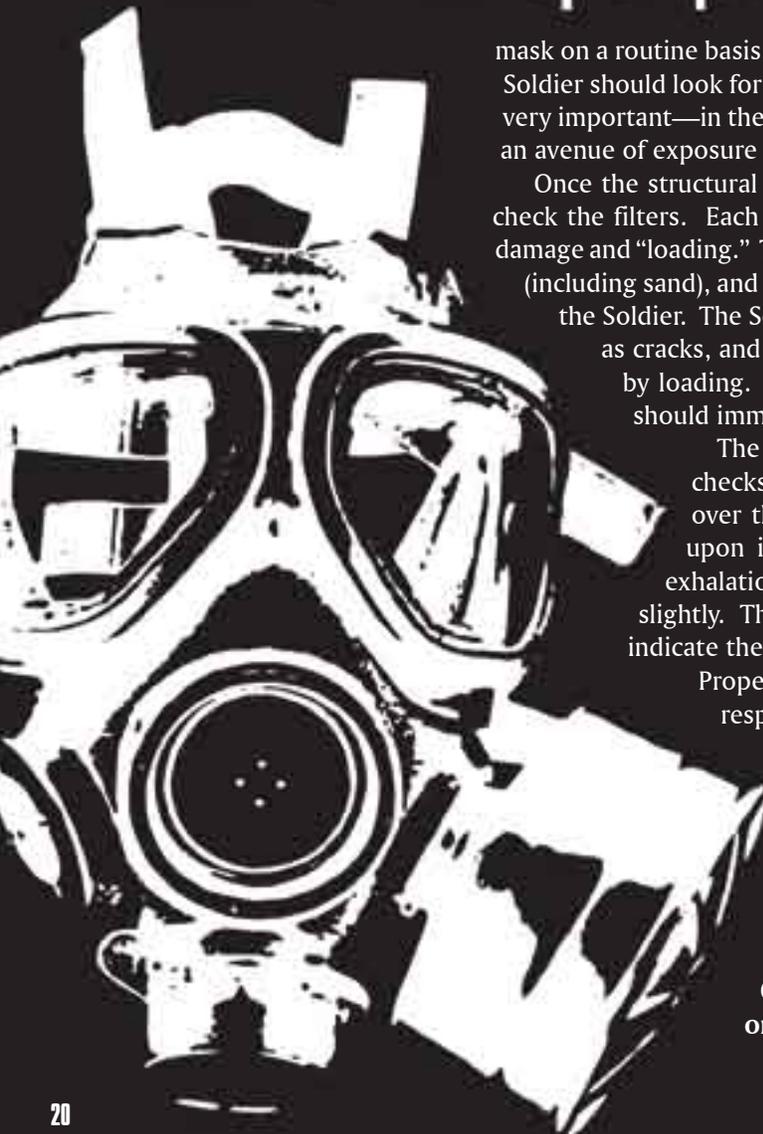
Every Soldier in the Iraq and Afghanistan theaters is issued NBC protective equipment prior to their deployment, including a mask and respirator. The full-face negative pressure respirator is the most common respirator found in theater. With this type respirator the Soldier's face is covered with a shield, but they must use their own lung power to bring air through the filters. These filters allow the user to breathe "clean" air by removing specific contaminants from the air that passes through the filter cartridge.

The desert environment in Iraq and Afghanistan can cause problems with NBC equipment. Soldiers must ensure they keep their respirators protected from the environment. Filters can become clogged with sand, which reduces their effectiveness in an attack situation. Besides clogging, the filters also are susceptible to environmental damage, with the end result being a reduction in their effectiveness. Basically, wearing a respirator with a damaged or clogged filter is like not wearing any protection at all.

How does a Soldier keep their respirator safe? First, the Soldier must inspect their respirator and

# Check Your NBC Equipment

**LINDA ORDING**  
Safety Specialist  
Corpus Christi Army Depot, TX



mask on a routine basis, perhaps daily. All the straps should be in good repair, and the Soldier should look for any cracks or breaks in the plastic and face shield. This step is very important—in the event of an NBC attack, those cracks and breaks could provide an avenue of exposure to the Soldier.

Once the structural integrity of the mask has been inspected, the Soldier should check the filters. Each filter comes with a plug that protects it from environmental damage and "loading." The filter is designed to hold a specified amount of contaminant (including sand), and anything over that load will result in the contaminant reaching the Soldier. The Soldier should inspect the filter for visible signs of damage such as cracks, and also breathe through the filter to determine difficulty caused by loading. If the respirator or filter is damaged in any way, the Soldier should immediately be issued a new respirator.

The Soldier also should perform a fit test along with the above checks. The Soldier should put the respirator on, place their hands over the cartridges, and inhale. The mask should collapse slightly upon inhalation. The Soldier then should place a hand over the exhalation valve and exhale, at which time the mask should bulge slightly. There should be no leakage around the mask's edges—no leaks indicate the Soldier is wearing the mask properly.

Proper storage, in combination with these checks, will ensure the respirator provides the best possible protection for the Soldier wearing it. If you're not sure how to correctly perform these checks or have questions about storing your equipment, ask your unit's NBC officer or NBC NCO. NBC equipment is a vital part of bringing our Soldiers home safe from the fight. Make sure yours is up to standard!

Contact the author at (361) 961-2326 or by e-mail at [linda.ording@us.army.mil](mailto:linda.ording@us.army.mil).

# Samurais Fight the Safety Battle

**CPT DANNY REICHARD**  
Commander  
HHD, 35th S&S BN  
Camp Zama, Japan

**M**ost leaders will tell you that one of the most difficult parts of their job is getting safety through to their young Soldiers. To combat this challenge, the 4-23 Infantry in Fort Richardson, AK, implemented the Unit Mission Protection Council (UMPC) in 2004 with much success. The program involves young Soldiers in the risk management process and gives them responsibility for their own safety. Building upon the achievements of the 4-23, the 35th Supply and Service Battalion at Sagami Army Depot, Japan, developed their own version of the UMPC—the Samurai Protection Council (SPC). CPT Danny Reichard, commander of the 35th's Headquarters and Headquarters Detachment, discusses the SPC's achievements in the article below.

The SPC is described best as a “council of Soldiers designed to protect Soldiers.” We accomplish this by fostering “life skill” changes within each of our Soldiers. These changes arm every Soldier with the “weapons” to protect themselves both on and off duty. For example, we teach our Soldiers—particularly the junior enlisted—the value and necessity of conducting risk assessments for off-duty tasks. Whether the assessment is performed mentally or formally written out, the idea is the same—every task has risks, and they must be recognized. This “protect myself” mindset is necessary whether a Soldier is

on the battlefield in a convoy or simply changing a light bulb at home.

The SPC is involved in conducting risk assessments for all operations conducted by the unit. The SPC meets collectively each month and reviews the unit's quarterly training brief for potential hazards. After the review is complete, the council begins risk assessments for each of the upcoming training events and identifies risk mitigating actions. Company leadership then steps in and gives the council recommendations based on the previously recognized hazards and risk mitigating actions.

The SPC also performs risk assessments for barracks, Government housing areas, and Morale, Welfare, and Recreation grounds and facilities frequented by Samurai Soldiers. Any hazards or findings are discussed during the SPC's monthly meetings and formally documented. Recommendations then are forwarded to the appropriate office for resolution.

It's difficult to pinpoint when an SPC recommendation specifically prevented an accident. However, our unit has gone over 365 days without a DUI. We haven't experienced any military vehicle accidents since the SPC began, nor has a single Soldier been injured in a training accident. These facts show that Samurai Soldiers are thinking safety. These programs work—try one in your unit today! 🚗

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**D**o you love to roll on the throttle, dig deep in the turns, and feel the road on a motorcycle? What about driving? Do you enjoy cross-country trips, or do you get a kick out of squeezing every ounce of performance from your car? How about sports? Do you like team sports such as basketball, football, or soccer? Or are you into extreme sports such as snowboarding or Moto-X? How about when you're at home? Do you enjoy partying, relaxing in your pool, or firing up your barbecue? And on the more serious side, do you work at a job where the real threat is not enemy action but an accident? Wherever you are and whatever you enjoy doing on your off-duty time, *ImpaX* is about getting the best out of life

that, *ImpaX* is the perfect place for you to talk about how you've learned to enjoy your favorite sport or off-duty activity safely. *ImpaX* is also a great place to share your stories if you've had a close call and gained some good lessons learned. After all, why not share the wealth and keep someone else from getting injured? Just e-mail your story to **robert.vanelsberg@safetycenter.army.mil**. Don't worry if you're not a trained journalist—just send the facts as if you were sharing your experience with a friend.

*ImpaX* is for you! It was created and designed with you in mind. If you're a member of the Army family and want to try *ImpaX* on for size, send your e-mail request to **sharrel.forehand@safetycenter.army.mil**, or mail your request to: U.S. Army Combat Readiness Center, ATTN: *ImpaX*, Bldg. 4905, 5th Avenue, Fort Rucker, AL 36362-5363. 

# *impaX* IS FOR YOU!

while avoiding the painful accidental "impacts" that can ruin your day.

So exactly what is *ImpaX*? *ImpaX* is the Army's newest safety magazine and is intended to complement *Flightfax* and *Countermeasure* by addressing non-tactical safety themes such as driving, sports and recreation, and home and industrial safety. Because vehicle accidents pose the biggest threat for accidental death to the Army's people, *ImpaX* will place a special focus on driving safety. Inside the magazine you'll see automotive safety articles including crash test results, proper vehicle maintenance, driver skill improvement, new safety developments, and more.

Because *ImpaX* is not just a magazine for the people of the Army but also by them, it will be chock-full of true-life stories from the people you rub elbows with every day—fellow Soldiers, family members, and Army civilians. Because of





### Class C

■ Two Soldiers suffered fractures to their legs when the Strykers they were driving collided during a mission in blackout conditions. One of the Strykers rear-ended the other during the accident sequence. Both Soldiers were hospitalized for their injuries.



### Class A

■ Soldier was killed when the HMMWV he was riding in overturned. The Soldier was ejected from the vehicle when its door separated during the rollover. The HMMWV was operating in blackout conditions at the time of the accident.

■ Soldier suffered fatal injuries when the HMMWV he was driving rolled over. The HMMWV was towing another HMMWV down a hill when it jackknifed, ran off the roadway, and overturned. The truck commander suffered minor injuries.

■ Soldier died when the 5-ton truck he was riding in ran off the roadway and overturned into a 15-foot culvert. Two other Soldiers in the truck suffered serious injuries. The Soldiers were returning to base from a rest and relaxation break at the time of the accident.

■ Soldier was killed when the armored non-tactical vehicle he was riding in ran off the roadway and overturned. The foreign contractor

driving the vehicle reportedly lost control of it, causing the accident.

■ Soldier suffered fatal injuries when the up-armored HMMWV he was riding in overturned. The driver swerved the vehicle to avoid colliding with a truck immediately before the rollover. Two other Soldiers in the HMMWV were injured. The deceased Soldier was acting as the vehicle's gunner and was ejected during the rollover.



### Class A

■ Two Army contractors were killed when an explosion occurred in the propellant storage bunker in which they were working. No other details were reported.

■ Soldier collapsed and died near the finish line of his deployed camp's Army Ten Miler. The Soldier was participating in the ruck walk portion of the event. Numerous medical personnel, including doctors, were on site and administered first aid to the Soldier, who was airlifted to a military hospital. The Soldier was pronounced dead at the hospital.

■ Soldier collapsed and died during the Army Physical Fitness Test. The Soldier was transported to the local medical center, where he was pronounced dead.

■ Soldier suffered fatal gunshot wounds when he was caught in the crossfire during a firefight. The Soldier was wounded by enemy fire and attempting to return to a friendly position when he was hit by 5.56 mm (M16) rounds.

### Class B

■ Two of Soldier's fingers were amputated when a munition exploded in the back of a HMMWV he was clearing out. An M42 submunition is suspected to have detonated and caused the injury.

■ Soldier's fingers were amputated when an unidentified munition exploded in his hand. The Soldier was clearing bunkers when another Soldier handed him the metal object, which subsequently detonated.

### Class C

■ Soldier suffered fractures and other injuries to both feet when a HMMWV ran over them. The Soldier was acting as a ground guide for the HMMWV at the time of the accident. The accident was attributed to the Soldier walking too close to the front of the vehicle.

# Transformation of U.S. Army Safety Center (USASC) to the U.S. Army Combat Readiness Center (USACRC)

## Why Are We Changing?

★ The current Army safety structure and policy is not postured to meet the challenges of a transforming Army at War and the new Soldier generation.

★ Our immediate action is needed to attack the climbing fatality rate, both accidental and combat, using the expertise at the U.S. Army Combat Readiness Center and other agencies in the Department of the Army.

★ Currently, there is no normalized collection of threat data in a holistic, composite manner, which allows lessons to be immediately learned and rapidly applied across the Army.

★ Our transformation will allow focus on sustaining readiness with a cultural shift to managing all facets of risk and hazards at every level by improving training in Composite Risk Management, implementing interactive Web-based tools, marketing personal messages, collecting mishap data, and developing predictive analyses through data mining.



U.S. ARMY COMBAT READINESS CENTER

Making a Difference  
for the  
**Soldier.**