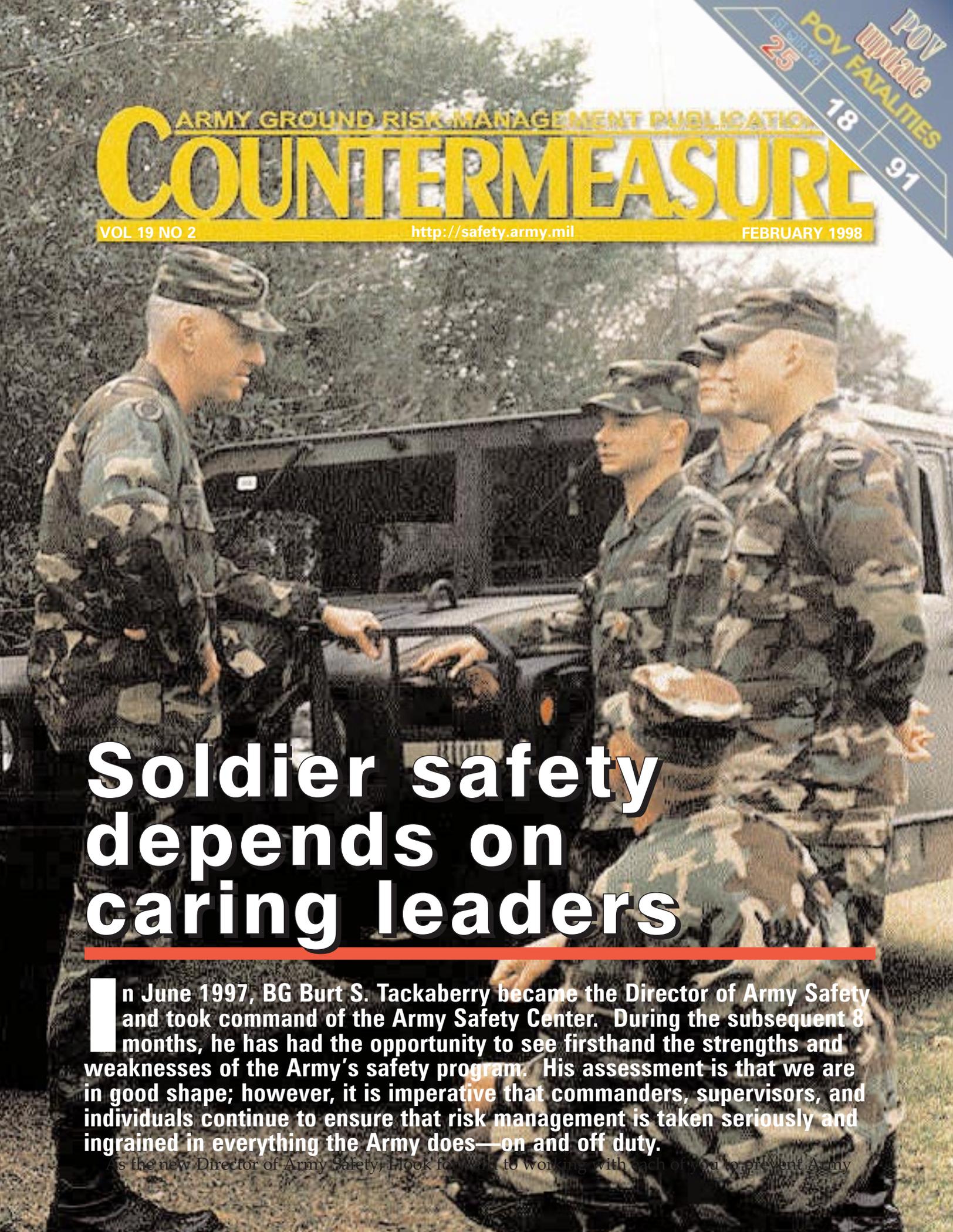


POV update  
POV FATALITIES  
18 91  
25

ARMY GROUND RISK MANAGEMENT PUBLICATION

# COUNTERMEASURE

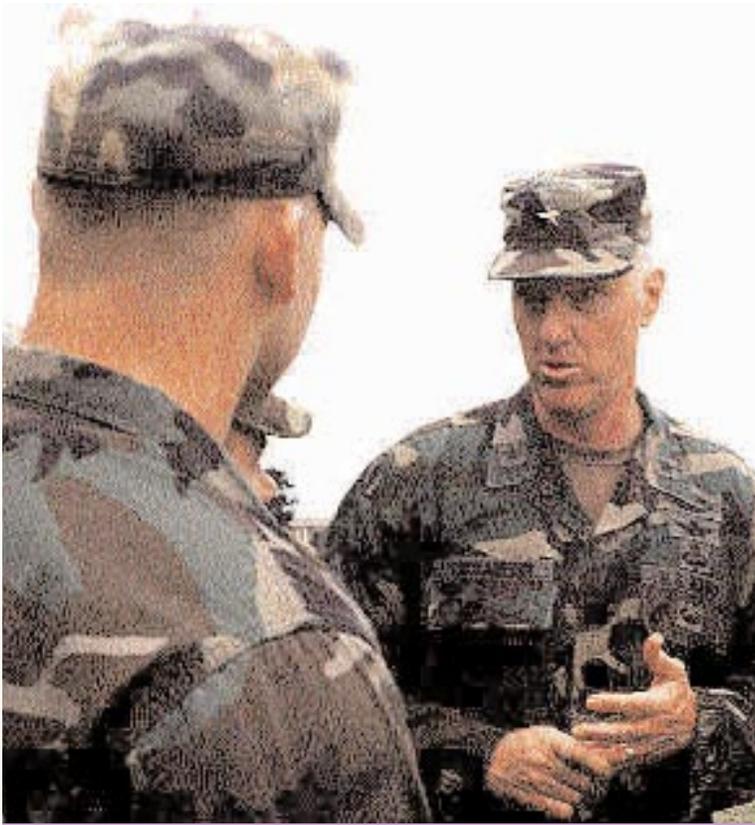
VOL 19 NO 2 <http://safety.army.mil> FEBRUARY 1998



## Soldier safety depends on caring leaders

**I**n June 1997, BG Burt S. Tackaberry became the Director of Army Safety and took command of the Army Safety Center. During the subsequent 8 months, he has had the opportunity to see firsthand the strengths and weaknesses of the Army's safety program. His assessment is that we are in good shape; however, it is imperative that commanders, supervisors, and individuals continue to ensure that risk management is taken seriously and ingrained in everything the Army does—on and off duty.

As the new Director of Army Safety, I look forward to working with each of you to prevent Army



**“A good leader identifies the necessary standards and gets his or her soldiers to understand and maintain those standards. At the same time, a good, caring leader creates a climate of caring leadership in which soldiers protect one another by taking action to prevent accidents. This type of environment starts at the top and must filter down throughout the entire organization.”**

accidents. Of course, I am talking about all aspects of safety – ground, aviation, and weapons. I am impressed by the effectiveness of the Army’s overall safety programs. It is commander business, and they do it well. All of us – in the units, at the installations, in the MACOMs, and at the Safety Center are proud of our safety record. The last three fiscal years, FYs 95, 96, and 97, were the Army’s best years on record. We have to be proud of that record and know that the tremendous efforts under way within our Army safety programs are working. Therefore, my challenge is to keep up the momentum of things that have been working and continue to look for new ways to protect our force.

I believe it is simply soldiers caring about soldiers and getting personally involved in their safety and welfare. It is individual soldiers caring enough about their own professional performance and the performance of other members of their unit to protect themselves and their fellow soldiers. It is leaders caring enough to get directly involved to fix accountability, tighten supervision, and set high standards of performance.

#### **A Word to Leaders**

The heart of the Army is its people, and we cannot afford the tragic loss of even one soldier. Leaders must be involved in continuously evaluating the status of safety programs and control measures as well as the experience level of assigned personnel. Managing inherent risks and mitigating hazards must be the primary concern in all that the unit does and factored into all mission-related tasks.

I have always said that if you are in a good unit, you train well, train hard, maintain hard, do it safely, and care for soldiers. And if you truly care for soldiers, they will put 100 percent back into the unit. And that 100 percent will manifest itself in the quality maintenance of the aircraft or the vehicles, and soldiers will do their job safely. It’s a sort of reciprocal do-loop. You can see that in many organizations in the Army – ground units or aviation units, or any units that have an excellent safety track record.

A good leader identifies the necessary standards and gets his or her soldiers to

understand and maintain those standards. At the same time, a good, caring leader creates a climate of caring leadership in which soldiers protect one another by taking action to prevent accidents. This type of environment starts at the top and must filter down throughout the entire organization.

Be alert! Awareness of an unsafe practice or attitude is the first step in preventing an accident. But awareness alone is not enough.

Someone must care.

Leaders must care enough to step in and take action before the accident happens. Because every time he does not correct a situation that is dangerous or wrong, he has just set a new standard. That is why establishing standards, ensuring everyone knows and understands the standards, and then enforcing those standards are very, very important. If you ingrain risk management into the soldiers, then when there is no leadership present, soldiers will do the right thing. They are going to look at a situation, look at what is required, and use the risk management process of identifying hazards and implementing controls.

Your soldiers want to do well, and I use this as an example: It is three in the morning, pouring down rain, freezing cold, they will put the refuel point in, and they will do it right and do it safely. Without caring leadership—it is three in the morning, pouring down rain, freezing cold, and the refuel point will not get in or if it does, it will not be safe or done professionally. So, genuine caring leadership goes a long way.

Caring is a two-way street. If leaders take care of their soldiers, soldiers will return that care by exhibiting loyalty to the unit, personal discipline to standards, and loyalty to and concern for their peers. It is absolutely true. Subordinates take care of you more than you think. They take care of you in safety, they take care of you in speaking well of the unit, and they take care of you by not letting other soldiers do dumb things; they give more than a leader can

ever give back.

That's the thing about it: If you treat them well, lead them well and fairly, then they are going to produce for you.

### **Protect the Force Through Safety**

Protecting the force is working! The Army has a great safety program. We are doing a magnificent job! Because of quality leadership, the Army was able to reduce the number of

fatalities from 194 in FY 96 to 146 in FY 97. We will not be satisfied until not a single soldier dies in an accident that could have been prevented.

Privately owned vehicle (POV) accidents are a major concern for Army leadership. Privately owned vehicle accidents are the number one killer of our soldiers. Just in POV accidents alone, we are losing almost an infantry company a year. Ninety-one of the 146 soldiers killed last year died in POV accidents.

Personnel injuries are the second leading killer of soldiers. In accidents that injure people,

personnel injuries are number one. The types of accidents that are hurting people: combat soldiering, which is tactical parachuting, infiltration/assault, or patrolling; sports, with basketball having the most accidents; and slips, trips, and falls registering third.

We have done well with our Army combat vehicles (tracked vehicles). There were 49 accidents in FY 97. We have a great record in the armor community and there are several reasons why in my opinion. One, when they take tracks out, they go out as units with leaders involved and present. On the other hand, our Army motor vehicles (wheeled vehicles), most often move out by themselves, not in formation, and without supervision. This means that before they leave the motor pool and go out on a mission, soldiers must be thoroughly, completely briefed on what they can and cannot do.

I understand we all operate in a high-otempo environment and our plates are full in a resource-constrained Army. That is the world

**I want to bring this to your attention: We have recently experienced a rise in fatal POV accidents. I urge you to watch this area closely and continue to press for safe driving practices.**

**—BG Burt S. Tackaberry  
CG, U.S. Army Safety Center**

we live in, that is the Army way. I fully believe that as we continue to make our Army safer, we must institutionalize the risk-management process to the point that it becomes second nature. Only then will our Army be a safer place for our soldiers to live and work.

### Risk Management

Meticulous attention to detail is imperative, and safety is a 24-hour-a-day state of mind. If young soldiers are taught risk management, the unnecessary loss of life will be reduced. Risk management must be instilled initially through repetition until it becomes instinctive and intuitive.

Our goal is to make risk management a routine part of planning and executing operational missions. The most important element is the sharing of

information. It is vital at every level of command, from Private to General. Using dialogue with the field is the proactive approach to safety. TALK!

The Safety Center tries very hard to get the information out to the field, so we can help commanders make a better, more-informed decision. What I mean by that is the Safety Center has tremendous accident data from the entire Army population. Fort Knox may not know about the accidents that are happening at Fort Sill or other installations. We need to share that information, identifying systemic problems so the Army can identify specific operational risks and take measures to reduce or eliminate those risks. Soldiers can learn from the errors that other individuals have encountered and recognize and control the hazards in the future.

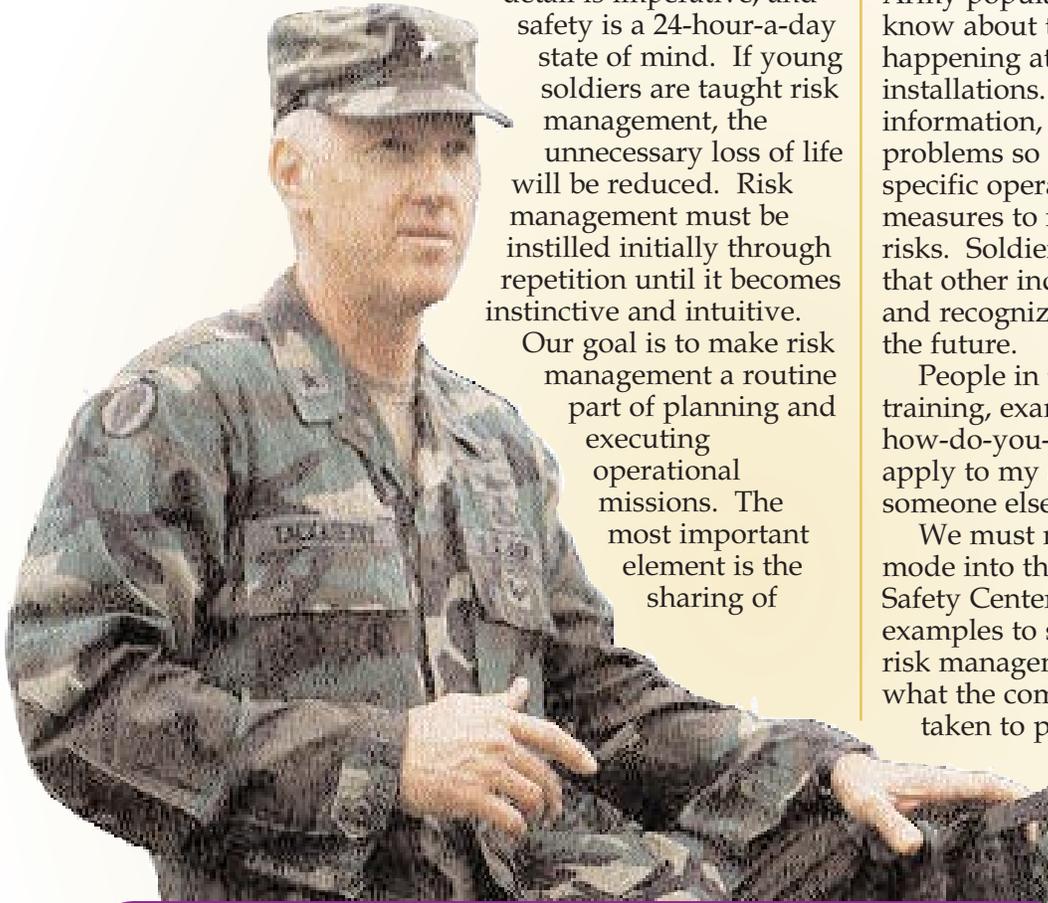
People in the field are asking for training, examples, briefings, books on how-do-you-do-this stuff, how does it apply to my situation, and where has someone else done it successfully?

We must move from the reactive mode into the proactive mode. The Safety Center is developing proactive examples to show situations in which risk management was used successfully, what the commander ran into, actions taken to prevent an accident, and the

results. We must get soldiers thinking about what can go wrong and what actions should be taken to control the risk — anticipation of problems — that is risk management.

### One Army—Same Standards

Tough caring is standard-making and enforcing those standards. Enforcement of standards develops discipline in the unit and in the soldiers, and disciplined soldiers are safe soldiers. The key to



## Risk management pointer

- Identify hazards
- Assess risk of each hazard
- Make risk decisions and develop controls
- Implement controls
- Supervise (monitor/enforce controls)

disciplined soldiers is for leaders to take an interest and take action against violations of established procedures and disregard for safe practices. Leaders must show that they will not tolerate a violation. Eliminate the “that’s the way we’ve always done it” mentality and get back to doing things right—to Army standards.

Leaders must talk standards. There are standards in training, there are standards in physical fitness, there are standards in the motor pool, and there are standards in safety. To have a proactive safety program, leaders must set clear, concise standards and enforce those standards. Standardization is proactive safety.

I have a saying: Don’t lower the bar, set it higher. It’s called standards. If

you throw a rope up on a hill and put five people on it, there is a tendency for them to all pull down, they will never pull up. One might try to pull up, but the other four will pull that one who wants to raise the standards back to the status quo. Good leaders, through caring leadership, can change a unit so they will all pull in the same direction.

Training to standard produces skilled, disciplined soldiers. And skilled, disciplined soldiers are professional soldiers who accept responsibility for the safety of themselves, the safety of others, and the protection of Army equipment. Soldier safety depends on caring leaders. It is everyone’s responsibility. ♦

## Keeping safety on track

**S**afety continues to be an area of concern throughout the Army. Significant progress was made in FY 97. To continue on this course, FY 98 will require the dedicated efforts of all members of the Army team.

To accomplish this feat, we must continue our initiatives to integrate risk management into everything that we do by practicing risk-management techniques until they become intuitive, and accepting responsibility for our actions or lack thereof. Doing so will provide us with the best chance of keeping safety on the right track as we face the tough challenges ahead in FY 98.

To assist us in effectively communicating to our readers, we would like to publish a brief synopsis of successful safety programs or commendable ideas and techniques for helping plan and implement an effective and efficient safety program. This information could be useful during command and staff meetings or any other meetings where safety issues may be discussed.

Speak up and tell us about experiences, good-news stories, and good ideas that are working in the units. If we use the recommendations/lessons learned in a



Countermeasure article, we will send the individual a “Safety Center Coin” with his or her name engraved.

Send written material to Commander, U.S. Army Safety Center, ATTN: CSSC-OSA-G (Countermeasure), Bldg. 4905, 5th Avenue, Fort Rucker, AL 36362-5363. FAX the information to the attention of Ms. Paula Allman at DSN 558-9528 (334-255-9528), or send it by e-mail to [allmanp@safety-emh1.army.mil](mailto:allmanp@safety-emh1.army.mil).

Be sure to include your full name, telephone number, FAX number, mailing address, or an e-mail address. ♦

# Once in a Lifetime Jump

**T**he jumpmaster continued: “..... You will then go into your third point of performance which is ‘Keep a sharp lookout for all jumpers during your entire descent!’ Remember the three rules of the air: Always look before you turn, always turn right to avoid collisions; and the lower jumper always has the right-of-way. Avoid all jumpers by maintaining at least a 50-foot separation all the way to the ground. At the end of your third point of performance, release all appropriate equipment tie-downs.”

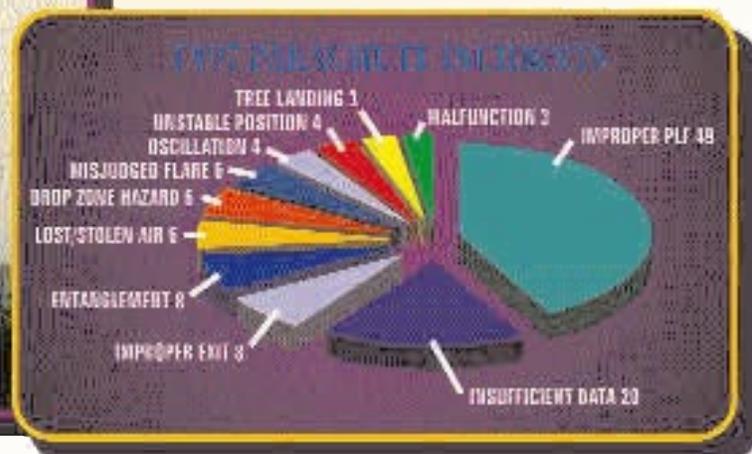
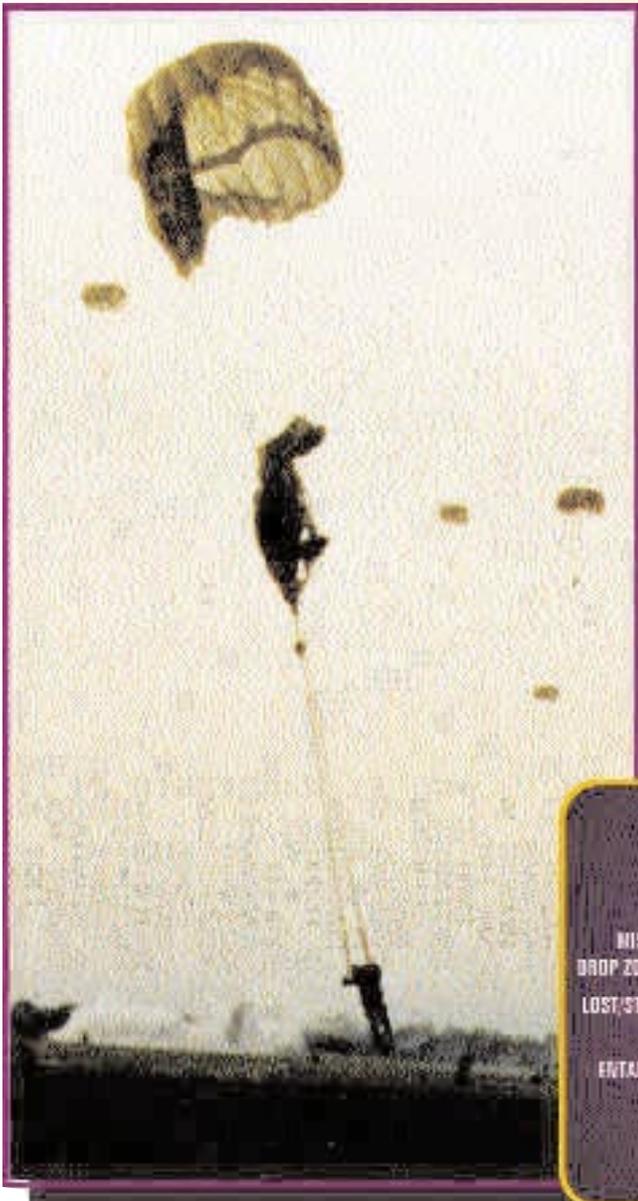
How many times have we heard the jumpmaster’s pre-jump brief? Tens, hundreds, maybe thousands? Since virtually “day one” at Airborne School, we have heard this standard brief over and over again. Most paratroopers have

unconsciously memorized the whole pre-jump routine whether they tried to or not. They have heard it so many times that they sometimes tune it out.

It’s like the businessman who travels on planes for a living. Does he watch and listen as the flight attendant goes through the pre-takeoff safety brief? Most likely not. He has seen and heard this brief many times over.

But that one fateful day when something goes terribly wrong, will he remember what he has tuned out for so long? Will he actually be able to carry out the actions that he has been instructed to do a hundred times over? Or will he freeze-up in a state of panic and fail to take the proper measures? Will he do it instinctively? Will he react out of fear? Will he do it as a result of extensive training? Will he do it because it makes common sense? Or will he fail to do it because he was overconfident in his ability and die because of it?

For example, during a daylight combat equipment jump, a paratrooper was fatally injured when he failed to properly execute his third point of performance by not keeping a sharp lookout



during his decent. Additionally, he did not follow the rules of the air and slip away from another jumper, nor did he maintain the proper separation; consequently, he floated directly above the other jumper's chute and lost his air. As he passed that jumper, he remained unresponsive. He failed to realize that he was falling faster than the other jumpers, and therefore didn't perform the proper emergency procedure of activating his reserve parachute.

Accidents and incidents will occur. Airborne operations are inherently dangerous operations and should be given the attention and respect they deserve. A high-altitude entanglement is the wrong time to question one's knowledge and/or ability to recover. What seemed like a mundane and repetitive pre-jump brief turned into the most important thing this paratrooper should have listened to.

In the past five years, there have been 1162 reported incidents involving tactical parachuting operations. In FY 97, there were 116 incidents of which 7 percent resulted in entanglements; 5 percent resulted in lost or stolen air; and 3 percent resulted from a parachute malfunction.

There have been 49 fatalities as the result of parachute operations since 1986, five of those occurred during 1997. How many of these incidents could have been avoided? Probably all of them.

Entanglements, lost air, and malfunctions happen. They are infrequent mishaps, but none-the-less, they happen. There are as many reasons these events take place as there are reasons they should not.

As repetitious as a pre-jump brief can seem, it serves a valuable purpose. That purpose is to save lives by ensuring all jumpers can execute all emergency procedures in all emergency situations. This is accomplished through repetition and jumpmasters enforcing standards throughout sustained airborne training. If not, the next jump could have a lasting impact! ♦

**POC: CPT(P) Gary J. Kotouch, U.S. Army Safety Center, DSN 558-1218, e-mail [kotouchg@safety-emh1.army.mil](mailto:kotouchg@safety-emh1.army.mil)**

**“We should all bear one thing in mind when we talk about a troop who ‘rode one in.’ He called upon the sum of all his knowledge and made a judgment. He believed in it so strongly that he knowingly bet his life on it. That he was mistaken in his judgment is a tragedy, not stupidity.**

**“Every supervisor and contemporary who ever spoke to him had an opportunity to influence his judgment, so a little bit of all of us goes in with every troop we lose.”**

**—Author Unknown**

# Watch your fingers!

**T**here has been a significant increase in the number of accidents where a soldier has lost a finger, or the joint of a finger has been crushed or severed. Most of these accidents were caused on duty when a soldier's ring got caught on work equipment. At least monthly, on average, a soldier loses a finger while wearing a ring on duty. This is a compelling reason to leave the ring at home, especially if you work around hazardous equipment.

Eighty percent of all accidents occur as the result of human error. There are five major reasons for human error. They are leader failure, individual failure, training failure, standards failure, and support failure.

These accidents are shocking both for the quickness and ease with which they happen, as well as the severity of the consequences:

☞ An accident in the motor pool bay left

a soldier's arm broken in two places and his right hand index finger severed. The soldier disregarded specific instructions from his supervisor to get assistance before performing -10 level maintenance on the winch of an M35A2 truck. Instead, the soldier elected to do the service alone and in an unauthorized area. While standing at the front of the truck and manually controlling the winch, the rag the soldier was using to grease the winch cable became caught and his right arm was pulled into the winch.

## Analysis:

- Leader failed to supervise the soldier and enforce prescribed standards. Emphasis should be placed on explicit communications that direct actions between leaders and soldiers, and the risks involved.

- Individual failed to follow supervisor's instructions and prescribed technical manual procedures on operating hazardous equipment.

- Training failure suggests that soldier did not receive proper training and/or enough risk management training before he got involved in winch operations. Technical Manual 9-2320-361-10, Operator's Manual for 2-½ Ton Series Trucks, is devoted to safety precautions for the M35 series 2-½ ton trucks.

☞ A soldier's index finger was severed and his middle finger crushed when he and another soldier were attempting to hook a ¼-ton trailer to another vehicle. Upon release of the roll stand, the tongue weight of the trailer fell on the pintle of the hitch, catching the



Keeping soldiers from getting disfiguring injuries and losing fingers and hands require leaders to enforce standards for each task. The payoff is healthy soldiers who are available for duty with all of their original body parts intact.

accident soldier's right hand. The tongue weight exceeded the two soldiers' lift capabilities.

### Analysis:

- Leader failed to supervise his soldiers and enforce prescribed standards.
- Individual failure suggests that soldiers did not cite reference manuals to ensure job was performed to standards. Proper use of the technical manual would have pointed out a couple of safety violations in this operation. One, insufficient number of personnel were on hand to lift and maintain the weight of the trailer; and two, if the TM had been referenced, correct operating procedures could have prevented this soldier's permanent disability.
- Training failure implies soldiers were not trained to known standards (either the training was insufficient, incorrect, or not existing for that task).

In the following illustrations, soldiers lost fingers while moving quickly from one place to another:

☞ Retrieving his crewman's helmet, a soldier climbed down from an Avenger weapon system and got his wedding band caught on an undetermined part of the vehicle. The flesh and tendons were stripped from his finger; consequently, his finger was amputated due to the severity of the injury.

☞ A soldier lost his finger while dismounting a cargo HEMTT. Soldier was unloading ammunition when his wedding ring got caught on the vehicle.

His left ring finger was pulled off by the weight of his body and was too badly damaged to be reattached.

### Analysis:

Most technical manuals carry warning statements which warn soldiers to remove all rings, bracelets, wristwatches, and neck chains before working around vehicles. Jewelry can catch on equipment and cause injury, or may short across an electrical circuit and cause severe burns or electrical shock. Commanders may prohibit soldiers from wearing jewelry while performing hazardous jobs, and other leaders should encourage soldiers not to wear rings or other jewelry around equipment.

- Leaders must ensure that standards exist within the unit, ensure soldiers know the standards, and enforce those standards at all times.
- Soldiers should be reminded of the importance of carefully following prescribed procedures when operating hazardous equipment.
- Training to standard is imperative. Leaders must demand discipline by-the-book performance and permit no shortcuts.

Risk management is not just a leader's responsibility, it is everyone's responsibility. It could save soldiers' fingers.

**POC: SFC Erwin Bailey, AR, Combat Arms System, Ground Tactical Branch; DSN 558-2908 (334-255-2908)**

## Help for the first-line leader

**E**nforcement is the supervisor's first line of defense in safe operations. You – the first-line supervisor, the squad leader, the platoon sergeant, the section sergeant, or the NCOIC – must insist that safety be part of the soldier's everyday life.

When you have your daily squad or section meeting, let your soldiers know the safety hazards associated with the tasks they'll be doing that day and what safety precautions

they need to take. Inspect your soldiers before they start a task to ensure they're wearing all the required equipment needed for that job. Make sure you personally know that a soldier knows how to operate equipment or a motor vehicle to standard before tasking him to use it. And above all, be sure your soldiers are fully trained to standard and that you enforce that standard – every time. ♦

# Static advisory

## Extended cold weather clothing system (ECWCS)

**S**oldiers conducting static-sensitive operations need to be aware of possible static discharge from the ECWCS parka, NSN 8415-01-228-1306 (series) and trousers, NSN 8415-01-228-1336 (series).

These outer garments of the ECWCS are made of a synthetic laminated cloth (commonly known as Gore-Tex®). These synthetic materials can develop a static electric charge that does not readily dissipate. Synthetic fabrics generally develop greater static charges and maintain these charges for a longer period than natural fibers such as cotton or wool.

Electrostatic discharge (ESD) during operations such as ammunition or missile handling, fuel dispensing and refueling, and maintenance of electronics may present an immediate operator

hazard or have a delayed adverse effect upon systems.

Units should identify operations where ESD can be a hazard and implement controls to reduce or eliminate these hazards. References that specify established procedures include, but are not limited to, the following:

■ **FM 10-68:** *Aircraft Refueling.*

■ **FM 10-69:** *Petroleum Supply Point Equipment and Operations.*

■ **FM 10-20:** *Organizational Maintenance of Military Petroleum Pipelines, Tanks, and Related Equipment.*

■ **FM 9-38:** *Conventional Ammo Unit Operations.*

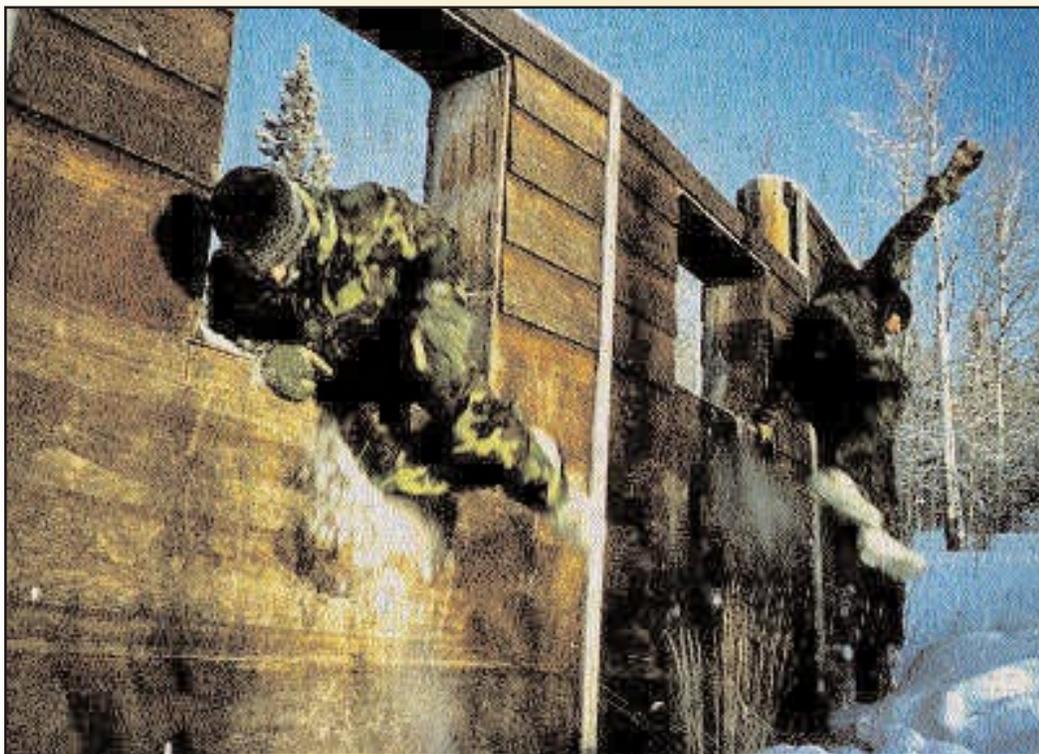
Fortunately, no incidents have been attributed to ESD from field clothing, however, units should ensure normal engineering controls, such as grounding, bonding, and ventilation of fuel/air

mixtures are part of their standing operating procedures for static-sensitive operations.

### Points of contact

■ **Technical** – Mr. Neil E. Smedstad, U.S. Army Natick Research Development and Engineering Center, DSN 256-4032 (508-233-4032).

■ **Safety** – Mr. Paul G. Angelis, U.S. Army Natick Research Development and Engineering Center, DSN 256-5208 (508-233-5208). ♦



Soldiers train wearing ECWCS clothing that develop static electrical charges. These static charges do not readily dissipate and may present hazards during training.

# If you aren't wearing a seatbelt—

## What's holding you back?

**R**esearch shows there is less chance of death and injury to the occupants of a car involved in an accident if (1) the occupants remain in the car (a person is 25 times more likely to be killed if thrown out of the car), and (2) they are kept from bouncing around inside the car. The restraint system—a seatbelt and shoulder harness—is designed to do both of these. Restraint systems do their job so well that they save thousands of lives and injuries each year. And even more deaths could be prevented if every person would use them.

Although some people are thrown clear in a crash and luckily walk away with little more than a few scratches, these are exceptional cases. Accident statistics show that thousands of deaths and serious injuries occur because unrestrained occupants are thrown out of their vehicles. Some of these people are killed or injured on impact with the ground or some other obstacle. Others are dragged or run over by another vehicle. Some are run over or crushed by their own car. In all but extreme cases, restraint systems could prevent these injuries.

Other facts point out the need to use the restraint system when driving locally as well as when on the highway. Statistics show that about 75 percent of all vehicle accidents happen within 25 miles of the occupants' homes. Of course, this does not mean you are safer driving along a highway than when driving locally. What these statistics point out is that most daily driving is done near one's home; so, three times as many accidents occur locally as in remote areas. In 80 percent of those local accidents that produce deaths or injuries, the impact speeds are under 40 mph. This means high speeds are not needed

for deaths and injuries to occur. Since accidents are more likely near the driver's home, it is just as important to use the restraint system when driving around town as it is on the highway. The only way to gain full benefit from restraint systems is to make a habit of using them on every trip.

Now we come to a common argument against using restraint systems: "I don't like the idea of being buckled up and trapped if the car should catch fire or go into water."

In only about 1 percent of all accidents do either of these conditions occur. But even if the car catches fire or goes into water, the first requirement for escape is to be conscious. Any impact that produces fire or dumps a car into water is going to be a severe one. Without the use of restraint systems, occupants are going to be thrown around inside the vehicle. The chance of being knocked unconscious is a real one.

Over a lifetime, a person has more than a 50/50 chance of being injured in a car accident. There are many things that can be done to reduce that risk. Driving defensively and cautiously, not driving while under the influence of alcohol and drugs, and keeping your car in peak condition are three important steps. None of these, however, will guarantee that a person will not have an accident.

Good drivers have accidents too, sometimes because they are hit by drinking or drugged drivers or other poor drivers, and sometimes because they make an error. Nobody is immune to accidents and no one can control all of the factors involved in a traffic accident. But there is a simple and effective way of cutting the risk of being injured by more than half—wear restraint systems!

**What's holding you back? ♦**

# Incoming

**S**afety Center personnel have been retiring and PCSing at an astonishing rate this year, and that means we have a lot of new folks on board.

In our continuing efforts to keep Countermeasure relevant to your needs and interests, we ask you to contact our professional staff if you have questions, ideas, or comments. Please let us know how we can help you. We truly want to know how we can serve you better.

New ground tactical subject matter experts, their branches, and their phone numbers are listed below. DSN is 558-xxxx; commercial is 334-255-xxxx.

- LTC Peter Simmons, Chief, Ground

Systems, 2926

- MAJ Julian Simerly, Wheeled Vehicles/ Weapons, 1186

- MAJ Monroe Harden, Heavy Tracked Vehicles, 9863

- CPT(P) Gary Kotouch, Light Tracks/ Airborne, 1218

- MSG Ernest Dobereiner, Infantry, 2959

- SFC Erwin Bailey, Armor, 2908

- SFC Charles Olsen, Engineer, 3034

- SFC Charlotte Underwood, Chemical, 2913

- SFC Clarence Welch, Field Artillery/ Airborne, 2892

- Mr. Don Wren, Safety Engineer, 9864

- Ms. Paula Allman, Writer-Editor, 2688 ♦

## Note to the field

**I**n looking at Countermeasure's distribution list recently, we noticed some installations were receiving more issues than they had soldiers. We've updated the list to take care of such problems. If your unit gets fewer copies than you need, let us know. We'll be glad to add to the list those who truly need to receive Countermeasure. Also, local reproduction is both authorized and encouraged.

In addition, if you have electronic transmission capability, Countermeasure is now on the Internet, so users have yet another way of receiving this publication (<http://safety.army.mil>).

For distribution questions, call Ms. Sharrel Forehand, Media Management and Production Division, at DSN 558-2062 or 334-255-2062. Email is: [forehans@safety-emh1.army.mil](mailto:forehans@safety-emh1.army.mil). ♦

