ARMY GROUND RISK-MANAGEMENT PUBLICATION

COUNTERMEASURE

VOL 20 NO 8 http://safety.army.mil AUGUST 1999

POV FATALITIES
THRU JUNE FY 98 97
THRU JUNE FY 98 86

Stand up,
hook up,
shuffle to
the door,
jump right out
and count to four.

ARMY GROUND RISK-MANAGEMENT PUBLICATION
COUNTERMEASURE

The Official Safety Magazine for Army Ground Risk-Management

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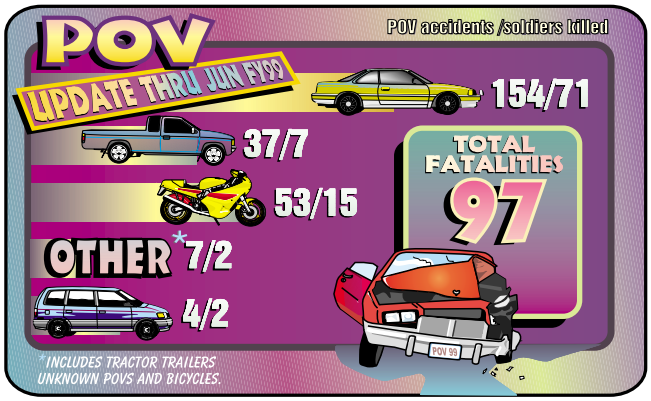

U.S. ARMY SAFETY CENTER

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Gene M. LaCoste
Brigadier General, U.S. Army
Commanding Officer

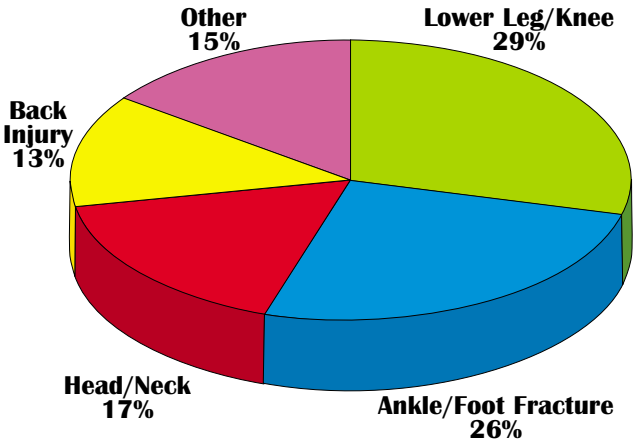
Tactical parachuting is inherently dangerous and should be given the attention and respect it deserves.

In this issue, Countermeasure addresses a wide range of subjects pertaining to airborne operations.

Tactical Parachuting—The Rush

If you ask any paratrooper why he participates in airborne operations, he will more than likely say that it is pride in belonging to an elite team of professionals who perform an important mission for our Army. Some will admit that it is the exhilarating rush they receive while participating in this high-risk activity. There's something about the adrenaline rush, the natural high that comes with the shallow, rapid breathing and racing pulse brought on by the thrill and danger of doing something that many people consider…well, CRAZY. It's true. That is how "normal" people look at paratroopers who intentionally "jump out of perfectly good airplanes." Jumping out of a perfectly good airplane is a precision activity in which a slight deviation from the norm or a split-second hesitation can have disastrous consequences.

FY99 Tactical Parachuting Injuries



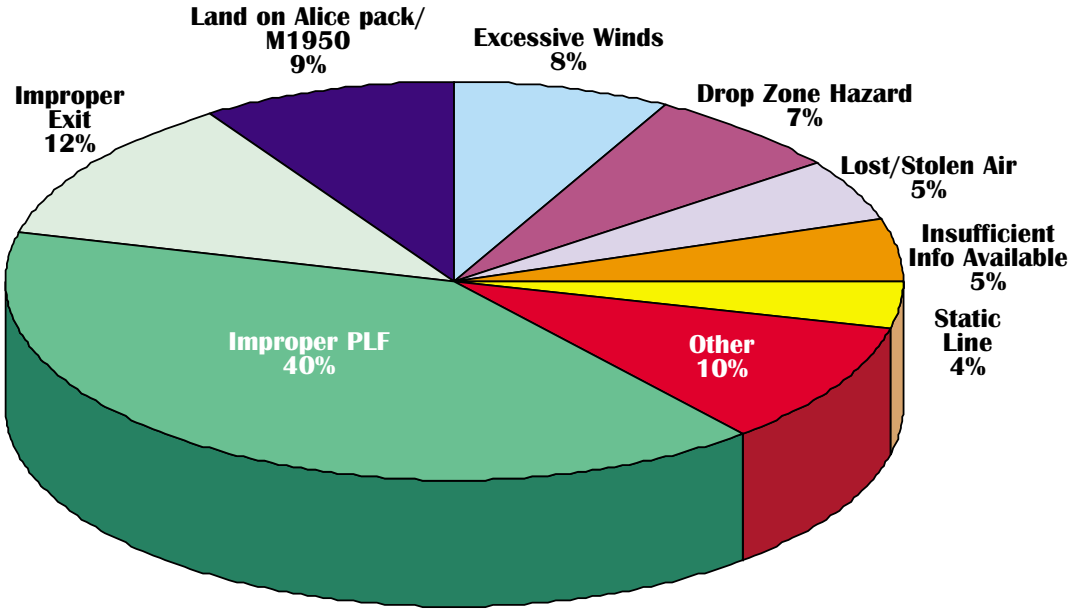
Out of the hundreds of thousands of jumps made since FY 96, the airborne community has experienced 678 incidents, 13 of those were fatal. Three were military free-fall and ten were static line.

So far in FY 99 (as of 10 Jun 99), there have been 86 parachuting incidents, 2 of those fatal. Accidents resulting from troopers failing to perform proper parachute landing falls (PLFs) continue to be the prevalent cause factor. Other common causation factors are improper exits, landings on ALICE pack, excessive winds, drop zone hazards, lost/stolen air, and static-line injuries. Most of the injuries sustained were lower leg/knee damage, ankle/foot fractures, head/neck and back injuries.

Although paratroopers get an adrenaline fix by jumping through the clouds and falling at an excessive rate of speed, we also perform a valuable mission for our Army—we respond to the world's emergencies quickly with overwhelming combat power and fight the minute we get on the ground. And we do it safely. We do everything we can to manage the risks associated with tactical parachuting.

I am proud to be a member of this elite group of professionals. It is also an exhilarating rush and worth all the bumps and bruises received while performing the Army mission.

FY99 Tactical Parachuting Incident Cause Factors



AIRBORNE!

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Accident Review

What a Helluva Way To Die!

This was a routine proficiency jump at night with combat equipment. Upon reaching the drop zone, the jumpmaster gave the command, "GO!" You exit the aircraft. You have a good, tight body position...good canopy. You look around...no trouble. You look below...looks fine. But as the earth below quickly appears larger and larger, you realize the drop zone has an unfamiliar glare to it. Wait a minute! That's not the drop zone, that's water!

BACKGROUND

A long-range surveillance detachment (LRSD) was conducting a night airborne operation with the primary objective focusing on certifying drop zone support team leaders (DZSTLs) and jumpmasters.

The day prior to this operation, a jumpmaster refresher class was conducted. Additional classes were also given to include setting up a drop zone for an airborne operation and the duties and responsibilities of the drop zone safety officer (DZSO).

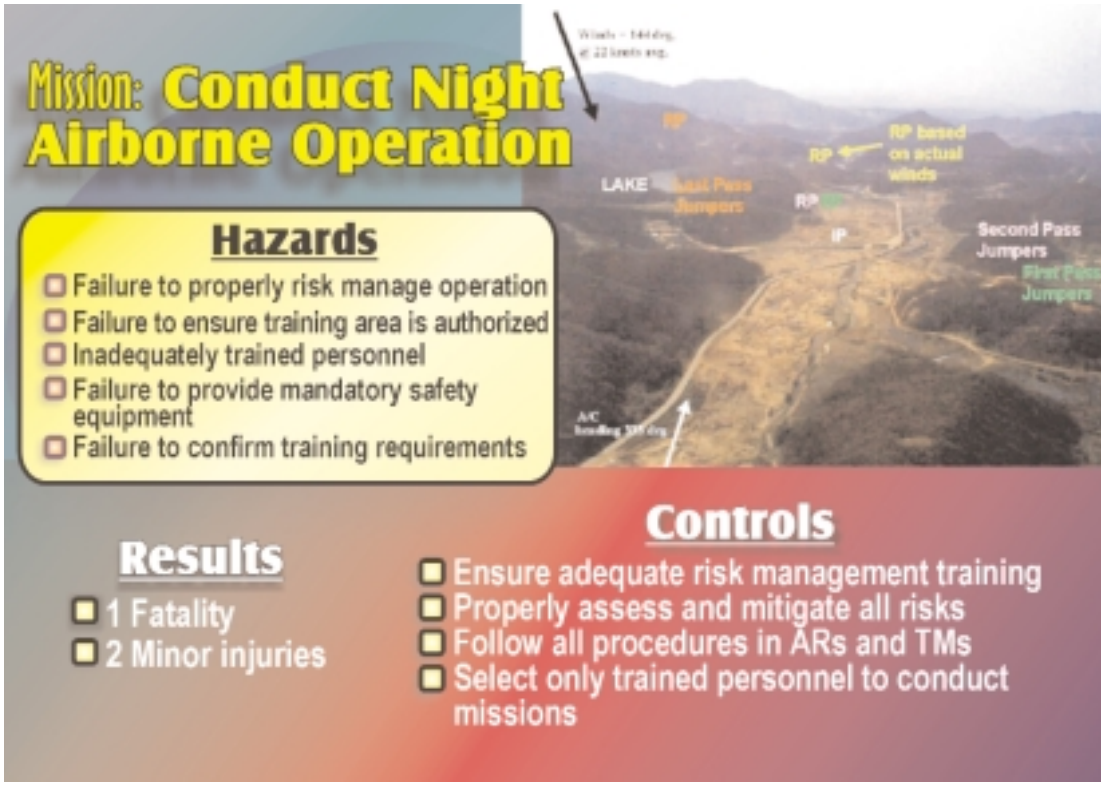
The next afternoon, the LRSD commander gave the marshaling area control officer (MACO) brief to the DZSO and all paratroopers scheduled to participate in the airborne operation. The primary hazards covered during the brief were three access gates adjacent to the DZ, steep creek banks on the northern end of the DZ, and power lines. No mention was made of a lake located 300 meters from the DZ nor was it depicted on the MACO board.

The DZSO was responsible for setting up the DZ. As part of their certification process, two NCOs were assigned as assistant DZSOs with the responsibilities to observe and assist the DZSO in the preparation of the DZ.

The DZSTL launched a 10-gram pilot balloon to determine mean effective winds (MEW). The DZSO determined the winds to be 12 knots.

Approximately two hours later, the DZSTL launched a 30-gram pilot balloon. The DZSO recalled the MEW to be again 12 knots. He determined the jumpers drift would be 450 meters based on a 10-knot wind factor. The code letter was emplaced and the release point (RP) established using 10 knots as the wind factor.

At approximately 2000, the first two jumpers exited over the DZ. As part of the jumpmaster certification process, the LRSD commander performed the jumpmaster duties with an NCO observing who was being certified. The DZSTL observed both parachutes land approximately 800 meters southeast of the desired impact point (IP).



Next, the second pass of three jumpers exited. The NCO being certified was now the

jumpmaster and the LRSD commander observed and certified him to perform jumpmaster duties on his own for the next pass. Prior to exiting, the DZSTL made a correction based on the landings of the first pass. He had the aircraft on the same heading of 333 degrees and offset 50-meters to the west of the original RP. The command, "execute, execute, execute" was given, and all three jumpers exited. The DZSO determined that all three paratroopers landed off the DZ to the southeast and approximately 600 meters from the desired IP.

ACCIDENT

Subsequently, the next pass of paratroopers with three jumpers was on approach to the RP. The newly certified NCO was the jumpmaster on board. The DZSO had added an additional 50-meter offset and now had the aircraft on an approximate heading of 333 degrees and approximately 100 meters to the west of the original RP. He determined the aircraft to be parallel to the RP and 100 meters to the west. The command, "execute, execute, execute" was given, and the three jumpers exited the aircraft.

All jumpers had functional parachutes and all were observed drifting to the southeast. The DZSO relayed to the aircraft that all jumpers were clear and safely on the ground. However, the first jumper landed in trees beside the lake. He was approximately 300 meters west of the DZ and 600 meters west of the RP. The third jumper landed at the top of a ridge separating the DZ from the lake.

The accident victim was the second jumper. He landed in the lake approximately 450 meters west of the DZ and 750 meters west of the RP. The first jumper heard the victim yelling for help and splashing in the water. He immediately dove into the water and began swimming to where he last heard the cries for help.

The aircraft returned and initiated a search using their landing lights. With no rescue equipment available, the recovery of the victim took about an hour.

The victim was air evacuated to a nearby hospital and pronounced dead; cause of death was determined to be drowning.

CIRCUMSTANCES

The circumstances that led up to this accident were the result of individual, leadership, and training failures. These failures were the result of complacency, overconfidence, and just plain failure to supervise. For example:

- **Individual failure.** To begin with, the LRSD commander failed to adequately plan the airborne operation by failing to ensure the DZ was authorized for parachute operations. The drop zone survey that he used was outdated and only a draft. It did not depict the lake nor was it validated by approving authority signatures. The last authorized survey for this DZ was approved in 1993. At that time, the survey depicted the lake where the accident occurred, but was authorized only for daytime personnel drops. The drop zone survey became obsolete approximately one year before the drops were conducted.

  Also, the LRSD commander did not identify obvious hazards associated with the airborne operation. He noted on the risk management worksheet that the probability for injury due to a water landing was improbable (low risk) due to no bodies of water located within 1 kilometer of the drop zone. However, this lake was located 300 meters from the edge of the drop zone, and the accident victim landed in water 400 meters from the edge of the drop zone.

  In addition, it was noted on the risk assessment that the probability for injury due to a tree landing was remote (marginal risk). However, the drop zone was adjacent to a ridgeline consisting of trees higher than 35 feet, which should have also indicated a "high-risk" assessment.

- **Leadership failure.** The LRSD commander failed to select qualified personnel to conduct jumpmaster duties as part of this airborne operation. He selected an NCO to conduct jumpmaster duties, who was a senior-rated parachutist, but he had only been with this unit for a few weeks and had not been on jump status for over three years. He attended jumpmaster refresher the day before the jump; however, he didn't attend basic airborne refresher or conduct a refresher jump before assuming jumpmaster duties.

  The LRSD commander failed to coordinate for maintaining currency of his jumpmaster-qualified personnel. There were no personnel within the LRSD that met the basic requirements in FM 57-220 for jumpmaster currency.

  According to FM 57-220, "To be current as a jumpmaster, the jumpmaster must have either performed primary or assistant jumpmaster duties within the preceding 180 days; or if a senior or master-rated parachutist, performed duty as a safety on U.S. Air Force aircraft within the preceding 180 days; or completed a jumpmaster refresher course in the preceding 180 days. (Jumpmaster or safety duties performed on Army rotary-wing aircraft will not apply for jumpmaster currency)."

  The LRSD commander failed to brief and

provide accurate information regarding the presence of the lake during the MACO briefing. He acknowledged that he knew of the position of the lake in respect to the drop zone, but felt it was not an issue. His MACO board, which he used to brief his personnel, did not address the lake, trees or power lines, all of which were prominent obstacles to be avoided. Thus, none of the jumpers, or personnel involved in the airborne operation, were aware of the position of the lake in respect to the drop zone.

The brigade commander, who was present on the DZ, was the final approving authority for all LRSD operations and was the direct supervisor of the brigade executive officer and staff managing this brigade training.

■ **Training failure.** The following failures were the result of inadequate training provided by the LRSD commander and inadequate experience of the DZSO in the proper actions, controls, and methods for conducting a successful parachute operation.

The DZSO miscalculated the position of the RP for the jumpers to exit the aircraft. It was determined that the jumpers were released approximately 1000 meters west of the drop zone. This was determined by two accounts.

First, a pilot on board the aircraft stated they were approximately 1000 meters west when the jumpers exited. More noteable, however, was that the crew chief was videotaping the actions on board the aircraft. The video shows all three jumpers exiting the aircraft, and it distinctly shows the water beneath them when they exited.

The DZSO also failed to have the required safety equipment for this particular airborne operation on the drop zone. According to FM 57-220 and the LRSD ASOP, the DZSO should have had, at a minimum, tree-climbing equipment to retrieve jumpers from the trees and all necessary water-recovery equipment to include a boat with engine running, life preservers for the jumpers, and one 120-foot long rope. Also, parachutist type B7 life preservers should have been issued to the jumpers prior to the airborne operation. It was concluded that if the victim had been issued a B7 life preserver, he most likely would have survived the water landing. Because these safety measures were not in place, no water recovery was possible.

In addition, the DZSO failed to use a map to properly set up and assess requirements. In fact, not a single member of the DZST had a map of the drop zone. It is unclear how they confirmed they were on the correct drop zone, established timing points or release points, and prepared the drop zone for operations without a map. It was concluded that the DZSO never located the drop zone on a map. If he had, it was determined that he would have realized the location of the lake and taken the appropriate precautions. Noteworthy is the fact that of all the LRSD personnel, not one of them ever plotted the drop zone on a map to review, plan, or verify features.

You may now ask yourself how this could have possibly happened? Leadership failure, from the NCO level all the way up through the command level, is how it happened. It is incumbent on leaders to ensure that their soldiers are properly prepared and adequately equipped for every operation. It is also incumbent on them to ensure that their chain of command is prepared and possesses all the appropriate information to make sound leadership decisions. Notwithstanding, the chain of command is given complete responsibility for soldiers' welfare in their command and should never compromise safety for the sake of any mission. It's just a shame that it takes a tragedy to open our eyes.♦

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Free-Fall Ends In Tragedy

All parachute jumps enjoy one common factor. They all end when parachutists make contact with the ground. The law of gravity is going to see to that. The things you do from the time you exit any aircraft until you make contact with the ground will make the difference between a safe landing and a tragedy. While all airborne operations are inherently dangerous, it is safer than driving your car to work. Of course, parachuting accidents do happen occasionally. For example:

A jumper was performing a high-altitude low-opening (HALO) night jump from 12,500 feet above ground level (AGL) with nine other jumpers. The exit was reported as smooth and uneventful. All of the jumpers were instructed to wave off at 5,000 feet AGL. This allows for a safe separation between jumpers before they

pull their main parachute ripcord handle between 3,500–4,500 feet AGL.

The accident victim pulled his main parachute ripcord handle within the prescribed altitude and experienced a pilot chute hesitation. This malfunction is also referred to as a "burble," and is considered a minor deployment problem. It usually occurs when a parachutist is in a nearly flat and stable body position. The airflow around him may be so uniform that it creates a partial vacuum located immediately above the jumper's back. This vacuum can prevent the pilot chute from completely inflating, thereby preventing the main parachute from lifting out of the pack tray or container.

The emergency procedures for this type of malfunction are clearly defined in FM 31-19, *Military Free-Fall Parachuting*, and were rehearsed by all jumpers during pre-jump training. Generally, just turning to look over the right shoulder will change the airflow and remedy the hesitation. It is unknown whether this jumper decided he could not clear this malfunction or if he did it incorrectly. In either event, he attempted to perform a cutaway procedure.

As the name implies, a cutaway is simply cutting or getting rid of the main parachute prior to activating the reserve parachute. The procedures for this emergency action are formalized in TC 31-19, *Special Forces Military Free-Fall Parachuting*, and included in performance-oriented training prior to each jump. The cutaway handle is located inboard on the right side of the jumper's main lift web and is identified or described as a red pillow.

The cutaway procedures are as follows:

1. Throw away the main ripcord.
2. **Look** and **grab** the cutaway handle.
3. **Look** and **grab** the reserve ripcord (located on left side of main lift web).
4. **Pull** the cutaway handle.
5. **Pull** the reserve ripcord.
6. Throw away the cutaway handle and the reserve ripcord handle.
7. Arch and ensure the reserve pilot chute has deployed.
8. Perform the post-opening procedures.

Reminder: The abbreviated form is **"LOOK GRAB, LOOK GRAB, PULL, PULL."**

It is believed that this jumper activated his reserve parachute (step 5) before completing the cutaway procedure for his main parachute (step 4).

The reserve pilot parachute was launched and immediately became entangled with the main pilot-chute bridle line. His main canopy release handle (red cushioned handle) had not been pulled first; therefore, he activated it out of sequence. The main canopy immediately released, but stayed entangled with the reserve bridle. Although the reserve bridle line came to its full length, it could not deploy the reserve because the bridle line and suspension lines had created a bag lock (parachute unable to deploy from container) condition on the reserve.

This accident, although rare, had characteristics indicative of an individual failure. This jumper failed to execute the correct emergency procedures to clear a pilot chute hesitation. He also performed an out-of-sequence cutaway procedure. Since this jumper was fatally injured, the specific cause for his actions will never be determined.

We investigate accidents for the purpose of preventing future accidents. Leaders and soldiers should focus on the errors being made, why they were made, and actions we can implement to reduce or prevent a recurrence of the same mistake. ♦

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Tree Landing

While conducting an administrative non-tactical daylight parachute jump from a UH-60 Blackhawk helicopter, a jumper descended into a 100-foot tree, becoming hung up about 68 feet above ground level (AGL). Consequently, he received fatal injuries when he fell from that elevation.

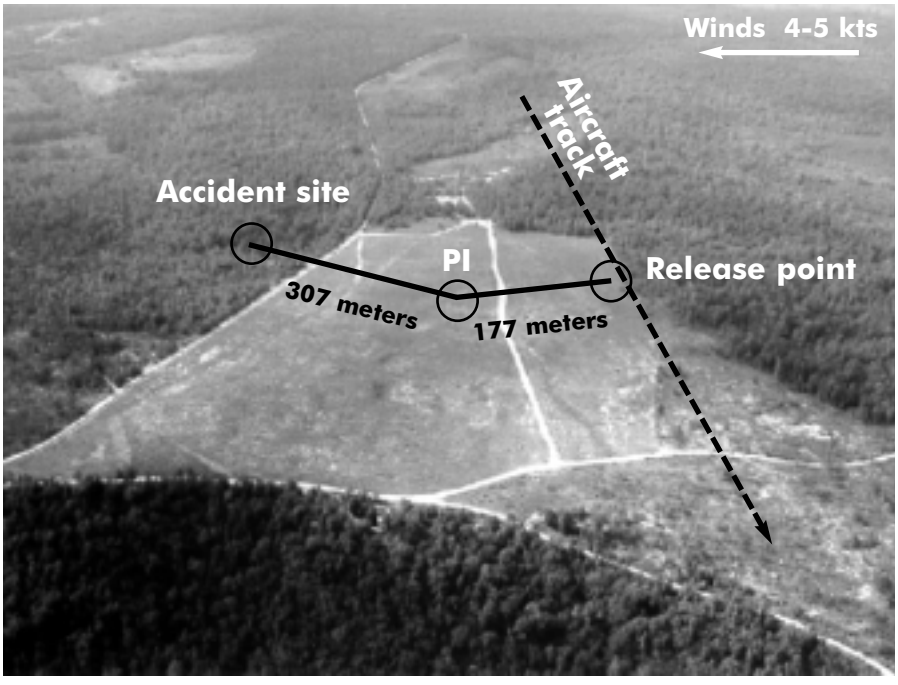
ACCIDENT

The jumpers drew and donned their parachutes after pre-jump training. They were inspected and then boarded the aircraft. On command, the jumpers began exiting the aircraft. The accident victim was the sixth jumper to exit the aircraft. He made an appropriate exit and obtained a full, controllable canopy. The jumper traveled the complete width of the drop zone (DZ) and subsequently landed in a wooded area east of the DZ.

The jumper's descent into the trees was observed, and the NCOIC proceeded to the site with a 4-man recovery team. The jumper was found straddling a limb 68 feet AGL with his parachute above him in the tree. He immediately told the jumper to go for the trunk of the tree without first having him follow the proper procedure for recovery from a tree landing; i.e., pulling on the risers to determine the extent of support. Subsequently, as the jumper attempted to go for the base of the tree, the limb broke that was supporting him and he fell. He landed on his rear right shoulder and subsequently died of internal injuries.

■ **Individual failure.** The jumper did not apply appropriate controls to compensate for the lateral drift across the DZ to ensure descent into the DZ or descent away from the trees. He had, prior to this accident, successfully negotiated this type of parachute while crossing the DZ from west to east. On this day, however, he entered the trees on the east side of the DZ and became hung in a single tree.

■ **Leadership failure.** The NCOIC failed to stay attentive and properly assess the situation to determine all courses of action for recovery. He did not take into consideration that on the DZ was a 2½ ton truck with recovery equipment. The actions by the NCOIC were a result of overconfidence in the jumper's ability and haste of the situation. The NCOIC had seen many jumpers enter the trees on this particular DZ prior to this accident. He also described how he had climbed trees before to recover jumpers on another DZ similar to this one. This haste perpetuated his reliance on the ability of the jumper to recover himself from the tree. ♦



POC: MAJ Gary Kotouch, Ground Systems and Accident Investigation Division, USASC, DSN 558-2933 (334-255-2933); kotouchg@safety-emh1.army.mil

Guidelines For Safe Jumps

While there are relatively few parachute accidents, the ones that do happen generally are fatal. FM 57-220, *Basic Parachuting Techniques and Training*, provides further guidance for safe parachute operations. In addition, commanders and other leaders can use the following checklist to manage the risks inherent in parachute operations.

- ❑ **Have conditions on the drop zone (DZ) been reviewed?**
- ❑ **Have actions been rehearsed that are to be conducted on the DZ?**
- ❑ **Are obstacles on and around the DZ marked?**
- ❑ **Have parachute landing falls been reviewed?**
- ❑ **Have emergency landing procedures been reviewed?**
- ❑ **Are corrective lenses worn by personnel who require them?**
- ❑ **Are loads limited to jumper's capability? (Excess weight will increase the probability of a weak exit.)**
- ❑ **Are soldiers trained on 1-second interval and correct exit procedures?**
- ❑ **Have towed-parachutist procedures, equipment tiedowns, and accidental reserve activations been emphasized?**
- ❑ **Have reserve parachute activation procedures been reviewed for the new MIRPS?**
- ❑ **For night jumps, have all jumpers gone through the five points of performance? (Place special emphasis on getting into the fifth point ASAP; it is sometimes difficult to determine altitude at night.)**
- ❑ **Are only red lights used for 30 minutes before and during night jumps? (Use of white lights may degrade jumpers' night vision.)**
- ❑ **Are night halo jumps rehearsed during daylight when the situation permits?**
- ❑ **Is an experienced buddy assigned to assist inexperienced jumpers?**
- ❑ **Do jumpmasters know and identify the correct release point?**
- ❑ **Are door bundles used for extra equipment and ammunition?**
- ❑ **Has crossloading plan been reviewed?**
- ❑ **Have aircraft crash drills been conducted?**
- ❑ **Has drop zone been verified as current and authorized?**
- ❑ **Are all jumpmasters current and qualified?**

What Have You Done For Me Lately?

The purpose of a parachute drop is to deliver combat troops, equipment, and supplies to a designated ground area. To be effective, personnel must be delivered uninjured and capable of performing their mission. The U.S. Army Soldier Systems Center (Natick) has taken a monumental step toward perfecting airdrop technology. The following programs demonstrate the research and development efforts underway to allow our soldiers the benefits of modern technolgy. This results in enhanced mission performance, a dramatic increase in the soldier's warfighting capabilities, and safety on the battlefield.

ADVANCED TACTICAL PARACHUTING SYSTEM (ATPS)

The ATPS program is being developed as a result of an XVIII Airborne Corps top priority airdrop need and user requirement to reduce parachute injuries. The ATPS includes a main parachute, reserve parachute, and harness to replace the venerable T-10 parachute system. ATPS will provide the airborne soldier with unparalleled safety and enhance combat performance of the "First to Fight."

The ATPS will serve the same combat environment as the T-10: 500 feet above ground level (AGL) minimum planned altitude deployed from an aircraft traveling at speeds of 130-150 knots. ATPS will provide marked improvements in all areas. Rate of descent will be reduced by 25 percent from 21ft/sec to 16ft/sec. This reduction in the rate of descent will result in a 40 percent reduction in impact energy and a significant reduction in landing injuries. The ATPS will also incorporate an advanced reserve parachute and an advanced harness. The reserve parachute will provide a dramatic decrease in rate of descent over the T-10 reserve. The ATPS harness system will include shoulder-mounted main and reserve parachute riser attachments, added comfort pads, and an integral equipment release, improving all aspects of harness performance.

EXTRACTION PARACHUTE JETTISON SYSTEM (EPJS)

A malfunction during an attempted airdrop delivery of heavy equipment to the battlefield risks the safety of the entire crew and the aircraft itself. The capability of jettisoning extraction parachutes when they are outside of the aircraft before the load has been extracted is essential. Currently, if a malfunction occurs, the loadmaster must get behind the load and cut away the extraction parachutes by hand. This is very dangerous because the load could break away while the loadmaster is cutting the lines. The EPJS concept has been developed to jettison malfunctioning parachutes quickly and safely.

A nondevelopmental item (NDI) candidate modeled after the EPJS system used by the French military currently is in testing.

DUAL ROW AIRDROP SYSTEM (DRAS)

The DRAS reduces the quantity of C-17s necessary to support the Strategic Brigade Airdrop (SBA) mission and reduces the tactical insertion time. The DRAS maximizes the cargo potential for airdrop of the C-17 by permitting airdrop use of the aircraft's dual logistics rail system (side by side) verses the single row airdrop system currently in use. The system reduces drop zone dispersion, results in faster delivery of troops and equipment, and thereby reduces the threat exposure of both aircraft and airborne forces.

The DRAS is composed of common rigging items and modified type V airdrop platforms in lengths of 8, 12, and 16 feet and are 88 inches in width verses the standard 108-inch type V version.

The DRAS will be able to gravity airdrop loads with a rigged platform weight capability of 14,500 pounds (HMMWV). The airdrop loads will exit the aircraft sequentially by row. The airdrop altitude range for operations will be 750 to 1200 feet at conventional airspeeds of 130-150 knots and deliver a fully mission capable load in 17 knot surface winds utilizing a parachute release.

UNIVERSAL STATIC LINE (USL)

The U.S. Army has a requirement for a USL suitable for airborne operations on all current Army, Air Force, Navy, and Marine aircraft. The current 15-foot static line in use is not acceptable for use on the Air Force's newest transport plane, the C-17. The program is investigating several

candidate items that could potentially meet the requirement. A single length 20-foot line was shown to be suitable on the C-17; however, it induced an increased safety risk on the C-130. The program strategy includes static line options such as adjustable/convertible candidates that are currently being produced for testing. Testing is scheduled to begin in the fall of 1999 with a goal of fielding in 3rd quarter 2000.

EMERGENCY PROCEDURES FOR ACTIVATION OF MIRPS

The Modified Improved Reserve Parachute System (MIRPS) includes a spring-deployed pilot chute attached to a bridle. This spring is designed to decrease the time needed for a successful deployment of the reserve parachute, thereby increasing the survivability rate of the jumper and reducing the injury rate. Originally, the MIRPS required no action by the paratrooper after pulling the reserve ripcord handle; however, in a recent incident, a MIRPS parachute failed to deploy when it was accidentally activated on the ground. What follows is a chronology of events that have occurred since that accidental activation:

- 2 March 1999–Initial non-activation on drop zone.
- 3 March 1999–Reserve ripcord bench tests by users.
- 4 March 1999-Temporary suspension of airborne operations using the MIRPS.
- 5 March 1999-On-site review.
- 10 March 1999-U.S. Army Infantry Center issued message R101200ZMAR99, subject: Added Safety Procedures for Activation of MIRPS (see box below). Airborne operations using MIRPS resumes.
- 26 March 1999-Soldier Biological Chemical Command (SBCCOM) issued Maintenance Advisory Message (MAM) 99-01, subject: Clarifying Packing Instructions.
- 13 April 1999-SBCCOM issued MAM 99-02, subject: Surveillance Data and Schedule.

A review of all available information indicates that the activation failures were caused because the spring that deploys the reserve pilot chute was not centered in the reserve container. This packing issue has been corrected, and clarified packing instructions are outlined in MAM 99-01. The risk of the MIRPS failing to perform as designed is low. Additionally, there have been no accident reports submitted to the Safety Center that were the result of complications with the MIRPS.

Surveillance data and general information will continue to be gathered through September 1999 and a review of this data is scheduled to take place in October 1999 to determine if a requirement for a materiel fix is warranted. In the interim, all airborne personnel should be aware of the added safety procedures required for activation of the MIRPS as they are outlined in the message.

POCs: CPT Joel B. Rieman, DSN 256-5631 (508-233-5631); CW4 Martin J. Neises, DSN 256-6247 (508-233-6247), www.natick.army.mil; or SFC Michael R. Williams, USASC, DSN 558-2959 (334-255-2959)

101200ZMAR99 UNCLAS Subject: Added Safety Procedures for Activation of MIRPS

1. In a recent incident, a MIRPS parachute failed to deploy when accidentally activated on the ground. Although there is no indication that the MIRPS will fail to deploy when properly activated during an actual malfunction, the following additional safety precautions are required:
   - Activate the MIRPS using the pull drop method. The jumper will remain in a good tight body position, secure the MIRPS left carrying handle, and pull the ripcord grip. The MIRPS should immediately activate.
   - If there is no immediate reserve parachute reaction, the jumper will maintain his good tight body position and hold onto the left carrying handle and quickly punch the MIRPS pack tray on the right side with a closed fist.
   - If the MIRPS still does not respond, jumper will pull the right end panel loose from the MIRPS pack tray while keeping his hand away from the front of the reserve.
2. This information should be incorporated into all pre-jump training. All jumpmaster personnel will be informed of the above actions and the information will be distributed to units subordinate to addressees.
3. Jumpmasters should pay particular attention to the positioning of the MIRPS spring to ensure it is properly centered behind the ripcord protective flap when conducting the inspection of the reserve parachute during the jumpmaster personnel inspection (JMPI) sequence.
4. Commanders should consider these additional precautions in their risk assessment for airborne operations when using the MIRPS.
5. This information will be incorporated into Change 1 of FM 57-220.
6. POC: Mr. John Graber, 1/507th Airborne Technical Advisor, DSN 835-3012.

Safe Reading—Pass the Word

Our Army is better now than it has ever been. Today's Army has the best equipment, the best training, and the finest soldiers, civilians and families in its history. We can deploy in a moment's notice to wherever we're needed and successfully meet mission requirements.

If we are serious about the readiness of our Army, we must be serious about safety. Safety must be our first concern at all times.

The U.S. Army Safety Center can help. We have the responsibility to collect and distribute accident data and statistics relating to injuries, occupational illnesses, and report damage related to Army operations. The major vehicles for meeting this requirement are ***Countermeasure***, ***Flightfax***, and ***CAPP Report***. If you're not already taking advantage of the Army's safety publications, check them out. They're full of the latest information on doing your job safely.

Countermeasure, now in its 20th year of publication, deals with accident prevention in Army operations other than aviation (to include motor vehicles, explosives and weapons, fire protection, recreation and athletics, and training). *Countermeasure* is published monthly with a circulation of about 35,000 copies and is also posted to the Army Safety Center web site: **http://safety.army.mil**. Distributed down to unit level, its primary audience includes first-line leaders of soldiers, and its secondary audience is commanders.

Flightfax, now in its 27th year of publication, is the Army's only aviation accident-prevention publication. It is published monthly with a circulation of 18,000 copies and is also posted to the Army Safety Center web site. Distributed down to unit level, its primary audience is aviation safety officers and operational pilots, and its secondary audience is aviation commanders and maintenance personnel.

CAPP Report, now in its 9th year of publication, is the Army's civilian accident prevention program publication. Its primary audience includes Army personnel and civilian safety managers who oversee workplace safety, enforce safety rules, and are responsible for environmental and occupational safety and health fields. The *CAPP Report* is published quarterly and is posted to the Army Safety Center web site.

To receive *Countermeasure* or *Flightfax* publications, write to:

U.S. Army Safety Center
Bldg. 4905, 5th Avenue
ATTN: CSSC-SM
Fort Rucker, AL 36362-5363

or call **DSN 558-2062 (334-255-2062)** or e-mail **countermeasure@safety-emh1.army.mil** or **flightfax@safety-emh1.army.mil.** ♦