

Training Strategy and Safety

EDITOR'S NOTE: This article was written by an officer who served in the 1st Battalion, 507th Infantry, for a short time while waiting to attend another school and whose name, unfortunately, is not known.

In today's Army, we train hard to meet tomorrow's challenges. To be effective, training must be organized and conducted safely, and no unit is too small or too large to benefit from a good safety program.

Although many soldiers and leaders have trouble believing that realistic training and safety can coexist, there is a middle ground where the benefits from training and safety balance each other. This middle ground is what every unit must seek.

Incorporating safety initiatives into a training program is neither difficult nor overly time consuming. In fact, some units have achieved substantial results just by being more safety conscious. One such unit is the 1st Battalion, 507th Infantry, which is responsible for the training conducted in the Basic Airborne Course at Fort Benning. By instituting well-thought-out safety measures, the battalion dramatically reduced the number of parachute training accidents and injuries in the course.

A unit's safety efforts, like its training program, must be organized and coordinated, and any changes in procedure must be made carefully. A decision made in haste without the possible consequences being weighed can often result in even more accidents or injuries.

When the leaders of the battalion looked at improving safety in the course, they did what every unit must do—they first identified some specific problem

areas. From a review of past records, it became clear that there were several areas in which changes in safety procedure could be made.

At the outset, for example, the leaders of the battalion knew that they would have to put command emphasis on improving safety and that initially there would be resistance to changes in training. To overcome this natural resistance, the battalion took a direct course of action. They let company commanders, platoon sergeants, and squad leaders know that they would be held accountable for injuries and attrition.

Then, when injuries or accidents did occur, two questions were asked: Did the trainers and leaders identify all the risk factors before the injury occurred? Were the trainers conducting training to the standards? If the answer to either question was "no," then further investigation was warranted.

COMMAND EMPHASIS

By letting leaders and trainers know that preventable accidents and injuries would not be tolerated, the command sent an important message. Subordinate units came to realize the importance of safety, and the command made better safety a personal goal for every leader in the battalion.

One safety measure that is closely related to accountability is that of identifying the students who are highly susceptible to certain types of injury. These high-risk students fall into two basic categories—those who are more susceptible to heat and cold injuries and those who are more susceptible to head injuries.

The procedures for identifying the students in each category are basically

the same: When students first enter the course, medical personnel at the Troop Medical Clinic screen their records looking for any signs of previous heat, cold, or head injuries. The students' leaders also question them as to whether they have had any of these problems.

Any students who are identified as high risk are marked (their uniforms are tagged) so that all the leaders and trainers can tell at a glance which soldiers they must watch more closely during training.

An important part of the training that students receive in the course is performing proper parachute landing falls (PLFs), and some of this training is conducted on the swing landing trainer (SLT). The trainer allows students to descend from a 12-foot high platform. During the descent, they are subjected to a motion similar to that of a parachute descent. At a certain predetermined point, the student is released and is expected to perform a correct PLF.

To improve the safety at the SLT site itself, several simple and easily implemented changes were made. One was to increase the height of the retaining wall around the SLT pit so the pit could hold more sawdust and make the landings softer. A second change was to lower, by one and one-half feet, the student release marker indicators—the point at which the trainers release the students from the training apparatus and the students fall to the ground. With a shorter distance to fall, the students have less potential for injuries while they are still learning to perform PLFs.

In addition, a medical study was made to investigate the SLT's physiologic effect on the students. Although that research is still in progress, it is expected that the results will suggest ways to im-

prove SLT safety further in the future.

Of all the training in the course, none is more potentially dangerous than the actual jumps from an airplane. The battalion found several areas where changes could be made in its jump procedures, and a safety film was produced that all students see on the day of their first qualifying jump. The film—essentially a complete review of the first two weeks of training—thoroughly discusses jump procedures, control of the parachute, PLFs, and emergency procedures.

The battalion leaders saw room for improvement in the parachute jump sequence for students. Basically, all the students jumped twice with the T-10 parachute, then once with the MC1-1, then twice more with the T-10. Because the two parachutes differ in their maneuverability and landing characteristics, this sequence forced the students to change their procedures halfway through and then return again to the original procedures. The jump sequence was modified so that the students now use the MC1-1 on their last jump. This allows them to concentrate on T-10 procedures for the first four jumps and then on MC1-1 procedures.

Another change was to reduce the number of jumpers who exited through each door, during one pass over the drop zone, from 15 to 10. This reduction has helped reduce the possibility that parachutes will become entangled.

Although the long, wide open drop zone used for the course was about as safe as a DZ can be, several small changes made it even safer.

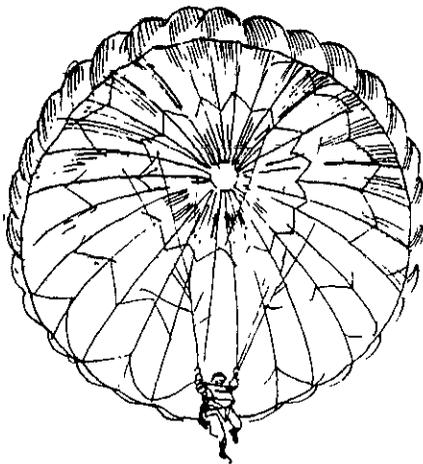
First, the portion of the zone where 80 percent of the jumpers landed was plowed to make the landings somewhat softer and prevent lower leg injuries. (These injuries are the most frequent type of recordable injury—those requiring that an accident report be prepared in accordance with Army Regulation 385-40).

Then the battalion began spreading ten qualified cadre coaches, with bullhorns, throughout the drop zone for every jump. These ten coaches—one for every two jumpers—are there to correct and advise jumpers as they are landing. To ensure that they are heard, the speaker system used is capable of reaching

1,250 feet into the air (the jump altitude). This method has proved effective in reducing PLF-related injuries.

The use of smoke on the DZ was expanded, depending upon wind conditions, to enable the jumpers to see the wind direction. Both types of parachutes require a jumper to perform certain steering procedures that slow his horizontal movement across the DZ, and he must know the wind direction to perform the correct procedures. The battalion increased the requirement for smoke from one location to two for all jumps. This change has also helped reduce PLF-related injuries.

Several other measures have been taken. One particularly important one was to ask the Infantry School's Direc-



torate of Combat Developments to conduct a study that would lead to improvements in the Kevlar helmet or to a design for an improved concussion helmet. One area being explored is a possible correlation between neck size and strength and how this might relate to head injury. If such a correlation is found, a predetermined neck size or strength may become a prerequisite for the Basic Airborne Course.

While physiological data is being gathered, possible changes in the paratroopers' equipment are also being considered. Future projects may include the development of a foam or air-filled insert for the Kevlar helmet. Some of the factors that must be considered are bal-

istic protection versus head crash protection; full time protection versus jump-only protection; and the size and weight of the helmet.

Another innovative measure was to use the full potential of such students as enlisted medics, doctors, and chaplains. These students are now identified when they start the training and are informed that, even in a training environment, they are still responsible for using their skills to help other students, if the situation dictates it. Primarily, the medics and doctors are to spot injuries during daily training, and the chaplains are to counsel any fellow students who may need their assistance.

The goal of instituting all of these new safety procedures was to reduce accidents and injuries as much as possible without reducing the realism of the training. The battalion leaders realized, however, that they would not be able to eliminate all accidents and injuries. Now, though, whenever a major injury does occur, a battalion safety meeting is convened. Anyone who is even remotely involved in the training accident—parachute riggers, jumpmasters, other jumpers, the chain of command, and all company commanders—get together for a thorough investigation to identify the causes and effects of the accident. If possible, they also identify measures that may prevent further accidents of the same type, and these measures are immediately implemented.

After a new safety initiative has been in effect for more than a year, the accident and injury records are reviewed and compared with those of previous years. When recordable jump injuries from Fiscal Year (FY) 1989, the first year with new safety initiatives, were compared with the injuries for FY 1988 and FY 1987, the results showed that safety had improved immensely. In fact, injury rates had dropped from 1.26 per thousand jumps in FY 87 and 1.02 per thousand in FY 88 to 0.56 per thousand in FY 89. In short, the safety initiatives worked better than anyone had imagined they would.

As a result, the 1st Battalion, 507th Infantry is now helping other units improve their safety records. The battalion

is producing an exportable safety film, for example, that will help airborne units conduct safer airborne operations.

These safety measures are only a few examples of the way a unit can improve its safety record. No matter what type of training a unit may conduct, there is

always room for improvement. All it takes is some common sense, a little imagination, and the will to succeed. By identifying problem areas, developing solutions, and emphasizing those solutions, a unit can see results. Those results may not be dramatic, but where

safety is concerned any improvement at all is worth the effort.



Kangaroo 89

U.S. Light Infantry in the Outback

LIEUTENANT COLONEL COLE C. KINGSEED

The mission of a light infantry force is to deploy rapidly to defeat enemy forces in a low intensity conflict and, when properly augmented, also to fight and win in a mid or high intensity conflict. No exercise has demonstrated the ability of a light force to accomplish its low intensity mission more clearly than during Kangaroo 89, the largest peacetime military exercise in Australia since World War II.

This joint combined exercise, set in northern Australia, involved more than 20,000 men and women from the Australian Army, Navy, and Air Force, as well as a light infantry task force from the 25th U.S. Infantry Division (Light). This light infantry task force formed the nucleus of more than 1,800 members of the United States armed forces who took part.

In addition to the inherent value of the exercise to Australia's Defense Force, Kangaroo 89 also served to further validate the U.S. light infantry division concept. Not only was the U.S. task force able to deploy rapidly to Australia's Northern Territory, but it also conducted low intensity operations for a sustained period in one of the world's harshest climates and on some of its harshest terrain.

The U.S. task force had unrivaled suc-

cess in the Australian outback and learned many lessons that may benefit the rest of the light infantry community.

What the Australians call "low level" conflict bears striking similarities to our own concept of "low intensity" conflict. As defined in their doctrinal literature, "low level" conflict is that in which an opponent engages in politically motivated hostile acts ranging from non-violent infringements of Australia's sovereignty or interests to small-scale military actions against the country.

This level of conflict may arise with little or no warning and may not require direct military involvement. It includes operations against small scale air intrusions, harassment of local shipping, and limited harassment and raids by small groups.

Australian doctrine also includes "escalated low level" conflict, which is the upper limit of the way existing and prospective regional military capabilities might realistically be applied against the nation.

Essentially, in escalated low level conflict, an enemy supplements (or substitutes) unconventional tactics and forces with military units that are prepared to confront conventional forces directly.

Such confrontation could include increased aerial or naval harassment, attacks on Northern Territory settlements and installations, and more intensive raids by land forces.

During Kangaroo 89, the spectrum of conflict rapidly moved from low level to escalated low level conflict. To counter an incursion from a mythical island nation, Australia deployed its 1st Division, its only active duty division, to the northern rim of the continent. Attached to the division's operational deployment force was the light infantry task force from the 25th Infantry Division. It consisted of the 4th Battalion, 87th Infantry, a 155-man howitzer battery, a company of UH60 Black Hawk helicopters, an Engineer platoon, a detachment from the division's Military Intelligence battalion (consisting of the long range surveillance detachment, a low-level voice intercept team, and a section of AN/TRQ-32s), a Stinger section, and a combat service support element.

Also included in the task force package were 18 key personnel upgrade program (KPUP) controllers and a civil affairs team from the 25th Division's CAPSTONE unit, the 445th Civil Affairs Company from California. Of special