

# Accident Update

— safety violations cost lives, dollars

By MSG Barry Williams

In fiscal year 1991, the Army lost 350 soldiers to accidents. This is nothing new. In fact, this figure is down from the three-year average of 373 soldiers killed per year. More than 6,000 soldiers were injured, and 93,000 training man-days were lost. In all, accidents cost the Army over \$400 million last year—a significant blow to war-fighting capability in an era of declining resources.

Chemical Corps units contributed again last year to this costly toll of damaged equipment and injured soldiers. If we look at the way the numbers break down, patterns emerge that can help us predict where accidents are most likely to occur and take action to prevent them.

Total accidents dropped last year from the 47 reported in FY90 to 25 in FY91, although there were three

fatalities, the same as FY90. Unfortunately, the cost of accidents nearly tripled, rising from \$900,000 to \$2.4 million. If it is difficult to visualize that much money, consider this: If we divided the cost of last year's accidents among all chemical soldiers, each of us would have to pay more than \$250.

As usual, vehicle accidents caused the majority of fatalities. One death occurred when a soldier rolled his POV at night. The autopsy showed that he had been under the influence of alcohol. Studies by the Department of Transportation show that a BAC of .10%, just at the legal limit in most states, the risk of a fatal traffic accident increases by 6 to 12 times.

The driver of a 2-1/2-ton truck died in a night convoy operation when, for unknown reasons, he crossed over the oncoming traffic lane of the highway and rolled down an embankment. At the time of the accident, the company was four hours into the convoy and still



A FOX NBC recon vehicle was destroyed beyond economical repair in Southwest Asia.

two hours away from the first planned rest stop. According to FM 22-9, *Soldier Performance in Continuous Operations*, night operations can severely affect the circadian rhythm, the body's work-rest cycle, and lead to a severe loss of mental efficiency. Furthermore, contrary to the assumptions regarding age, young soldiers are affected more than older.

Last year's most expensive single accident for the Chemical Corps cost more than \$1,000,000 in damage and injuries. A Fox NBC reconnaissance vehicle flipped after it was driven into a washout on an unimproved dirt road in southwest Asia. The vehicle was destroyed beyond economical repair, but miraculously two soldiers who had been standing in the TC's and surveyor's hatches were thrown out of the vehicle and were not seriously hurt. At the time of the accident the vehicle speed was in excess of 80 kilometers per hour.

When a soldier is hurt running, walking, loading equipment, while handling a weapon, or in a multitude of similar ways, the Army puts the accident under the broad category of "other personnel injury." The majority of last year's mishaps fell into this category.

For instance, one victim of a fatal accident fell while dismounting a 2-1/2-ton truck, hitting his head on the ground. Although the consequences of this last accident were more extreme than usual, climbing onto and off vehicles is always hazardous, and each year many soldiers are hurt by this seemingly simple operation.

One soldier escaped death, but will be totally paralyzed for the rest of his life following a dive headfirst into a water blivet during a company social event. The equipment may be unique to a chemical unit, but the type of accident is not. Young soldiers are hurt and killed every year when they get careless around water. At the time of the

accident, the water blivet was not being supervised.

Rounding out the most serious of last year's injury accidents were: a soldier who survived an electrocution when he contacted a power line while standing on an M578 recovery vehicle and another soldier who amputated a finger when his ring caught on an M12 decon apparatus as he was climbing down. DOD 4145.19-R-1 prohibits soldiers from wearing rings around equipment, and leaders need to inform their soldiers of this hazard and enforce the standard. If more units would do this, we could reduce the high number of finger amputations that occur Army-wide every year.

What is the common factor in most accidents? They usually involve a human error resulting from a standards failure. Standards are established in various ways: Army regulations, field manuals, technical manuals, soldier's manuals, local SOPs, and the guidance of the commander, for example. The greatest number of Army accidents occur when soldiers who have been trained in standards fail to follow them. Frequently this also involves a failure on the part of leaders to enforce the standard.

What happened in the incident with the Fox? The standards were certainly known. The off-road speed limit for the vehicle, as published in its TM, is 60 kilometers per hour. This speed is considered sufficiently important that it was even stenciled onto the instrument panel of the accident vehicle. The driver definitely knew the limit, but failed to follow it. Two passengers had failed to buckle their safety belts, a clear violation of Army regulations. Worst of all, there was a noncommissioned officer in the vehicle who knew the standards and failed to enforce them.

As a result, the Army lost a valuable piece of NBC reconnaissance equipment just prior to starting hostilities

with a foe who had a significant chemical threat, which he had pledged to use. In addition, a unit was short several soldiers while they recovered from injuries.

Leaders need to perform a risk assessment as a part of mission planning. Had one unit done this, they might have learned that a night convoy in an unfamiliar country, driving for 12 hours with only one rest stop, is a dangerously high-risk operation. Then perhaps ways could have been found to modify the mission: running the convoy in the daytime or making more frequent rest stops, for example.

The Army recently released two excellent films on managing risk: *It's Up to You—The Role of the NCO in Reducing Accidents* (PIN 707509, TVT 26-931) and *Nobody's Fault—Reducing the Risk in Training* (PIN 706456, TVT 20-932). Aimed at the company-level leader, these films recreate actual Army accidents to illustrate how proper use of risk management techniques might have prevented them. They are guaranteed to liven up the training schedule.

As the Army draws down, each soldier and each piece of equipment becomes more important. This consideration is especially important in the Chemical Corps with our relatively small numbers of resources. In reducing accidents, we do our part in protecting the war-fighting capabilities of the Corps.

*At the time this article was written, MSG Barry Williams was assigned as the Chemical Safety LNO to the U.S. Army Safety Center at Fort Rucker, Alabama. MSG Williams' previous assignments include Pine Bluff, Arkansas, and the 11th Chemical Company and the Chemical Staff at VII Corps Headquarters in Stuttgart, Germany.*