

The Deadliest Road for Marines



Ground Warrior

Since 1994, four Marines have died on one road in the California Mountains. Here's what happened to the last one.

By GySgt. Brian McGeorge

An engineer platoon had finished a long and intense day in the field doing some demolition training (shooting line charges) when they called it quits. Despite being one of the riskiest events a Marine unit can do, the training went without incident. In this case, the unit used some smart planning and execution, and they included operational risk management (ORM) in their demolition training; it worked. But they forgot the risks of the trip home.

This was no ordinary trip. It was Friday afternoon, and the Marines were in the Margarita mountains and had to drive on Roblar Road to return. [See sidebar.] The road began at an elevation of 2,600 feet and ended 8 miles below at 600 feet. It was long, winding, and steep. A mistake by a driver could spell disaster.

The trip back to the battalion began with an effort to save time. The platoon leaders decided to get the LVS on the road since it was the slowest vehicle. The LVS would get a head start while the remainder of the unit finished packing. Early arrival at the battalion would enable the driver and assistant driver (A-driver) to turn in the LVS and TRAM (forklift) before the others arrived.

The driver and A-driver, both lance corporals, loaded the 36,000-pound TRAM onto the trailer of the LVS and got on the road. Within the first mile, and still on level ground, the driver stopped twice to check the chains that strapped the TRAM to the trailer. With the load tightly secured, they started down the mountain road. The two Marines began talking about the recent history of vehicles running off the very road they were using. They also talked about the fear those Marines



Guardrails are no match for a 48-ton LVS moving at 40 mph.

Firemen had to cut the cab to free the driver.



The metal of the cab that is suppose to protect you has its limits, too.



must have felt as they plummeted to their death in the deep canyon below. But little did they realize that just around the bend, they were going to add another page of history to the dangerous mountain road.

After traveling 2 miles, the driver began feverishly pumping his foot brake and pulling on the trailer brake with his hand. He yelled that he didn't have enough air pressure in the system to slow down. With the speed now 40 mph, both Marines were convinced the situation wasn't getting better. The driver decided to turn the LVS into the side of the mountain to stop the vehicle, but it was too late. The road turned sharply. The driver struggled to make the sharp left turn, but the vehicle's momentum was overpowering. The LVS flipped onto its roof, slid to the right edge of the road, and smashed through the guardrail. The LVS came to a stop on the shoulder of the road. Meanwhile, the TRAM broke loose from its chains and tumbled into the canyon. The injured A-driver crawled out of the LVS and called for the driver, but he never answered. There was an emergency phone 50 meters from the mishap site, but it didn't work.

Marines from the engineer unit arrived 15 minutes later. They had a radio, but it was disassembled and packed away. Driving down the mountain range, inspectors came upon the overturned LVS and called for emergency personnel, but it was too late. The driver, trapped in the crushed cab, was dead.

A combination of events led to this mishap.

1. Driver error. Engineers found the brake system in proper working order. The driver should not have relied solely on the wheel

brakes to slow his vehicle. This decision led to the air pressure in the braking system to fall too low. As a result, the brakes couldn't slow a vehicle that was going too fast to begin with. A Marine familiar with operating an LVS might ask in what positions were the gear selector, transfer case shifter, and engine brake? The investigators found conflicting evidence in this mishap and could not determine set positions.

2. Poor planning. The platoon used a risk-management matrix that had been used in a similar training event. It was a boilerplate plan. The demolition training was covered, but the hazards of the 48-mile trip to the range and back were not.

3. Lack of awareness. The platoon commander, truck master, dispatcher, and passenger were unaware of the commanding general's policy letter¹, which listed several precautions, including speed and gear selection when traveling the mountainous road. In fact, most of the Marines in the motor-transport unit were unaware of the message, despite it being posted on the window of the dispatcher's office. The truck master, new to the unit and responsible for tasking and training the drivers, was not familiar with the mountain road until the day of the incident.

4. No safety brief. The driver and A-driver had no guidance about safely transporting equipment to and from the range.

5. Inadequate speed limit signs. Investigators concluded that the posted speed limit of 25 mph was too fast for the LVS and its load.

The driver's training was up-to-date, and according to his unit leaders, he was one of the best LVS drivers in the battalion. He had driven the mountainous road as many as 20 times.

During the investigation an LVS was tested with a heavier load on the same road. In this case, the engine brake was on, and the gear selector and transfer-case shifter were in their lowest positions. The speed down the mountain was slow and safe enough that the brakes were not used and there was no loss of air pressure.

Here's what an LVS driver should know:

Your brakes get weaker when air pressure is depleted from the brake system. If the air pressure drops below 90 psi, the driver should stop until air pressure is restored to 120 psi.

Use the engine brake, and place the vehicle in the lowest gear and transfer when descending steep terrain. Then you won't have to depend on the air brakes alone

for slowing.

Here's what leaders should do:

Be familiar with your TMs, SOPs, range regulations, and policy letters that affect the safe operations of your unit. Turnover in our units is frequent and inevitable, therefore ensure your turnover folder is current. Review your unit's procedures and lessons learned with your Marines by making them a part of your training plan.

You can start with a boilerplate ORM plan, but remember every situation is unique. Each new training event contains different personnel, training levels, weather conditions, terrain, and equipment. Have someone look at your plan to ensure you've covered all the bases.

Take time to brief your Marines on the task at hand. Arm them with the knowledge to do the job safely. Taking shortcuts is the quickest and most popular way to hurt or kill a Marine. 🚫

¹ CG FIRST MARDIV//G-7/SAFETY//, MSG DTG R141301Z OCT 97, SUBJ/TATICAL VEHICLE DRIVING IN CASE SPRINGS AREA//

Since 1994, 11 Marines have died in tactical vehicles, four of them on Roblar Road in Camp Pendleton. The mishap this article chronicles happened last year. Before that, there were four crashes on this road. In 1998, a lance corporal lost control of his 5-ton and it rolled several times, pinning him underneath. He sustained severe head injuries. In 1997, a wrecker pulling a 5-ton ended up with both tumbling down a cliff. Fortunately, the two Marines jumped out in time. Just a month before this happened an LAV went over a cliff killing two lance corporals. In 1994, an LVS rolled killing a PFC.

Roblar Road has the highest numbers of deaths on any road that Marines use for training purposes. If you're training on this road, you need to be aware of the dangers it holds, and brief your troops on them. If you're the driver, follow the rules. 🚫

GySgt. McGeorge is the combat vehicle safety analyst and can be reached at bmcgeorge@safetycenter.navy.mil