Safety Dog

Wants You
To Be Safe!

The Safety Corner

From the Marine Corps Center for Lessons Learned

January 4, 2009

This Issue of the Safety Corner Addresses Seatbelt Safety.

From the Director: Seat belts are the most effective means of saving lives and reducing serious injuries in traffic accidents. Wearing them properly is also the law in most states. Every year, Marines, Sailors, family members, and friends are killed, or maimed simply because they didn't "buckle up". Failure to use seat belts contributes to more fatalities than any other single traffic safety-related behavior.

The National Highway Traffic Safety Administration estimates that seat belts save 9,500 lives in the United States each year. INHTSA, also estimates that an additional 9,000 lives would be saved and 160,000 nonfatal injuries would be prevented each year if all motor vehicle occupants ages 5 years and older properly used restraint devices all of the time.

Seat belts and child safety seats save lives when use correctly and significantly reduce the rate of injury in an accident. Despite all the hazards we face every time we get behind the wheel of a vehicle, wearing a seat belt is still the single most effective thing you can do to save lives and reduce injuries on our nation's highways and roads.

We encourage you to pass on and post this newsletter for widest dissemination. Log on to www.mccll.usmc.mil to download previous editions of the Marine Corps Center for Lessons Learned Safety Corner as well as our Monthly Newsletters. I look forward to receiving your comments and feedback so we can raise awareness, reduce risk and maintain a high level of readiness.

Semper Fidelis,
Col Monte Dunard, Director MCCLL

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We welcome suggestions and comments on this Safety Corner. Please send your comments via e-mail to feedback, or you may contact us at (703) 432-1279.

Did You Know?

Approximately 35,000 people die in motor vehicle crashes each year. About 50 percent (17,000) of these people could be saved if they wore their safety belts.

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JANUARY 2009
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Seat Belt Laws

http://www.ghsa.org/html/stateinfo/laws/seatbelt_laws.html

Seat belt laws are divided into two categories: **primary** and **secondary**. **Primary seat belt laws allow law enforcement officers** to ticket a driver for not wearing a seat belt, without any other traffic offense taking place. **Secondary seat belt laws state that law enforcement officers** may issue a ticket for not wearing a seat belt only when there is another citable traffic infraction.

- 26 states, the District of Columbia, American Samoa, Guam, the Northern Mariana Islands, Puerto Rico and the Virgin Islands have primary seat belt laws.
- 23 states have secondary laws.

New Hampshire has enacted neither a primary nor a secondary seat belt law for adults, although the state does have a primary child passenger safety law that covers children under 18. Specific laws vary greatly from state to state, depending on the age of the rider and in what seat he or she is sitting.

Types of Seat Belts

http://en.wikipedia.org/wiki/Seat_belt

Lap seat belt. Adjustable strap that goes over the waist. Used frequently in older cars, now uncommon except in some rear middle seats. Passenger aircraft seats also use lap seat belts.
Sash. Adjustable strap that goes over the shoulder. Used mainly in the 1960s, but of limited benefit because it is very easy to slip out of in a collision
Three-point seatbelt in a car. Similar to the lap and shoulder, but one single continuous length of webbing. Both three-point and lap-and-sash belts help spread out the energy of the moving body in a collision over the chest, pelvis, and shoulders.
Belt-in-Seat (BIS). The BIS is a three-point where the shoulder belt attachment is to the backrest, not to the b pillar. The first car using this system in the United States was the 1990 Mercedes-Benz SL.

Experimental production car safety belts.

- **Criss-cross:** Experimental safety belt presented in the Volvo SCC. It forms a cross-brace across the chest.

- **3+2 Point Seatbelt**: Experimental safety belt from Autoliv similar to the criss-cross. The 3+2 improves protection against rollovers and side impacts.

- **Four point "belt and suspenders":** An experimental design from Ford where the "suspenders" are attached to the backrest, not to the frame of the car.

- **Inflatable Safety Belts:** An airbag is included within the belt for the rear seat belts

Five-point harnesses. Safer but more restrictive than most other seat belt types. They are typically found in child safety seats and in racing cars.
Six-point harnesses. Similar to a five-point harness but includes an extra belt between the legs. These belts are used mainly in racing. In NASCAR, the six-point harness became popular after the death of Dale Earnhardt.
Seven-point harnesses (5+2). Aerobatic aircraft frequently use a combination harness consisting of a five-point harness with a redundant lap-belt attached to a different part of the airframe.

Did You Know?

The most effective safety protection available today for passenger vehicle occupants is lap/shoulder seat belts combined, and that studies have shown that if you use your seat belts, your children will also.

Wearing Seat Belts Can Help You Save Money, Time and Your Life

www.nhtsa.dot.gov/people/injury/airbags/Seatbelt%20Broch%20Web/nonpolice.html

Buckling up right is a snap! And it can keep you out of the hospital.

1. Adjust the lap belt to fit low and tight across your hips/ pelvis, not your stomach area.
2. Place the shoulder belt snuggly across your chest, away from your neck.
3. Never place the shoulder belt behind your back or under your arm

(continued)

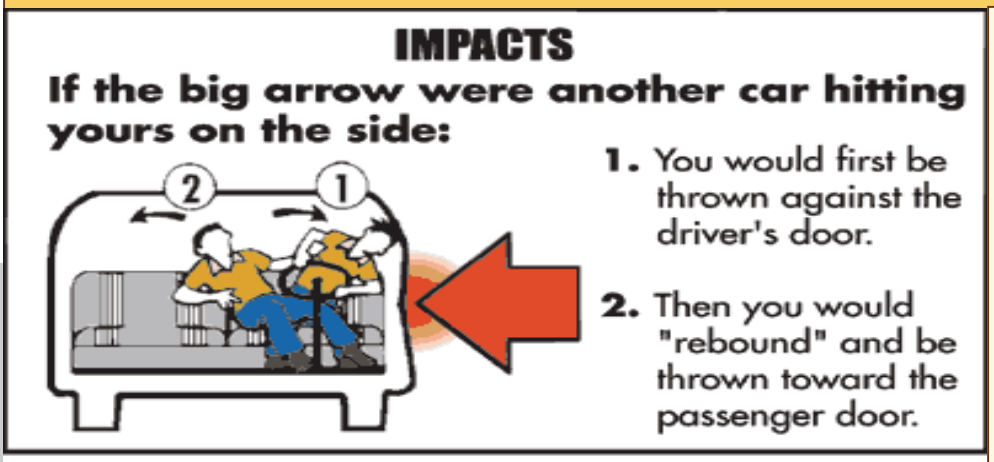
If you wear a seat belt every time you get into a vehicle, you're more likely to:

- ☑ Get to where you're going on time. Wearing a seat belt isn't just a good idea; it's the law, and many States are conducting heightened enforcement of their seat belt laws. It's pretty hard to follow the troopers advice of "have a good day" after you've been issued a ticket and spend 30 minutes on the side of the road.
- ☑ Hold onto your hard-earned cash. Seat belt tickets can mean hefty fines and, in some places, points on your license, not to mention an increase in your automobile insurance rates.
- ☑ Prevent disabling injuries and scarring. Every 15 seconds, someone is injured in a traffic crash. If you're not buckled up, you could be thrown through the windshield, sent skidding along the pavement or be crushed under a vehicle in a crash.
- ☑ Live. Someone is killed in a crash every 13 minutes. However, seat belts save over 9,000 lives each year, and they can help you maintain positive control of your car in a crash.

Not convinced by State law? Consider the laws of physics:

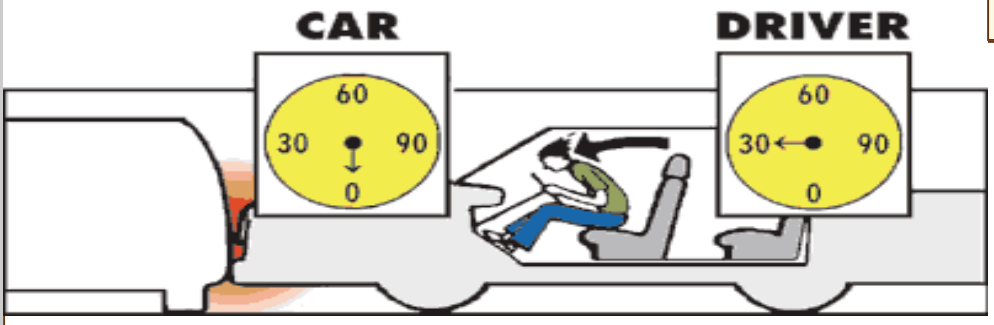
- If you crash or slam on your brakes, your car comes to a sudden stop. But you will keep moving until you, too, are stopped by the windshield, dashboard or pavement.
- Wearing a seat belt stops your body from being thrown around inside or outside the car. A seat belt decreases the chances you'll get hurt by firmly keeping you in place.
- Air bags are designed to be used with seat belts. By themselves, they are only 12% effective at reducing deaths.

HOW DO YOU WANT TO STOP?



The pictures illustrate what can happen in an accident.

- Your car stops, but you keep on going at the same speed you were traveling until you hit the dashboard or windshield. At 30 mph this is like hitting the ground from the top of a three-story building.
- If you were struck from the side, the impact could push you back and forth across the seat.
- Belts and straps keep you in a better position to control the car.



Have air bags? Buckle up anyway.

In most vehicles, air bags are only in the front and inflate only in frontal crashes. In rear or side crashes and rollovers, the seat belt can save you from serious injury or death.

Air bags inflate rapidly in a crash. If you're not buckled up, you could be thrown too close to the air bag and seriously injured or even killed.

Air bags are more effective when you're buckled up and seated at least 10" away, and when children under 12 are properly buckled up in the back seat.

Seat Belts Saved My Children, My Life

By 1st Lt Trisha Loede

4/25/2008 **BUCKLEY AIR FORCE BASE, Colo.**

On April 22 at about 5:10 p.m. I experienced every parent's nightmare-a major motor vehicle accident with my children in the car.

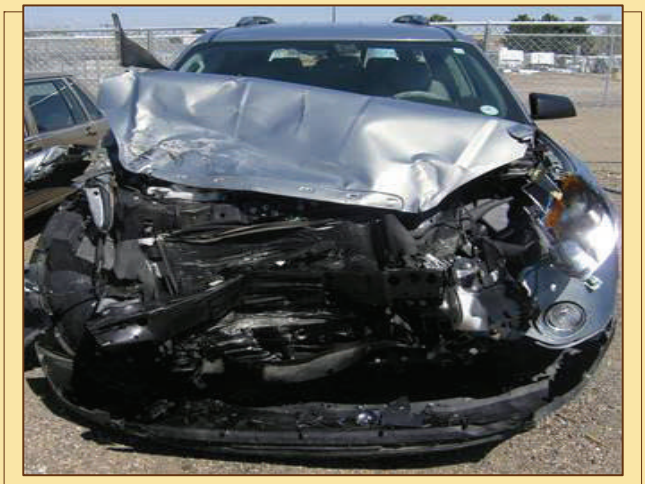
I was on my way to drop off our 8 and 6 year-old children with my husband before reporting to work when a car ran a red light and slammed head on into my vehicle.

I was driving northbound on one of the local roads and was approaching an intersection where I had a green light. As I proceeded through the intersection, going 40 mph, a southbound driver decided to make a left hand turn into my lane.

I slammed on the brakes in time to lock us into our seat belts milliseconds before impact. We slammed into a Ford F-350, bounced off of it, and hit it again with the back of our sport utility vehicle before we stopped in the middle of the intersection.

According to witnesses, the driver of the truck didn't even slow down, nor did he look at on-coming traffic; he just turned.

I shudder to think of the outcome had we not been wearing our seat belts. The children would have been tossed around the inside of the spinning SUV like the loose papers and toys that seemed to appear from out of nowhere. Today, they are at school showing off their battle wounds, telling all their friends about seat belts, and I am here at work with nothing more than some sore muscles, bumps and bruises.



BUCKLEY AIR FORCE BASE, Colo. -- An officer, from the 460th Space Wing, and her children survived a head-on crash with another vehicle that ran a red light in Parker, Colo., April 22. The family walked away with a few bruises because they were wearing their seatbelts. (Courtesy photo)

The SUV that I loved to drive is a total loss.

Think about this: we as consumers can upgrade just about any feature in our vehicles from the rims and tires to the interior and music system.

The one feature that stays the same, no matter what level of upgrade you get, is seat belts. They are there for a reason.

You have no excuse for not using them. The next time you get into your vehicle, remember, you may be the best driver out there, but you never know who is behind the wheel of every other vehicle on the road.

We didn't even have a chance to prevent this accident, said witnesses and police on scene. We are lucky to have been able to walk away from our mangled SUV.

Do what you can to protect yourselves and your family. You only get one chance in an accident. I am thankful that we made the right decision and buckled up.

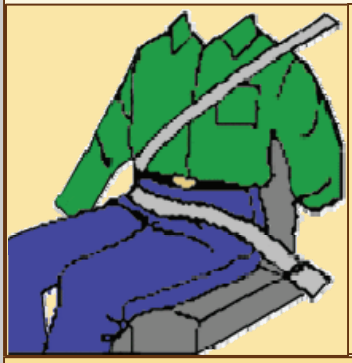
I wrote this as your Wingman to encourage you to wear your seat belt!

1st Lt. Trisha Loede is the 460th Space Wing Protocol chief.

There is a Correct Way to Wear a Seat Belt

http://www.nysgtsc.state.ny.us/seat-ndx.htm

When you buckle up, adjust your belt so it is positioned correctly. The **lap belt** or lap portion of the lap/shoulder belt combination should be adjusted so it is snug and low across the hips and pelvis, never across the stomach.



The **shoulder belt** should cross the chest and collarbone and be snug. The belt should never cross the front of the neck or face. Do not add excessive slack (more than one inch) into the shoulder belt. If you have an automatic shoulder belt, the lap belt must be buckled manually. Some vehicles have shoulder belt adjusters that allow you to move the shoulder belt's upper anchorage. This feature makes it easier to adjust the shoulder belt so that it does not touch the neck.

Small adjustments in either the belt position or in your position on the seat can improve your comfort and make the belt work better in a crash.

Incorrect Ways to Wear Seat Belts

Do not wear the belt across your stomach. In a crash serious injury can occur.

Do not place the shoulder belt behind your back; your upper body is not restrained and injuries to the head and chest are likely.

Do not wear the belt under your arm; the belt will ride over the lower part of your rib cage which could break ribs and cause internal injuries.

Seat Belts are the Best Protection

http://www.car-accidents.com/pages/seat_belts.html

Failure to wear a seat belt contributes to more fatalities than any other single traffic safety-related behavior. Sixty-three percent of people killed in accidents are not wearing seat belts. Wearing a seat belt is still the single most effective thing we can do to save lives and reduce injuries on America's roadways.

Data suggests that education alone is not doing the job with young people, especially males ages 16 to 25 (the age group least likely to buckle up). They simply do not believe they will be injured or killed. Yet they are the nation's highest-risk drivers, with more drunk driving charges, more speeding, and more crashes. Neither education nor fear of injury or death is strong enough to motivate this tough-to-reach group. Rather, it takes stronger seat belt laws and high visibility enforcement campaigns to get them to buckle up.

Seat belts are the most effective safety devices in vehicles today, estimated to save 9,500 lives each year. Yet only 68 percent of motor vehicle occupants are buckled. In 1996, more than 60 percent of the occupants killed in fatal crashes were unrestrained.

If 90 percent of Americans buckled up, we would prevent more than 5,500 deaths and 132,000 injuries annually. The cost of unbuckled drivers and passengers goes beyond those killed and the loss to their families. We all pay for those who don't buckle up in higher taxes, higher health care cost, and higher insurance costs.

On average, inpatient hospital care costs for an unbelted crash victim are 50 percent higher than those for a belted crash victim. Society bears 85 percent of those costs, not the individuals involved. Every American pays about $580 a year toward the cost of crashes. If everyone buckled up, this figure would drop significantly. By reaching the goal of 90 percent seat belt use and 25 percent reduction in child fatalities, we would save $8.8 billion annually.

Quick Safety Seat Checkup Tips

http://www.bragg.army.mil/PSBC-BM/PubsAndForms/SSS/SSS101/SSS118.pdf

Does your child ride in the back seat?
The back seat is generally the safest place in a crash. If your vehicle has a passenger air bag, it is essential for children 12 and under to ride in back.

Does your child ride facing the right way?
Infants should ride in rear facing restraints (in the back seat) until age one and at least 20-22 lbs. Infants who weigh 20 lbs before one year of age should ride in a restraint approved for higher rear facing weights. Always read your child restraint manual for instructions on properly using the restraint. Children over age one and at least 20 pounds may ride facing forward.

Does the safety belt hold the seat tightly in place?
Put the belt through the correct slots. If your safety seat can be used facing either way, use the correct belt path for each direction. Check the vehicle owner's manual and safety seat instruction book for guidance.

Is the harness buckled snugly around your child?
Keep harness straps snug over the child's shoulders. Place the chest clip at armpit level.

Does your child over 40 pounds have the best protection possible? Keep your child in a safety seat with a full harness as long as possible, at least until 40 pounds. Then use a belt-positioning booster seat which helps the adult lap and shoulder belt fit better. A belt-positioning booster seat is preferred for children between 40-80 pounds. It is used with the adult lap and shoulder belt.

How should a safety belt fit an older child? The child should be tall enough to sit without slouching, with knees bent at the edge of the seat, with feet on the floor. The lap belt must fit low and tight across the upper thighs. The shoulder belt should rest over the shoulder and across the chest. Never put the shoulder belt under the arm or behind the child's back. The adult lap and shoulder belt system alone will not fit most children until they are at least 4'9" tall and weigh about 80 pounds.

"TOP TEN"

Reasons To Wear Seatbelts

#10
I just don't like the taste of glass.

#9
I don't have a license to fly yet.

#8
I can see the road fine from inside my car.

#7
It takes less time to buckle than text message.

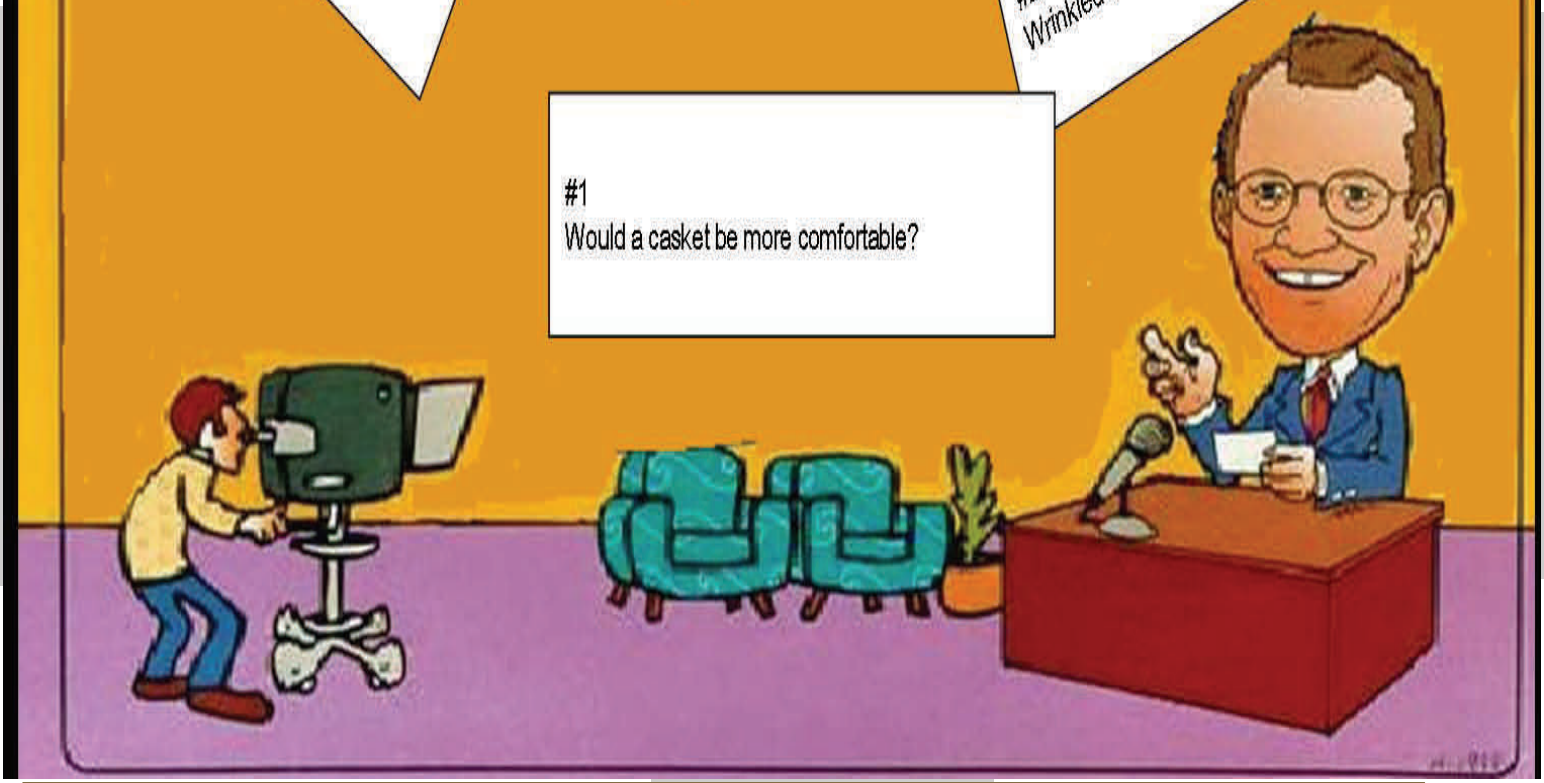
#6
Road rash isn't attractive.

#5
My head won't fit in the CD player.

#4
It's not cool to be stone cold dead.

#2
Wrinkled clothes are better than blood stain!.

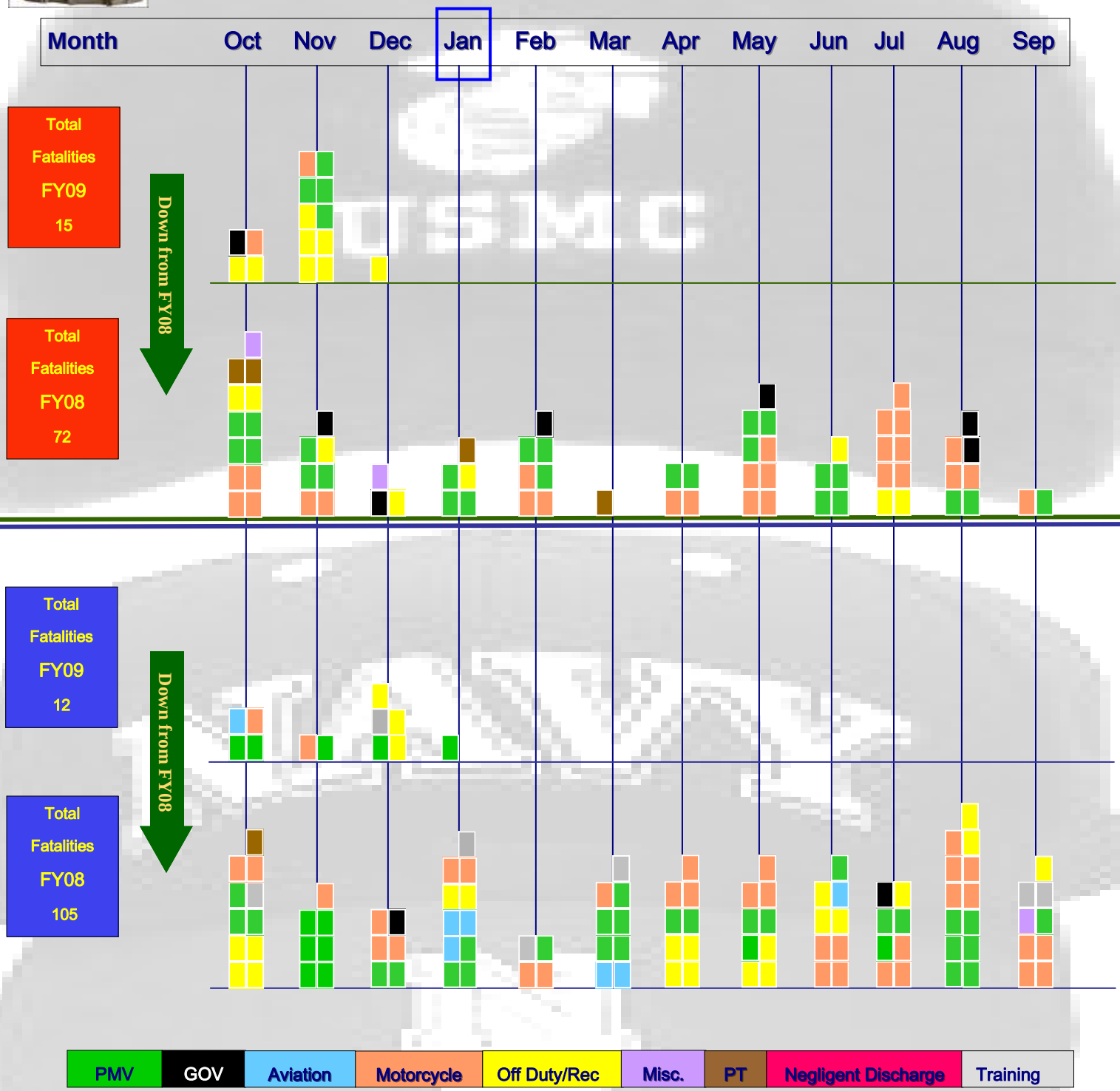
#1
Would a casket be more comfortable?



Fatality Summary as of January 08

When you gamble with safety, you bet your life.

Author Unknown



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