AVIATOR PROFICIENCY: KEEP THE EDGE SHARP

KNOWLEDGE

VOL 6 MAY 2012

OFFICIAL SAFETY MAGAZINE OF THE U.S. ARMY

MOTORCYCLE SAFETY

WHY WE GET IT WRONG

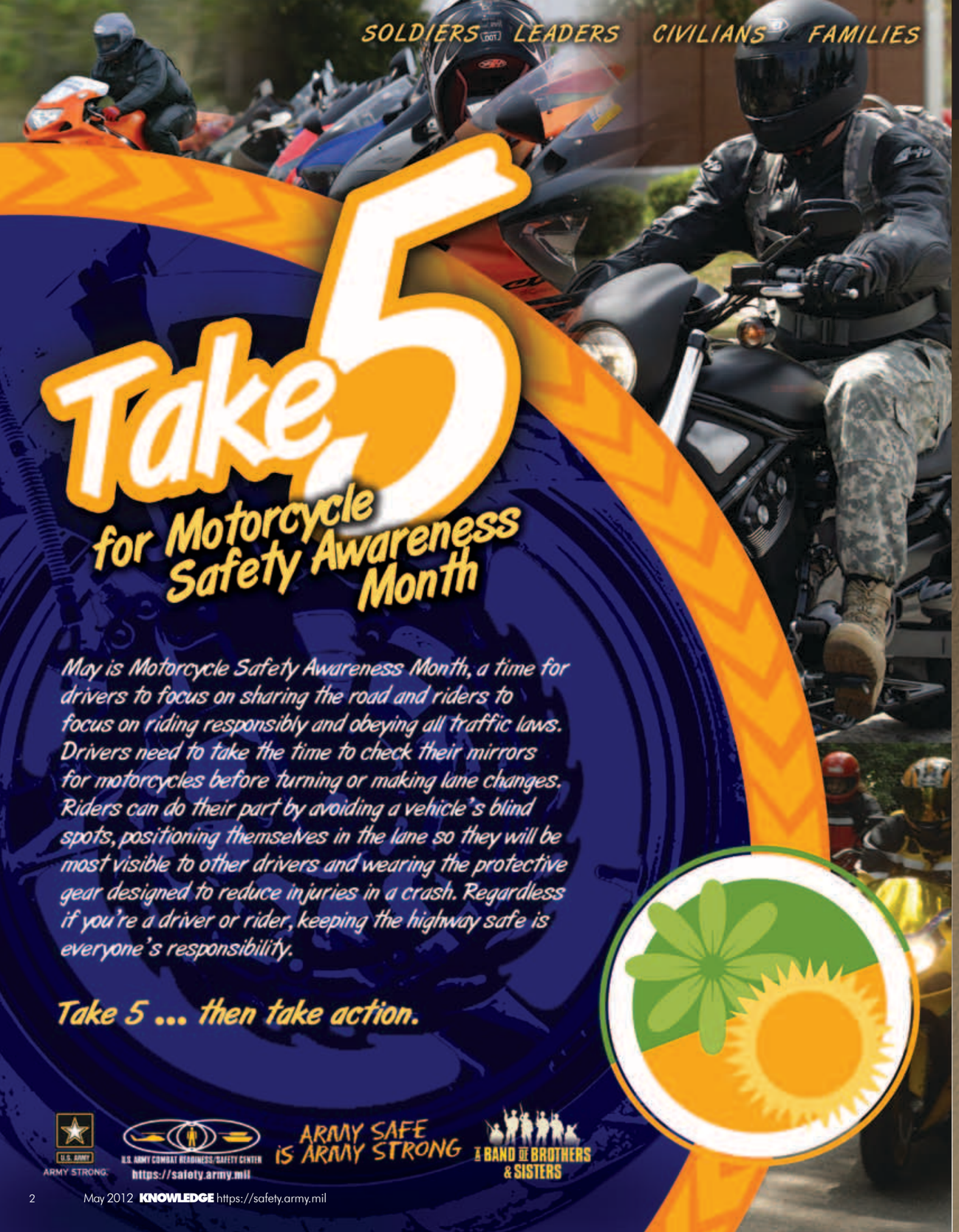
- AIRCRAFT LOGBOOKS
- ELECTRICAL HAZARDS
- LANE SPLITTING

+ WEAPONS HANDLING

U.S. ARMY
ARMY STRONG.

BAND OF BROTHERS & SISTERS

SCAN HERE FOR KNOWLEDGE ONLINE



May is Motorcycle Safety Awareness Month, a time for drivers to focus on sharing the road and riders to focus on riding responsibly and obeying all traffic laws. Drivers need to take the time to check their mirrors for motorcycles before turning or making lane changes. Riders can do their part by avoiding a vehicle's blind spots, positioning themselves in the lane so they will be most visible to other drivers and wearing the protective gear designed to reduce injuries in a crash. Regardless if you're a driver or rider, keeping the highway safe is everyone's responsibility.

Take 5 ... then take action.

ARMY STRONG. U.S. ARMY COMBAT READINESS/SAFETY CENTER https://safety.army.mil ARMY SAFE IS ARMY STRONG A BAND OF BROTHERS & SISTERS

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OFFICIAL SAFETY MAGAZINE OF THE U.S. ARMY

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ARMY SAFE IS ARMY STRONG

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Mission statement: The United States Army Combat Readiness/Safety Center (USACR/Safety Center) supports our Army by collecting, analyzing and communicating actionable information to assist Leaders, Soldiers, Families and Civilians in preserving/protecting our Army's combat resources.

We welcome your feedback. Please email comments to **safe.knowledge@conus.army.mil**.

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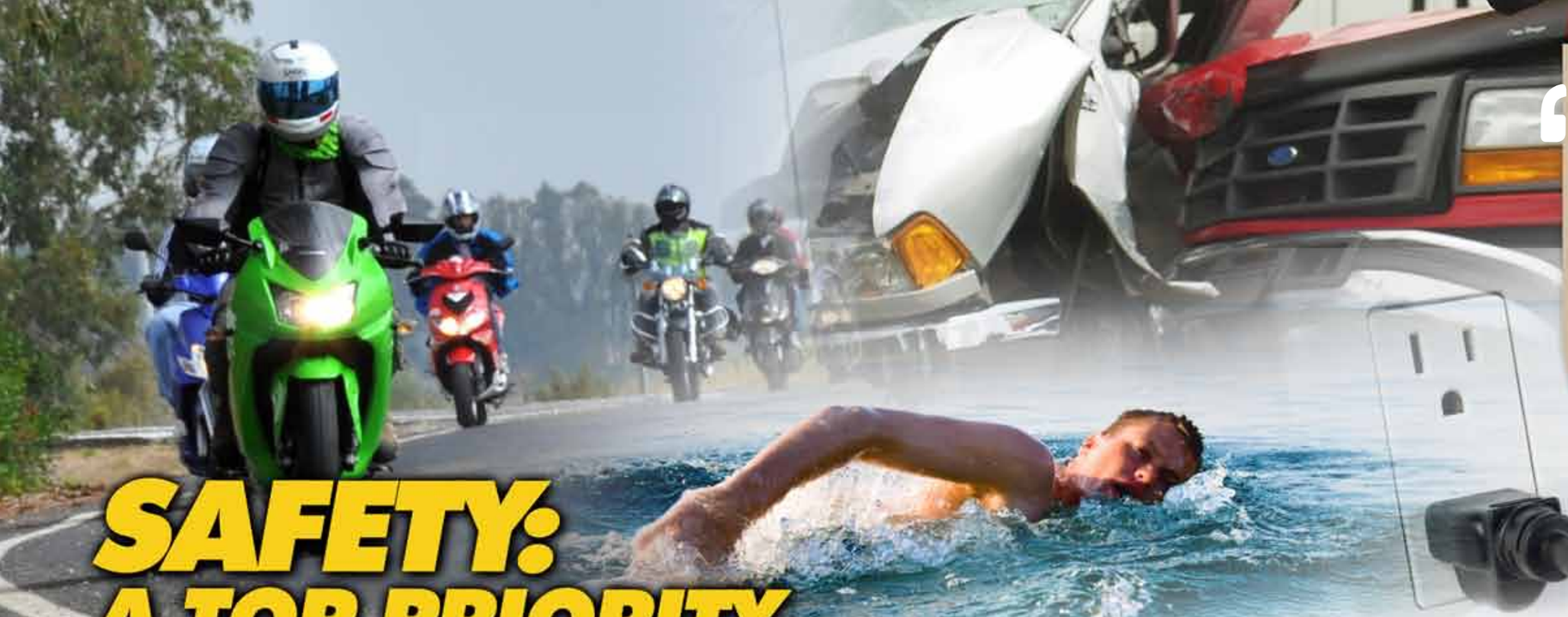


SAFETY: A TOP PRIORITY TODAY, TOMORROW

These late days of spring are a wonderful time of year: Temperatures are hinting at the lazy days of summer just ahead, and Soldiers, Families and Civilians across the force are heading outdoors to soak up the sun. This could be considered the most wonderful season of all for many reasons, and by now we're all hearing the sirens' song of perfect weather beckoning us to hit the highway for beaches, parks and other leisurely destinations. And while our Army will observe two national safety campaigns this month, I ask you all to remember risk doesn't keep a calendar — safety should be a priority every minute of every day.

May is Motorcycle Safety Awareness Month, and I'm pleased to report that halfway through fiscal 2012, Army motorcycle fatalities were down from the same timeframe last year. That's great news on the surface, especially considering the mild winter that offered nearly year-round riding conditions for many Soldiers in the United States. Engagement, whether among Leaders and Soldiers or Soldiers and their peers, is working, and most riders are doing the right things to stay safe on the road. However, a closer look at our 10-year motorcycle trend shows this relative calm could be highly deceptive.

Since fiscal 2002, motorcycle fatalities have predictably risen every two to three years, followed by a dramatic decline and then an equally dramatic increase. Now, our most pressing question is how to keep fiscal 2012 from being just another lull in the storm. Sustaining our current progress through the end of September and into the next few fiscal years won't be easy, especially when more and more Soldiers will be bringing their bikes out of winter hibernation or purchasing new rides altogether. Training is obviously a very important part of the solution, and the Army has addressed the need for expanded, sequential motorcycle training through the Progressive Motorcycle Program. Yet, as in all aspects of safety, training by itself isn't enough. Engagement and standards enforcement specifically targeted to indiscipline are the most crucial elements of preventing future tragedies not only on motorcycles, but in all types of vehicles.

This issue of Knowledge contains several excellent articles on motorcycle safety, including "Indiscipline — Beyond Risk Acceptance," written by Lt. Col. Scott Wile of the Driving Directorate here at the USACR/ Safety Center. I encourage you to carefully read this story and take Lt. Col. Wile's conclusions to heart. Risky behavior exists everywhere, but most alarmingly, it often exists just beneath the surface of day-to-day operations. Knowing which Soldiers are at risk, even those you'd never expect to be indisciplined off duty, is the first step in preventing future fatalities. Talk to your Soldiers, then talk to them some more so you'll be "in the know" regarding who's at risk within your formations.

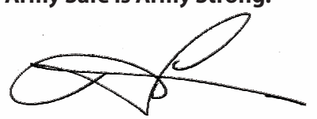
> "**KNOWING WHICH SOLDIERS** are at **RISK**, even those you'd **NEVER EXPECT** to be indisciplined off duty, is the **FIRST STEP** in preventing future **FATALITIES**."

While much of our attention and efforts should be focused on motorcycle safety, we can't do so at the expense of other issues. Although numbers have stabilized recently, sedans and other POVs were on the rise most of the first half of 2012. Since summer is historically the deadliest time of year for Soldiers in POVs, it's extremely important that you redouble your engagement efforts as we enter this season of long weekends and leisurely travel. Drowning also remains a top concern; we've already lost two Soldiers this fiscal year in water-related accidents. The annual Army Safe Spring/Summer campaign is currently underway, so I encourage you to check out our website at https://safety.army.mil for media tools specifically designed to target these and other critical seasonal hazards.

Finally, May was recently recognized as Electrical Safety Awareness Month by the Department of Defense. Electrical hazards are often unseen, and this program aims to educate Soldiers, Family members, Civilians and contractors on the hazards of electricity and the mitigation strategies that have proven effective in preventing injury and death. Visit our website often during the month for updates on this exciting new initiative.

Thank you all for everything you do for our Soldiers, Family members and Civilians. Play hard this summer, but remember to always play it safe! ≪

Army Safe is Army Strong!



WILLIAM T. WOLF
Brigadier General, USA
Director of Army Safety

How Do You Shoot Yourself?

One day while watching ESPN, I saw a story about an NFL wide receiver that shot himself in the leg. I wondered how anyone in their right mind could put a bullet in their own leg. I never would have imagined that I'd soon find myself in a similar situation. But there I was, riding in the back of an ambulance en route to the hospital with a severe, self-inflicted gunshot wound to my left thigh.

CHIEF WARRANT OFFICER 2 CARL PORTER
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Back in April 2011, I dropped off my two daughters at my aunt's house in Florida so she could watch them while I attended the Aviation Safety Officer and Warrant Officer Advanced courses at Fort Rucker, Ala. The drive from Baltimore, Md., to Florida wasn't bad, and I arrived in Tampa about 4 p.m. Once there, I prepared myself for my drive to Alabama later that night. I thought I did everything right to prep myself for the five-hour trip, such as eating a good dinner and taking a nap so I would have sufficient rest before I got behind the wheel. Little did I know I had already set up myself for failure before leaving Baltimore.

Anytime I'm home in Maryland, I keep a .45-caliber 1911 automatic Colt pistol in my car. I've owned the pistol for more than seven years and I'm licensed to carry it in several states. I've also trained on a variety of other weapons, from the 30 mm cannon used on the AH-64D Apache Longbow all the way down to a .22-caliber rifle, so no big deal, right? The pistol was still in the car when I rolled into Florida.

I awoke at 11:30 p.m., loaded the car and prepared to leave. I decided to put my pistol away since I was no longer in Baltimore. While sitting in the driver seat of my car, I removed my weapon from between the seat and center console. I placed my thumb on the hammer and proceeded to ride the hammer forward when, suddenly, I sent a .45-caliber hollow point bullet into my thigh!

I'd put my weapon in a non-firing configuration like that numerous times before and it never went off. What was different this time? It could have been many factors, but at that particular moment, I wasn't thinking about woulda-coulda-shoulda. The bullet went into my leg, shattered my femur and stopped. In shock, I convinced myself I hadn't just shot myself. I placed the weapon on the seat, put my car in drive and proceeded to drive to Alabama.

After about two minutes, I finally came back to reality and comprehended what just happened. My leg started burning. It felt like someone had dumped gasoline on it and set it on fire. I turned the car around and headed back to my aunt's house. Once there, I walked to the door and told my aunt about my accident. She called the authorities and medical personnel, and I was taken to the hospital.

Amazingly, my car wasn't damaged and there wasn't a drop of blood anywhere. Now that time has passed, I can reflect on the incident and consider what I should've done differently. For starters, I shouldn't have chambered a round or, if I did, I should've done so properly and not ridden the hammer forward in an attempt to clear the weapon. I also should have stored my pistol out of reach from my daughters. Although I've taught them everything there is to know about weapons, sometimes curiosity can get the best of kids.

There's nothing I can do about my accident now. However, I hope my mistake will make others think twice about their decisions when it comes to handling privately owned weapons.

DID YOU KNOW?

In an effort to reduce weapons handling accidents, the U.S. Army Combat Readiness/Safety Center has developed the Range & Weapons Safety Toolbox, available at https://safety.army.mil/rangeweaponssafety. Check it out today!

Treat every weapon as if it's loaded.
Handle every weapon with care.
Identify the target before you fire.
Never point the muzzle at anything you don't intend to shoot.
Keep the weapon on safe and your finger off the trigger until you intend to fire.

STAY AWARE TO STAY ALIVE

STEVE KURTIAK
Driving Directorate
U.S. Army Combat Readiness/Safety Center
Fort Rucker, Ala.

May is Motorcycle Safety Awareness Month, a good time to reflect on how the responsibility to ride safely rests on the shoulders of the rider. There are those in the motorcycle world who refer to the rider as a pilot. Others, however, might describe a rider as the "loose nut behind the handlebars" or other monikers not suited for print. If you, as a rider, are not in the rider/pilot group, you are not only bringing discredit to yourself, but to the rest of us who ride motorcycles safely. Riding a motorcycle is, of itself, not inherently dangerous. What is dangerous is riding unsafely, which leads to crashes and drives up injury and fatality rates. In many cases, riders are their own worst enemy.

Although the bulk of the responsibility rests on the rider's shoulders, there are others who are also responsible for a rider's safety. The distracted driver, the tailgater and every other driver of a motor vehicle also possess a responsibility for a rider's safety. Motorcycles have as much right to the roadway as any other vehicle. Drivers need to look out for us on the road and give us the room we need to maneuver.

Another riding season is upon us and with that comes the increased potential for needless injury and loss of life to Soldiers who ride motorcycles. As a fellow rider, I know we can reduce injuries and fatalities if we **RIDE SAFE** every time we operate a motorcycle, whether it is to and from work, on a weekend ride with friends or a solo trip to your favorite destination.

Ride within your capabilities on every ride and resist the temptation to crack the throttle open. For those of us who ride, this can be a difficult temptation to resist, especially if there is an open stretch of road without traffic. We all know that it's not the right thing to do but, unfortunately, many will not be able to resist. Find a reputable advanced motorcycling course and enroll. You will find out more about your capabilities (and shortcomings) in one day than in years of discovery learning. There are many schools available. And while the cost may seem steep at first, compared to the cost of replacement parts for your bike, raised insurance rates, other associated fines and the increased potential for injury or death, you'll find that a track day is much cheaper.

Identify potential hazards using the RiderRadar method you learned in the Basic *RiderCourse*. Use the 2-, 4- and 12-second scan technique. Establish a 2-second following distance, 4-second immediate path and 12-second anticipated path. To refresh your memory of this method, review the BRC book you received when you completed the training. Identifying a hazard is not limited to only those we personally encounter on the road. If you know someone who is riding untrained and without a license, you need to intervene. If you are operating a

> "**RIDE** within your **CAPABILITIES** on every ride and **RESIST** the temptation to **CRACK THE THROTTLE OPEN.**"

motorcycle without the training required by Army Regulation 385-10, you may be subject to any punitive options available to your commander.

Decide on a proactive course of action for the common hazards you encounter. As riders gain experience, they typically perform this mental task so often it becomes second nature. This includes scanning the road surface for potholes, tar snakes, loose dirt and gravel. Also, check the weather and treat each road intersection as if it were an "ambush zone," developing a course of action for each. Constantly evaluating potential hazards and having a course of action ready means it'll take less time to execute and you'll greatly reduce your potential of being involved in an accident.

Evade the hazards you encounter. This can be as simple as slowing down prior to entering the ambush zone mentioned earlier. Slowing down to avoid being ambushed can keep you from having to make it up as you go or rely on rusty skills to get you out of a potentially deadly situation. The Army trains you not to enter an ambush zone or, if you find yourself in one, how to get out! The thinking behind those combat skills translates well to the highway.

Street smarts will save your life by helping you make disciplined decisions to keep you from putting yourself into dangerous situations. Resist the urge to crack the throttle open or ride when you are fatigued or angry, and don't make the stupid choice to ride after consuming alcohol. You must be mentally engaged at all times when riding a motorcycle, and consuming alcohol slows response time. Lane positioning is also critical, place yourself in traffic so that you're easily seen and separate your motorcycle from other vehicles. You will see emerging traffic problems more quickly and clearly and have more time and space to respond.

Always wear protective gear on every ride, even if it is just down to the corner to put gas in your bike. The helmet is the most important component of protective gear and it must meet Department of Transportation standards. Full-face helmets provide the most protection, and the rest of your gear should also be specifically designed for motorcycle riding.

Frequent skill improvement is now mandatory per AR 385-10, but it is also a good idea to complete on your own. Good riders know when they need to brush up on their skills because riding skills perish if not refreshed. Practice with your fellow riders and consider attending a track day event.

Enjoy the ride! The recent changes to AR 385-10 aren't intended to make it more difficult for Soldiers to ride motorcycles, but to make it safer so they can enjoy riding for many years to come. If you see a fellow rider struggling, provide mentorship. If you have questions, ask. As riders, it's up to us to be responsible for our conduct and that of other riders if we're to protect our riding privileges. RIDE SAFE!

AIRCRAFT LOGBOOK REVIEW

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The aircraft logbook (NSN 7510-00-889-3494) is one of the most important pieces of equipment an aircrew will inspect during a preflight. Aviators are responsible to ensure all sections of the logbook are filled in, checked for accuracy and completeness, and the applicable forms are dated. This review is the last informal step in the quality assurance/quality control process.

In the fixed-wing community, we rely on civilian contract maintenance. While one contractor may cover the aircraft, a second contractor may cover selected "back-end" equipment, such as in the case of Special Electronic Mission Aircraft. The majority of contractors choose to use the Army's maintenance process as governed by DA PAM 738-751.

The bulk of contract maintenance personnel do an outstanding job, but they are human and can — like all of us — make mistakes or unintentionally fail to track, report or update a maintenance inspection status. Some subcontractors completing aircraft modifications, corrosion inspections or depot-level repairs/inspections also may not be familiar with the Army's procedures, documentations and maintenance requirements.

My story relates to a mission where I was tasked to pick up an aircraft and return it to my home station. My expectation, as well as most crews picking up a new aircraft, was the aircraft would be test flown, all discrepancies completed and logbook and historical data scrubbed and ready for pickup before crews were sent from home station. On this occasion, I arrived as the aircraft was just released by the contractor directly to my care. I started reviewing the logbook and things just did not look right. As I was reading DA Forms 2408-13/-13-1/-13-2/-18, they did not reflect the true status of the aircraft or the visible faults I saw. I compared the logbook against the aircraft and noticed the right engine cowling and avionics bay door had been removed. However, there weren't any write-ups on DA Form 2408-13-1 or -13-2 documenting the work. Right away, I knew I was in for a long wait.

As my day progressed, I moved to the maintenance office and noticed a dry-erase board. This board had a list of faults for my aircraft. Some of the faults were crossed-out, but most were not. I started looking in my logbook to see if the crossed-out faults had been documented or addressed. I was shocked to discover they weren't listed on any of my aircraft maintenance forms. I discussed this matter with the contractor's technicians. I found out documentation by dry-erase board was a normal practice in the civilian world. I continued to work my way through the flight pack entries and found numerous red "X" entries that were signed off incorrectly. I also identified procedures that were completed on my aircraft that were never documented. I reviewed DA Form 2408-14-1 and saw the faults that were completed were never transferred to DA Form 2408-13-1 to be signed off. When I reached DA Form 2408-18, I hit a stopping point; more than five inspection items were never completed and the aircraft had already been overflown (flown beyond the number of hours allowed before receiving scheduled maintenance).

I knew then I wasn't leaving this contract maintenance facility with my aircraft anytime soon and decided to dive into the aircraft historical logbook. I do not have an official Army maintenance background and this review seemed daunting; but after my maintenance review, I found it to be necessary.

For two weeks, I stayed at the contract maintenance facility, working to correct the logbook, flight packs and historical logbook before I was recalled to my unit. Back at my home station, I continued to monitor the maintenance status of this aircraft and found out it would not be ready for another six weeks.

Civilian contract maintenance technicians are very professional and good at what they do. However, they probably haven't experienced the copious amount of forms and recordkeeping the Army uses. I did not know everything, but I used my experience as a pilot to ask the right questions so the experts could find the right answers. Without well-trained quality assurance personnel, pilots must take responsibility for diving into the logbook(s) and flight packs to make sure the aircraft is ready and safe to fly. And that's not just when picking up an aircraft from depot maintenance, but every time they plan to fly. The rule is simple: Never fly an aircraft when you're not 100 percent comfortable about the maintenance it has received.

WHERE THE RAIL MEETS THE ROAD

HOWARD J. MAYHEW
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Will you be crossing a railroad track today? If so, your life could be in danger.

There are thousands of railroad crossings dotting the more than 160,000 miles of track in the U.S. If you encounter a train inside a railroad crossing, the train will always win. A locomotive alone weighs 200 or more tons, and that's not counting the freight cars attached. To make a comparison, a freight train hitting your vehicle is like your car hitting a soda can with one big difference — you're inside!

Think this is a rare occurrence? Think again. Every three hours, a person or vehicle is struck by a train. For example, in 2010, more than 800 people were injured and 260 were killed in 2,004 railroad crossing accidents. More often than not, these collisions occurred when drivers maneuvered around the gates at activated railroad crossings, not realizing an approaching train was less than 20 seconds away.

Fortunately, you don't have to join that statistics column. Here are some simple tips to keep motorists safe where the rail meets the road:

- Trains and cars don't mix. Never race a train to the crossing; even if you tie, you lose.
- Flashing red lights indicate a train is approaching from either direction. You can be fined for failure to obey these signals. Never walk around or behind lowered gates at a crossing, and do not cross the tracks until the lights have stopped flashing and it's safe to do so.
- The train you see is closer and moving faster than you think. If you see a train approaching, wait for it to go by before you proceed across the tracks.
- Be aware that trains cannot stop quickly. Even if the locomotive engineer sees you, a freight train moving at 55 mph can take a mile or more to stop once the emergency brakes are applied. That's the equivalent of 18 football fields.
- Never drive around lowered gates; it's illegal and deadly. If you suspect a signal is malfunctioning, call the 1-800 number posted on or near the crossing signal or your local law enforcement agency.
- Don't get trapped on the tracks. Proceed through a highway rail guard crossing only if you are sure you can completely clear the crossing without stopping. Remember, the train is 3 feet wider than the tracks on both sides.
- If your vehicle ever stalls on a track with a train coming, get out immediately and move quickly away from the tracks and back toward the direction from which the train is coming. If you run in the same direction the train is traveling, when it hits your car, you could be injured by flying debris. Call your local law enforcement agency for assistance.
- At a multiple track crossing waiting for a train to pass, watch out for a second train on the other tracks. That train could be approaching from either direction.
- When you need to cross train tracks, go to a designated crossing, look both ways and cross the tracks quickly without stopping. Remember it isn't safe to stop closer than 15 feet from a rail.
- Always expect a train. Freight trains do not follow set schedules.

Rail safety is for everyone, not just drivers. Pedestrians and others who choose to walk or play around railroad tracks are at extreme risk of being struck by a train. When I was a child, I used to put coins on the tracks and watch the train flatten them. If I only knew what I know now. Trains do not make the loud "click, clack" noise as in the past. Modern-day trains are much quieter. Trespassers who are hit by trains are usually involved in other activities such as riding all-terrain vehicles or motocross bikes, walking down the center of the track while wearing headphones or conducting physical training.

Earlier this year, a Soldier was killed and his wife critically injured when they were struck by a commuter train as they walked on the tracks over a railroad trestle. Pedestrians should keep the following tips in mind when near railroad tracks:

- Railroad tracks, trestles, yards and equipment are private property. If you are in a rail yard uninvited by a railroad official, you are trespassing and subject to criminal prosecution. You could be accidentally injured or killed in a busy rail yard.
- Trains overhang the tracks by at least 3 feet in both directions and loose straps hanging from rail cars may extend even farther. If you are in the right-of-way next to the tracks, you can be hit by the train.
- Do not hunt, fish or bungee jump from railroad trestles. There is only enough clearance on the tracks for a train to pass. Trestles are not meant to be sidewalks or pedestrian bridges. Never walk, run, cycle or operate ATVs on railroad tracks, rights-of-way or through tunnels.
- Do not attempt to hop aboard railroad equipment at any time. A slip of the foot can cost you a limb or your life.
- Be aware trains do not follow set schedules. Any time is train time!

OPERATION LIFESAVER

True-life stories can communicate safety principles with much greater impact than any lecture. To read about a young man who tempted fate on the tracks, go online to Operation Lifesaver at www.oli.org and click on "Shawn Potter's Story." You'll also find other helpful tools such as posters, videos and PSAs to emphasize the importance of safety around railroad tracks and crossings.

CONVOY VIGILANCE

JOHN HANSON, COL. MARK DRAKE AND LT. COL. TIM HANSEN
1st Theater Sustainment Command
Camp Arifjan, Kuwait

In the early morning hours of Dec. 18, 2011, the last U.S. convoys rolled across the desert border at Khabari Crossing, Kuwait, and closed the final chapter of the war in Iraq. The 1st Theater Sustainment Command had not only accomplished the colossal task of withdrawal within two months, but, most importantly, did it with neither loss of life nor serious injury. News camera crews and photographers, perched atop flatbed trailers by the side of the highway, focused on the procession of trucks entering Kuwait to capture the momentous event. Though invisible to a high-definition camera, the 1st TSC safety program, the linchpin of this mission, had also triumphed in this hour by achieving thousands of hours of safe convoy driving through hostile territory.

Command Emphasis on Safety

The 1st TSC has a unique structure. It is a split-based unit with elements at Fort Bragg, N.C., and Camp Arifjan, Kuwait. In its deployed mode, 70 percent of its strength comes from National Guard and Reserve units.

Maj. Gen. Kenneth S. Dowd, commanding general of 1st TSC, demanded application of the Army's composite risk management matrix at every leadership level and accountability — from routine safety stand-down inspections to the smallest mishap in a motor pool. Dowd stressed his safety priorities through quarterly executive safety council meetings with unit commanders. In this forum, he reviewed safety training and safety metrics and had his commanders share their best practices with the team. Through frequent motor pool visits on Camp Arifjan, Dowd met with battalion, company and convoy commanders to discuss impending missions and reinforced the fundamentals of convoy safety: spacing, speed, rollover procedures and safety restraints. Command teams also discussed actions to take in facing an armed enemy on the highways as well as the enemy of fatigue. Convoy commanders were authorized to decide on unscheduled rest overnight stops, or RONs, for the welfare and safety of their drivers. Throughout the 1st TSC, Leaders lead by example to reduce accidental injury or death among Soldiers, Army Civilians and Department of Defense contractors.

Safety on the Battlefield

In maximizing the awareness and practice of safety, the safety director was authorized to go into every motor pool, convoy brief and stockyard to check and enforce safety standards. The 1st TSC safety team was constantly meeting with commanders, first sergeants and convoy crews in orderly rooms, dining facilities and motor pools to put the word out on the latest in best driving and road practices while also gathering lessons learned from returning convoys. The safety director's days never seemed to stop as he and his team collected and analyzed threat-based and accidental hazard-based vulnerabilities of convoys and related operations to determine risk. Acting on his latest findings, the safety director implemented and enforced appropriate control measures. Feedback from drivers was priceless, and their comments enabled the safety team to advise the commander and his staff with accurate composite risk assessments and countermeasures.

Mission First, Soldiers Always

In the final 58-day stretch to

1ST TSC COMMANDING GENERAL'S TOP FIVE SAFETY PRIORITIES

1. Conduct quarterly safety meetings. Commander must brief program and lessons learned. Open discussion and forum. Contractors must participate.
2. Must conduct safety stand-downs once units arrive and prior to redeployment.
3. Safety team must be an enabler, not just a recorder of safety accidents and issues. Empower them.
4. Commander must discuss data and trends in command and staff sessions. Use your G-2 for threat analysis and trends.
5. Live and breathe your safety program, don't just talk it. Believe in the safety system and forecast upcoming trends.

complete the withdrawal from Iraq, convoys were coming and going around the clock. Every member of the 1st TSC team felt the weight of the increased operational tempo, yet everyone, from mechanics to chaplains, hunkered down and took ownership of this mission. Dowd regularly checked with his commanders on unit morale and personally encouraged Soldiers to take advantage of the resiliency centers at Camps Arifjan and Virginia when time allowed. Rest was a valued commodity, and Soldiers made good use of the facilities at these centers.

Safety at the Unit Level

The line-haul companies were the chief concern during the last two months of 2011. Their muscle and determination made the withdrawal a resounding success. In talking to the officers, NCOs and Soldiers of those units, Dowd found an enduring attitude toward safety that all units should emulate. First Lt. Linden Allen, executive officer of the 1644th Transportation Company of the Illinois Army National Guard, spoke for all when he expressed his company's regard for safety.

"We apply safety to everything we do," Allen said. "It starts with an intensive drivers' training and selection program and continues with safety briefs and inspections before every leg of a mission and regular safety stand-downs."

Allen added that CRM played a big role in the company's mission-planning process.

"The CRM process is used to its fullest extent to mitigate the risk of injury, and our Leaders, from company commander to our enlisted truck commanders, are tasked with supervising safety," he said.

"The Rest of the Story"

During those intense days of convoys traveling into and out of Iraq, the 1st TSC's low accident rate didn't meet even the minimum cost threshold of an Army Class D accident. According to AR 385-10, a Class D accident results in a non-fatal injury and with the total cost of property damage amounting to greater than $2,000 but less than $50,000. In fact, most of the injuries and mishaps sustained during this time occurred during off-duty activities such as team sports. Incredibly, a Soldier's foot injury was the most serious accident recorded during the withdrawal.

The Role of Safety in History

The 1st TSC safety program played a critical role in the execution of the massive withdrawal of troops and equipment from Iraq. Pushing troops and equipment to the limits of their endurance required a deep appreciation and understanding of safety measures of both commander and Soldier. Under such rigorous conditions, commanders must always be vigilant of their Soldiers' welfare and well-being.

When the withdrawal was completed Dec. 18 — nearly two weeks before President Barack Obama's Dec. 31 deadline — the 1st TSC had conducted 481 convoys, totaling 11 million miles across rough and unforgiving terrain. This final sum of miles traveled is equal to circling the globe at the equator 442 times. In the end, these drivers had transported 32,000 containers, 19,000 vehicles and 86,000 service members.

The challenge of this retrograde required the 1st TSC to travel greater distances, at faster speeds and with fewer trucks than the Red Ball Express during World War II. This accomplishment proves effective leadership, committed troops, a culture of safety and a clear mission can result in moving mountains.

TREACHEROUS TRAILS

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Bassett Army Community Hospital
Fort Wainwright, Alaska

Like most people, I grew up riding bicycles. As the years passed, my use of bikes progressed from fun to a mode of transportation. I covered many miles on two wheels during my college years. Shortly after moving to Italy with my husband, I took up the hobby of mountain biking.

While I've always been safety conscious and prepared, mountain biking and the unfamiliar equipment required an adjustment period. Wearing a helmet was always a given for me while riding, but one summer, I was introduced to clipless pedals — the type that are clipped to the shoe. The clip/shoe bond is so strong that it's been said the Jaws of Life are frequently used to free unfortunate soles (pun intended).

We traveled to a few races in Germany, where I placed first in my age division. After winning, I became confident in my abilities. I thought I could navigate any terrain on my bike; after all, winning first place means you are invincible, right?

Typical weekends for my husband and me were to meet friends in a village and ride on Italian mountain trails. One Saturday morning, we decided to take on a tougher trail. I hadn't negotiated this trail before, but our friends had navigated it many times. It was steep and full of washouts and ruts, but the main challenge was it was inundated with exposed tree roots, hence its nickname — the Root Down Trail.

> "I could have **EASILY SMASHED** into a **TREE OR STUMP**, broken a bone or even **WORSE**. Thank goodness I was **WEARING MY HELMET.**"

Not knowing the trail, I fell behind the others. They constantly waited on me at junctions to ensure I remained on the right trail. It didn't take long until I began to feel as though I was a burden and ruining their ride. After catching up for the third or fourth time, I decided I needed to step it up and throw caution to the wind since I seemed to be slowing the group. With that burden lifted, I began taking more risks and, in turn, began having many close calls.

Even with the risks I was taking, I remained behind, so I upped the tempo even more. As I came down the last root-covered bit of trail, I thought our meeting place was just around the corner. It was the perfect place to gain speed, giving me the opportunity to catch up. The trees passed by in a blur as I flew down the foot-wide trail. Then, in cinema-like slow motion, the next few moments seemed to last forever as I began flying over my handlebars! Being clipped into my pedals, I couldn't get out, so I tucked my head and rolled as I hit the ground. I landed on my back with my feet still firmly locked to the pedals, which were still attached to the bike, which was now tires-side up.

After the initial shock, I began to laugh as I thought to myself that I could have won the $10,000 prize on America's Funniest Home Videos. Slowly, I unclipped my feet, stood up and inspected my bike. Everything seemed to be in working order, so I continued on my way — a little wiser and a lot more bruised. No more than 100 yards around the corner was the rest of the group. Pretending that nothing happened, we continued with the rest of the ride.

In hindsight, I think of how lucky I am nothing serious happened to me that day. I could have easily smashed into a tree or stump, broken a bone or even worse. Thank goodness I was wearing my helmet. After being successful in several races, it was easy to become overconfident in my abilities. I made the mistake of trying to keep up with the rest of the group even though their skills surpassed mine. Having fun and enjoying the hobbies you like doesn't have to become a competition with others or with yourself. I had the preconceived idea in my head that I was ruining our friends' ride when, in all actuality, they were thankful for the breaks and the chance to chat about how awesome the trail was.

My advice is to get out there and have fun, but stay within your comfort zone and limitations. Competition and self-challenges are good, but all in moderation. The old adage of "walk before you run" is very applicable to safety in daily life.

Every year, aviators strive to make the most out of their allocated flying hours. Over the last 10 years, the increased mission requirements brought on by numerous deployments and related training has led to a proficient, well-trained and motivated pool of Army aviators. We have personnel who are well versed in environments from extreme heat and cold to high altitudes and severe dust. Because of standardized training and the hundreds of hours they've spent in the air, our aviators have developed a high level of proficiency.

Keep the Edge Sharp

CHIEF WARRANT OFFICER 4 MIKE ZINSKI
C Company, 204th Military Intelligence Battalion
Fort Bliss, Texas

> "The **GOAL** of **ALL** aviators and units is to **MAINTAIN MISSION READINESS** and the proficiency to accomplish their wartime **MISSIONS SUCCESSFULLY.**"

In the upcoming years, however, this situation will be subject to drastic change. Operations in Iraq have already drawn down extensively, and there is an imminent end to operations there already on the horizon. While we have significantly increased our presence in Afghanistan over the years to support operations, that theater, too, will begin to see reductions in requirements and, as a result, a reduction in assets in theater. Coupled with predicted deployment reductions, these missions will also become shorter in duration. As a direct result of this, aviators will fly fewer hours in theater performing missions. Lastly, as with all post-war periods, there is the looming threat of force and budget reductions, which could mean fewer units and training opportunities and reduced budgets for flying hour programs.

Because aviators may find themselves struggling to fly the minimum hours required by their specific aircrew training manuals, they may have to rely on flight simulators as an alternative. Instead of flying 300 hours or more in their semi-annual periods, aviators may soon spend less than 100 hours in the air. This will dramatically reduce training hours, forcing aviators to struggle to meet their minimums in the new peacetime operations tempo. The overall effect on the aviation community may be reduced proficiency. While aviators will always ensure they meet minimum requirements, what must be considered is the effectiveness of those hours. All aviators must ensure the limited time they have is used to the greatest effect. Commanders and units must ensure they keep the training as mission focused as possible and held to the highest standards at all times.

With reduced hours, individuals must make the most of simulators and other non-aircraft training aids for tasks that do not require actually flying an aircraft. This will allow them, when they do have flight time, to focus on the mission. When flying training missions, crews must strive to keep that training as realistic and challenging as possible. Their current skills, developed and honed in combat theaters, will degrade over time and training new aviators will require many hours. This additional training, while necessary, will mean fewer allocated hours elsewhere in the flying hour program.

The goal of all aviators and units is to maintain mission readiness and the proficiency to accomplish their wartime missions successfully. Aviators at all levels, especially the commanders, standardization personnel and those developing the training plans, must find the best way to make use of the shrinking allocation of assets to accomplish training and ensure aviator readiness. Individual aviator skills can become dull when not exercised to the extent they were when deployed. Aviators must work to keep the edge sharp and ensure they make the best use of the assets they have.

At the end of the day, currency in an aircraft does not mean an individual is proficient. Meeting the standards set forth in training requirements is the base level of proficiency required in an airframe, not the end standard expected to employ the aircraft in its mission. The challenge for the future will be to ensure the force can maintain training and operational levels necessary for future operations while living in an environment of shrinking assets. People are familiar with the adage of "train to standard, not to time," and that applies here. Aviators need to train to the standard (proficiency and ability to perform their wartime mission) and not to time (minimum annual hours and iterations).

MOTORCYCLE SAFETY — WHY WE GET IT WRONG

"Watch out for Bikers," "Loud Pipes Save Lives" and other "be safe" riding campaigns get a lot of attention from motorcyclists. But when you look at the science, these campaigns approach the problem from the wrong side. Studies show the greatest improvements in motorcycle safety are gained through better riding skills and awareness.

WAYNE BUSCH
Reprinted by permission from Smokymountainrider.com

I recently spent as much time as I could stand reading through studies on motorcycle accidents from the early 70s through the mid-80s. The most notable of these was the Hurt Report (see info box on page 26), though there are also a couple of big ones from Europe. The results of these studies are consistent over time and irrespective of location with similar conclusions:

- The most common multiple-vehicle accident is caused by a car turning left in front of a motorcycle at an intersection — about two-thirds of multiple-vehicle accidents.
- The most common single-vehicle motorcycle accident is running wide in a turn and leaving the road or sliding out — about one-third of single-vehicle accidents.
- In about 40 percent of motorcycle accidents, one of the contributing or causative factors is the rider's inexperience or lack of skills to evade or avoid the accident.

All of these are best addressed by the motorcycle rider through increased awareness and better skills.

Those popular riding campaigns mentioned earlier in this article are not supported by the science. They may be popular, and it's easy to put the blame on cage (car) drivers, but it's an ineffective approach.

Size Matters

The studies go in great detail examining how visible motorcycles are on the road — color, frontal area, bright clothing, lights on/off, etc. While each of these things does increase visibility and have an impact, overall it's not significantly relevant. The bottom line is motorcycles are small compared to any other motor vehicle on the road. You can do things to be more visible, but don't count on it helping much.

What's that Noise?

We are primarily visual creatures. Biologically, we process and intake information visually. Auditory input is secondary. We listen to the radio or books on tape when driving because we know we process our driving information visually.

There are no scientific studies that examine whether loud pipes have any impact on driver awareness. The evidence is anecdotal or assumed — "I know my loud pipes kept that guy from moving into my lane." Not if he didn't see you. When it comes to the most dangerous situation for motorcycles — approaching an intersection — you can draw your own conclusions from a simple experiment. Next time you're sitting at an intersection, note when you hear an approaching motorcycle. It's long after you can see it. By the time the sound is loud enough to draw attention, it's too late. Whatever is going to happen has already started.

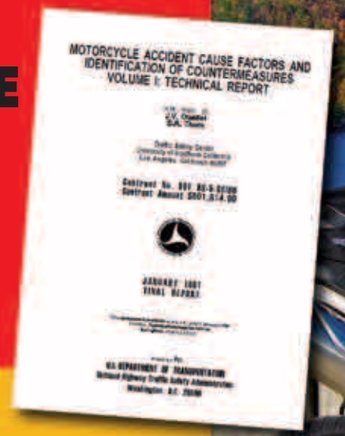
How to Ride Safer

Riding a motorcycle in traffic is like a mouse running through a herd of elephants. Be alert and ready to take quick evasive actions or you'll be crushed.

- **Always Ride Like You're Not Seen.** Expect the most common accident — a car pulling out in front of you. Intersections, side streets and anything that obstructs the view tells you to get ready to react. Develop that second sense and practice spotting these hazards.
- **Be Ready to React.** Ease off the throttle, get your hands ready to brake/clutch, get your feet off the highway pegs and down where you can get at the controls and position yourself to respond quickly.

CHECK OUT THE HURT REPORT

The Hurt Report is one of the most well-known studies on motorcycle safety. To read an online copy, go to http://isddc.dot.gov/OLPFiles/NHTSA/013695.pdf.


MOTORCYCLE ACCIDENT CAUSE FACTORS AND IDENTIFICATION OF COUNTERMEASURES
VOLUME I: TECHNICAL REPORT

- **React.** This is where most failures occur and where better skills make a significant statistical difference.

Once is Not Enough

Here's a typical example of how riders fail to respond properly to a situation. A car pulls in front of a bike and the rider jams on the rear brake. The bike either skids upright into the car or is laid down and slides uncontrolled along the ground. If you took a Motorcycle Safety Foundation course, you were exposed to how to brake and swerve. However, that happened in a parking lot at low speed with nothing to run into and with you totally focused on what you were doing. If that was the last time you practiced braking and avoidance, you are an accident waiting for an opportunity.

> "**COMMIT** to taking **MOTORCYCLE INSTRUCTION** to become a better and safer rider **RIGHT NOW.**"

Motorcycle Safety — Getting it Right

The science shows improving motorcycle riders' skills is the most effective means of reducing accidents.

- **Up Your Skills with Practice.** I can't ever recall seeing anyone practicing motorcycle skills independently. One reason may be you need to find a secluded, safe location to do it so it happens out of sight. I have my own secret test track not far from home where I go to hone my skills on a regular basis; but then I'm a motorcycle instructor and demand a high level of personal performance so I can demonstrate skills well for my students. Honestly, without such a motivation, I rarely practiced riding skills on my own previously in any serious manner. We all know we could be better with focused practice, but riding time is so precious that it's tough to give up a fun ride for the rigors of working on skills and practicing technique. Let's face it; it's the rare motorcycle rider who ever does any independent practice.
- **No Pain, No Gain.** At least swap one type of pain for another. A little financial pain can save you a whole lot of potential physical pain, as well as the attendant monetary consequences that result from even a minor accident. Since we're unlikely to practice skills on our own, force yourself to do it. Pay for it and you'll be motivated to give up the time and get your money's worth.
- **Git-R-Done.** While there are plenty of things you can do to learn to be a safer rider — online sources, books, etc., or occasional practice on your own to improve skills — if you want to get the quickest, best and easiest results, find professional structured instruction. You'll accomplish more in less time and progress more quickly to being a better, safer rider.

Are You Going to be Safe this Summer?

Commit to taking motorcycle instruction to become a better and safer rider right now. Whether it's repeating a basic course you've already had or scheduling a track day to work on advanced skills, take action now and find an appropriate class for you. I know you want to ride as many miles as you can this year — we all do. Let's all be safer riders as well.

DON'T GET ZAPPED

JORGE REBOLLEDO
U.S. Army Medical Materiel Command
Fort Detrick, Md.

There are different types of energy: electrical, chemical, thermal, electromagnetic, electrochemical, nuclear, potential and kinetic. Electricity is the most used type of energy in the United States, not only in industrial and commercial settings, but also in our homes. The majority of our day-to-day common household activities require electricity. Due to its daily use, thousands of people unknowingly expose themselves to risk every time they use electricity. It's important we understand these risks and avoid them as much as possible.

HOW ELECTRICAL CURRENT AFFECTS THE BODY

Current (Amps)	Human Reaction
0.001	Perception level. Just a faint tingle.
0.005	Slight shock felt; not painful but disturbing. Average individual can let go.
0.006-0.025 (Women)	Painful shock, muscular control lost.
0.009-0.030 (Men)	This is called the freezing current or "let-go" range.
0.050-0.150	Extreme pain, respiratory arrest, severe muscular contractions.
1-4.3	Ventricular fibrillation.
10	Cardiac arrest, severe burns and probable death.

Note: Some smaller microwave ovens use 10 amps (10,000 milliamps), and a common fluorescent light uses 1 amp (1,000 milliamps).

Editor's note: This chart is an excerpt from an Occupational Safety and Health Association electrical safety presentation. For more information, visit www.osha.gov.

> "So, how **MUCH** electricity is **FATAL?**"

The problem with electricity is it's invisible, odorless and silent. It can, however, be felt when touched. When certain levels of electricity run through a body, the consequences can be fatal. It doesn't discriminate either. Whether a person is short or tall, thin or obese, young or old, male or female — everyone is susceptible to electrical injuries.

The consequences may vary from a little fright to a burn — or even death by asphyxiation or heart failure. The seriousness of a shock depends on the amperage, duration of contact and resistance of the pathway through the body. For example, a small current passing through the heart is much more critical than a current passing between two fingers of the same hand.

So, how much electricity is fatal? People can feel electrical currents at levels as low as 1 milliamp, which produces a slight tingling sensation. Current levels above the 50 mA "let-go" threshold can cause loss of muscular control, irregular heart rhythm and, finally, cardiac arrest. That level of current is only a small fraction needed to power a 60-watt bulb, which draws about ½ amp, or 500 mA.

Electrical shock occurs when a person touches an electrically charged object and another surface capable of conducting electricity to ground at the same time. This allows the current to pass between the points of contact. Of note, damp skin is less resistant to current flow and permits greater shock effects.

The following are some safety tips and rules of thumb that will, if followed, help protect you and your loved ones from an electrical injury:

- Install ground fault circuit interrupter outlets in the kitchen, bathroom, garage and all other areas inside and outside your home that can

get wet. GFCIs provide protection against common electrical accidents, which include shock or fire when water reaches an electrical current, faulty wiring, defective cords and other ground fault electrical risks.

- Many accidents occur because of the misuse of lamps and lighting fixtures. For instance, many people think that it's all right to use a 100-watt light bulb in a 60-watt light socket. They are unaware that this can heat up the fixture, melt its wires and lead to an electrical fire. The same risk applies when a cord is plugged into a female adapter outlet that is screwed into a light socket.
- Never touch an electrical appliance with wet hands or while standing in water.
- If you have small children, it's recommended you cover all electrical outlets with plug socket guards. They are cheap and easily obtainable. This will prevent children from placing unwanted things in outlets.
- Place lamps and appliance cords out of the reach of children, perhaps behind heavy furniture.
- Always check appliances and cables for damage.
- Do not use any electrical appliance that smokes, sparks, hums, gives off a burning smell or has a damaged cord.
- Always unplug an electrical device before cleaning it.
- Only buy and use electrical products that comply with the safety standards of testing groups like Underwriters Laboratories.
- Treat electricity with utmost respect. Follow the directions printed on the product's manual, as well as the small labels in appliances, fixtures, cords and other devices.

Remember, electricity can't be seen, and special equipment is required to detect its presence. When in doubt, call for a qualified electrician to replace or repair any outdated or defective electrical device. Be smart and don't get zapped!

DID YOU KNOW?

- **Underwriters Laboratories has been the trusted resource across the globe for product safety certification and compliance solutions since 1894.**
- **The UL mark on a product means UL has tested and evaluated representative samples of that product and determined they meet their standardized requirements.**
- **UL's worldwide family of companies and network of service providers includes 68 laboratory testing and certification facilities serving customers in 102 countries.**
- **The only way to determine if a product has been certified by UL is to look for the UL mark on the product itself.**
- **Adopted in 1993, the CE labeling program aims to standardize regulations across the European Union.**
- **The CE marking on a product is a manufacturer's declaration that the product complies with the essential requirements of the relevant European health, safety and environmental protection legislation.**
- **CE marking on a product indicates to governmental officials that the product may be legally placed on the market in their country.**
- **The letters "CE" are the abbreviation of the French phrase "Conformité Européene," which literally means "European Conformity."**

Editor's note: This chart was adapted from an Occupational Safety and Health Association electrical safety presentation. For more information, visit www.osha.gov.

Indiscipline — Beyond Risk Acceptance

LT. COL. SCOTT WILE
Driving Directorate
U.S. Army Combat Readiness/Safety Center
Fort Rucker, Ala.

What is the No. 1 cause of privately owned motorcycle accidents across the Army today? That question can be answered in one word — indiscipline.

The headline states a Soldier died in a motorcycle accident. Read the story and you'll see he survived combat in both Iraq and Afghanistan but made several wrong decisions late one night on a street here in the United States. After drinking with his buddies and refusing a ride home, the Soldier was speeding and lost control of his motorcycle before it hit a utility pole, killing himself and his civilian passenger.

Neither this Soldier nor his friend had to die. No irresponsible driver ran them down that night last summer; their deaths were the direct result of the Soldier's risky behavior and negligence. And, while the newspaper reported this crash as an accident, the Army sees it as something more: risky behavior rooted in indiscipline.

Riding responsibly requires blending the right skills with the proper attitudes and behaviors that respect the hazards inherent to motorcycles. A myth persists within our Army that other drivers cause most motorcycle accidents, but a close look at actual data refutes that assumption. During fiscal 2011, more than 70 percent of all Soldier fatalities occurring on motorcycles were the fault of the rider, and nearly half those accidents didn't involve another vehicle at all. The loss of any Soldier is tragic, but we can't make excuses for negligence to soften the tragedy. Rather, we must face the indiscipline issue head on and work to change the attitudes and behaviors that are causing our Soldiers to kill themselves.

Many aspects of behavior contribute to indiscipline, and most riding accidents involve multiple safety failures. For example, when a rider chooses to speed and ride recklessly or not wear personal protective equipment, he or she significantly reduces their chances of survival in a crash. Understanding why these failures happen is vital to curbing preventable deaths on motorcycles, and several critical factors help explain the difficulties of indiscipline.

Leaders know not all Soldiers approach risk the same way. According to the September 2010 Army Health Promotion, Risk Reduction, and Suicide Prevention Report, operational tempo during the first years of Operation Iraqi Freedom led to the recruiting of high-risk individuals. Consequently, acts of indiscipline climbed as these recruits entered the force. The report also found these individuals tended to take increasingly greater risks over time. The near doubling of Army motorcycle fatalities between fiscal 2004 and 2005 (jumping from 22 to 40) and 2008's peak of 51 fatalities affirm that conclusion. Although numbers have declined somewhat since then, we closed fiscal 2011 with 45 motorcycle deaths, far too close to the 2008 figure for comfort.

Careful review of the U.S. Army Combat Readiness/Safety Center's accident

> "The **KEY** to **CURBING INDISCIPLINE** lies with **LEADERS** at all levels ..."

database reveals several interesting findings. Chief among these is that, contrary to popular belief, Soldiers who have recently redeployed from combat are no more prone to motorcycle accidents than their non-deployed peers. More accidents are resulting from indiscipline — speeding, drinking and riding, and a lack of PPE — than skill deficiencies caused by extended time off the road. In other words, Army motorcycle fatalities are unrelated to deployment or time away from home, and we should approach indiscipline as a systemic problem that transcends duty station or unit assignment.

Compounding the indiscipline problem is the type of motorcycle many Soldiers are choosing for their beginner bike. With incredible acceleration and top speeds nudging 200 mph, sport bikes have become the motorcycle of choice for many young, inexperienced Soldier riders. It used to be that riders started out on smaller bikes and gradually worked their way up the engine "cc" ladder, allowing them to progressively grow their skills and learn what worked to keep them safe. Today's trend is just the opposite: buy the biggest and fastest model you can afford and get trained later.

While some enthusiasts may feel sport bikes have been unfairly targeted, accident data show Soldiers riding these particular models are more than three times as likely to die in a crash as their peers on cruisers. A motorcycle is only as good as its rider, and the power and performance of the bikes most popular in our Army today simply outmatch many of their owners' riding skills.

What can be done?

To address indiscipline and establish lifelong learning among the Army's riding population, recent changes to Army Regulation 385-10, The Army Safety Program, mandate universal training through the Progressive Motorcycle Program. The PMP consists of four separate courses spaced at specific time intervals: the MSF Basic *RiderCourse*; Military SportBike *RiderCourse* or Experienced Riders Course; motorcycle refresher training; and sustainment training. Complementing that, the USACR/Safety Center Driving Directorate is currently working to expand the behavioral training curriculum currently offered as part of the BRC. The goal of these changes is to promote behavior change while motivating riders to continually manage their risk and operate their bikes according to their personal capabilities, as well as appropriate regulations and local laws.

Even with these needed refinements, however, training alone cannot fully solve the Army's current problems with motorcycles. The key to curbing indiscipline lies with Leaders at all levels engaging with their Soldiers on both the joys and hazards of riding, and Soldiers holding each other accountable for their behavior on the road. The real-world manifestation of engaged leadership and a positive riding culture is relatively simple: establishing a unit-level motorcycle mentorship program where experienced bikers guide novice riders as they build their skills and develop a safe riding style.

This is a concept Col. Kevin J. Christensen, commander, 110th Aviation Brigade, Fort Rucker, Ala., has taken to heart. Overseeing the Army's largest brigade — one filled with eager flight students, many of whom are riders — has allowed him to observe typical Soldier behaviors and consider the motivations behind them.

"First, I believe indiscipline — regardless of where or how it's manifested — is a key risk indicator for commanders to consider," he said. "While some might find it hard to make the connection between a traffic violation in a car or a non-judicial punishment resulting from an act of indiscipline and safe motorcycle riding, I think there's a connection. When Soldiers know what the chain of command expects of them and they still go out and ride recklessly, they're demonstrating a lack of judgment."

Christensen sees his brigade's MMP as a valuable tool for creating a responsible, safe riding environment.

"I think a good mentorship program establishes a self-policing environment," he said. "While the Army has made great strides with programs enhancing the knowledge and skills of our riders, it's left mostly to our mentors to uncover the underlying attitudes that can lead to risky (indisciplined) behavior."

He explained his goal is to modify rider behaviors in ways that will save lives, while encouraging mentors to share with unit leadership their concerns about high-risk Soldiers.

"For many Soldiers, safety briefings and the fear of consequences isn't sufficient to modify behavior," he said. "We have to get Soldiers to make the right decisions, even when the chain of command isn't watching them. In the cases where we can't modify behavior, we at least have to be aware of it and consider it as part of the risk management plan."

For more information on the MMP, visit https://safety.army.mil/mmp/.

RIDE FOR YOUR LIFE

The Motorcycle Mentorship Program establishes voluntary unit- or installation-level motorcycle associations where less experienced riders and seasoned riders can create a supportive environment of responsible motorcycle riding and enjoyment. This can create positive conduct and behavior and serve as a force multiplier that supports a commander's motorcycle accident prevention program.

MMP
MOTORCYCLE MENTORSHIP PROGRAM

Check out the USACR/Safety Center MMP website for some examples of active mentoring programs.

https://safety.army.mil/mmp/

WHO'S IN CONTROL?

CHIEF WARRANT OFFICER 3 CARL P. MILLER
2nd Brigade Combat Team, 4th Infantry Division
Fort Carson, Colo.

The OPTEMPO had been heavy for our single Tactical Unmanned Aircraft System platoon site. I was the TUAS operations technician for the 2nd Stryker Calvary Regiment out of Vilseck, Germany. We were giving the troopers of my regiment 24 hours of continuous coverage. The attacks on the forward operating base and the troopers going out had slowed a great deal. Our TUASs were utilized not only as reconnaissance, surveillance and target acquisition assets, but also as a deterrent for enemy forces. I thought everything was going great, and we had our operations down pat. Little did I know!

I had just taken a combat shower and was lying in my bunk resting from a 16-hour day. Just after midnight, there was a knock on the door to my containerized housing unit. I opened it to see my platoon leader (captain) and platoon sergeant standing there with grim looks on their faces. I knew we hadn't crashed, but by the looks on their faces, I knew something had happened. They both stood there as if they were in trouble. Tired and knowing tomorrow was to be a direct reflection of today, I asked what was wrong.

The young, newly pinned captain proceeded to tell me the story. Only 30 minutes before their arrival, a young specialist, serving as a newly qualified mission commander, had gotten us some attention from the U.S. Air Force, and it wasn't the kind of recognition my troop or squadron commander was going to like. We had been the fine recipients of a hazardous air traffic report, or HATR. It gets better than just a report, though.

Somewhere about 11:30 p.m. the night before, the young specialist had the operators pre-position the unmanned aircraft for the next mission. He requested airspace for transitioning. He was cleared for his transition and given a whole keypad, or enough area to do the mission. The operators requested a lower altitude for the mission. A lower altitude meant better video for the ground commanders. However, this was a trade-off because engine noise could give away the aircraft's position, so the mission commander requested a new altitude. The controlling agency granted the request and told him to "elevator in place." The crew argued about what that meant, as they did not know. The mission commander instructed the crew to continue their transition across the keypad (since he was already cleared for it) and to descend to the new low altitude.

Not even three minutes into their descent, the mission commander's communications radio monitor went crazy. The controlling agency was lighting into him pretty good, saying he had busted airspace and had nearly caused a midair collision with a manned fixed-wing aircraft. The crew of that aircraft said they were going to do a HATR. The young specialist replied with, "LOL!!! What R U talking about? LOL!"

Lessons Learned

What the controlling agency had meant for the TUAS operators to do was to loiter and descend in place. Of course, this is not what happened. This was not a good thing, but no one was hurt and no equipment damaged, thankfully. The specialist was removed from mission commander duties, the whole crew was counseled and we got a safety stand down to go over some very important things we had forgotten. However, my Soldiers and I learned a few lessons that day, and I thought it best to share them with the whole aviation community.

1. The chat software being used is for official communications. It is not Yahoo! or MSN. Leaders should train their Soldiers to use proper messaging techniques with the software. In this case, the specialist thought they were joking around and calling him a "hater." Neither he nor any of the other crewmembers knew what a HATR was.
2. Crew coordination is an annual training topic and very important in the process of doing our jobs. Both Army Regulations 95-1 and 95-23 state crew coordination will be used through all aspects of the flight. There are no new accidents, so we should have the lessons learned for them. Whether we are manned or unmanned, there is no need to reinvent the wheel. If you are unsure of the terminology, then you need to ask someone. Every Soldier and piece of equipment we have is vital to winning the mission. If we are to lose either, then let it be because the enemy got lucky or were just better than us — not because we are too embarrassed or stubborn to ask.
3. Whether the agency granting the airspace is talking on a radio or typing on a computer, we all have a right to know if other aircraft are directly above, below, beside, behind or in front of us. The crew above got pictures of the aircraft because they always scan with a camera during their descent. However, air traffic control never conveyed to our crew or the manned crew that we were in the same airspace. This could have been a huge mishap with lives lost and equipment destroyed. Sadly, the armed forces have enough accidents that take the lives of our brave men and women. Let's not add to it by thinking that unmanned aircraft are just remote-controlled aircraft. I challenge all ATC units and Leaders to not treat these aircraft differently. The rules, regulations and standards are the same, so should the procedures in which the airspace is granted, disapproved and traffic advisories given.

> "Whether the agency **GRANTING THE AIRSPACE** is talking on a **RADIO** or typing on a **COMPUTER**, we all have a **RIGHT** to know if other aircraft are directly **ABOVE, BELOW, BESIDE, BEHIND** or in **FRONT OF US.**"

The Pain of Lane Splitting

Last October, one of my closest friends, Cynthia, was involved in an accident while touring California on her motorcycle. She was accompanied by her husband and my good friend, Tim.

Cynthia was an experienced rider, and she and Tim enjoyed getting out on the weekends and taking trips on their bikes. On this particular trip, the two had taken a week off to travel from their home in northern New Mexico to California. As they rode on an interstate, Cynthia was "lane splitting" between a car and a pickup when the pickup suddenly changed lanes. Not seeing Cynthia, the driver of the pickup bumped her motorcycle, trapping her left leg between the truck and the bike. Cynthia was thrown off the bike and came to rest about 80 feet away in a field.

CHRISTOPHER S. RAINWATER, M.R.A.
358th Civil Affairs Brigade Safety
U.S. Army Reserve
Riverside, Calif.

Cynthia was airlifted to the closest hospital, where she underwent surgery to save her life. The surgeries were successful; however, Cynthia, a beautiful immigrant from Germany, lost her left leg below the knee and suffered extensive cuts to her body that resulted in terrible scarring. Cynthia was in the intensive care unit for two weeks.

Active and involved before the accident, Cynthia now found herself disabled. Her looks — she had been a model in Germany — were deeply affected by the injuries. It was uncertain if and when she could ever return to her career in New Mexico. In her eyes, life, as a result of the motorcycle accident, looked bleak.

I spoke with Cynthia and Tim on several occasions after the accident, and my wife and I happily tracked her improvement. She told me the crash was her fault. She knew lane splitting was dangerous and not allowed elsewhere, but she felt empowered by California's allowance of this dangerous practice. She thought she'd try it out.

Less than a month after the accident, I got an early morning call from Tim. He told me Cynthia had wheeled herself outside the previous night, watched the sun set over a New Mexico mesa and then took her own life. The physical agony she was enduring, the loss of her leg and the scarring were all too much for her. This incredibly lovely and bubbly woman, only 46 years old, was gone. Although what she'd done on her motorcycle may have been legal in California, it was anything but safe.

What is Lane Splitting?

California is unique in a number of ways. Its allowance of lane splitting, the term used to describe a motorcycle sharing your lane as they pass you (between you and another vehicle), has come under a lot of controversy.

While California does not specifically authorize lane splitting, at the same time, it fails to outlaw it. Worse, perhaps, California requires that motorcyclists simply use caution and operate their bikes "prudently."

This vague standard leaves plenty of room for bikers to interpret it however they wish.

On my drive from my home in Sun City, Calif., to March Air Reserve Base, located in Riverside, I travel on Interstate 215. Countless bikers, many wearing ACUs, blow by me as they weave between vehicles. Traffic is often slow during the commute, and the bikers travel at far greater speeds than traffic — adding to the many dangers of lane splitting.

If you are a biker, or if you have friends or relatives that ride motorcycles, share this with them. Remind them to follow these guidelines.

- Travel no more than 10 mph faster than the vehicles with which they're lane splitting.
- Merge back in with the traffic when they reach 30 to 35 mph.
- Never exceed the speed limit.
- Lane splitting between lanes one and two is preferred (lane one being the fast or inside lane)
- Stay, more or less, in one lane or the other. Excessive meandering might get you cited (California code 21658).
- Ride carefully to not cause damage to other vehicles.

Editor's note: The names have been changed to protect the family's privacy.

COMMENTS FROM A CALIFORNIA MOTORCYCLE OFFICER

The topic of lane splitting gets a lot of attention on the blog-o-sphere, especially in California. The following was an interesting contribution from a motorcycle officer responding to an individual who'd been ticketed for going 35 to 40 mph while lane splitting in stop-and-go traffic:

"At that speed you are traveling 58.7 feet per second … which is about four or five car lengths per second. An average reaction time is .75 seconds … meaning you have traveled 44 feet, or three to four car lengths, before you can even begin to apply the brakes or maneuver. If any of the cars within those three to four car lengths cuts you off, you would be a hood ornament before your brain could tell your body to react. Probably not a safe speed after all, don't you think? I ride over 130 miles on a motorcycle every weekday and I investigate very serious accidents. Speed on a motorcycle can be very deadly — even what you think is a slower speed could be fatal. Be safe while riding."

UP THE RIVER WITHOUT A PADDLE

RAYMOND OLYMPIO
Office of the Assistant Secretary of the Army
for Installation Environment and Energy
Washington, D.C.

Several good friends of mine and I took a trip across Eastern Europe from Mannheim, Germany, one Friday afternoon back in August 2008. We planned the trip months ahead of time, with no objectives or final destination in mind.

We took our first rest in Sibenik, Croatia, after partying and drinking local beer all night. The next day, with Croatia behind us, we found ourselves deep in Serbia, where we rented a room close to the Danube River. We familiarized ourselves with the area and made friends with two couples who occupied the rooms next to ours. Later that evening, we followed them to a karaoke bar, where we mingled with the locals and consumed countless shots of tuika, a locally brewed spirit.

The next morning about 9 a.m., while I was still trying to wake up, my friends and one of our neighbors persuaded me to go on a high-speed boat ride on the Danube. I finally woke up a few hours into the ride with a severe headache and quickly realized that the party from the night before was now continuing on the river. The boat was stocked with a liter of tuika, a bottle of vodka and 12 bottles of different types of local beer.

As we explored the river and drank, the boat finally started to slow down and all the occupants, excluding myself, began to practice their swimming skills. However, this phase of the river party didn't last long because my buddy, TJ, wasn't a very good swimmer. He was having difficulties swimming and, while everyone frolicked in the water, TJ began flailing around and nearly drowned! We were drunk, disorientated and unable to help him. Fortunately, good Samaritans fishing nearby came to the rescue and helped bring TJ to shore.

We didn't have any flotation devices or emergency procedures in place, and our cellphones were locked in the room. Horrified by the incident — even though tragedy was averted — we all learned a valuable lesson that day. This water-related incident could have been avoided had we followed these guidelines from the U.S. Army Corps of Engineers, National Water Safety Program:

- Take a safe boating course.
- Check your boat for all required safety equipment.
- Consider the size of your boat, the number of passengers and the amount of extra equipment that will be onboard. Don't overload the boat!
- If you will be in a powerboat, check your electrical system and fuel system for gas fumes.
- Follow the manufacturer's suggested procedures before starting the engine.
- Wear your life jacket; don't just carry one onboard.
- Leave alcohol behind to increase your safety and decrease your risk.
- Check the weather forecast.
- File a float plan with a member of your family or friend.

Also remember to:

- Never rely on toys such as inner tubes and water wings to stay afloat.
- Don't take chances by overestimating your swimming skills.
- Swim only in designated swimming areas.
- Never swim alone.

It's great to have fun with friends and Family during the summer months. However, don't let alcoholic beverages or good times turn off your safety common sense.

FYI

For more water safety tips, check out http://watersafety.usace.army.mil/safetytips.htm.

A COMMON PICTURE OF THE BATTLEFIELD

CHIEF WARRANT OFFICER 3 SHEILA PRESSLEY
A Company, 1st Battalion, 145th Aviation Regiment,
1st Aviation Brigade
Fort Rucker, Ala.

It was a day like any other. Our unit of Apache Longbows received a call from a ground unit requesting assistance on a street in downtown Baghdad. We pulled in collective, pushed the cyclic forward and headed toward the troops in contact. On the way, we received a situation report and the Attack Reconnaissance Team accessed the best tactics to employ for the situation. The cockpits of both aircraft were busy, with each individual accomplishing specific tasks along the way. Weapons armed, we were on our way to find the enemy. Once on station, we focused our attention on the ground. In the back of everyone's mind was our priority of protecting our ground forces.

The Baghdad area sectors, embedded in the map graphics of the multipurpose displays of the Longbows, provided easy recognition of boundaries for deconfliction of airspace. As a precaution, the crewmember tasked with monitoring Baghdad Radio called the controller and requested specific numbered sectors be closed to aircraft not in direct support of the troops in contact. The air traffic controller then made a call to all aircraft, reporting the sectors closed. Baghdad Radio also informed any aircraft checking into their airspace of the closed sectors by number. The attack aircraft called the controller once the mission was complete, and the controller then acknowledged and announced to all aircraft which numbered sectors were open for regular air traffic.

We took these safety precautions to avoid midair collisions and incidents of fratricide. Attack and Scout aircraft operate at varying altitudes and airspeeds, performing unpredictable maneuvers to avoid being shot down while supporting the troops. The crews were primarily focused on the ground rather than the airspace around them. The mission might call for ordnance in the form of Hellfire missiles, high-explosive 30 mm rounds and various types of rockets fired. If an aircraft inadvertently flies through a line of fire during an engagement, it can suffer friendly fire damage. If a pilot is forced into a maneuver to avoid a midair collision while the gunner is engaged, a fratricidal air-to-air or air-to-ground incident might also occur. Even illumination rockets, covert and overt, can pose a hazard to an aircraft flying beneath a falling flare, rocket body or motor. For a flight of non-participating aircraft to fly through the area can be catastrophic. Ground forces, already under fire and in need of assistance, may have to recover those crews and protect the crash site.

Medevac aircraft are always given right-of-way. They do a great job of calling Baghdad Radio or directly contacting the Attack or Scout aircraft for deconfliction if they must travel through the engagement area to save a life.

Unfortunately, close calls are regular events in closed sectors. Nonparticipating aircraft fly through closed sectors, not realizing or acknowledging the dangers. There are ways to mitigate the risks. What's required is situational awareness. More often than not, aircraft crews are simply unaware of the boundary they have crossed. Attack crews take for granted that we see the boundaries of our own ship, comparative to viewing those boundaries with a simple glance inside at the MPD at our customized map data. One way we can improve on our collective situational awareness — and, consequently, our safety — is through sharing that custom map data.

Any aircraft with glass cockpits or flying with Electronic Data Modules (also known as electronic kneeboards) can use the same map data with embedded graphics the Apaches use for boundary awareness and airspace deconfliction. Mostly, it's just a matter of sharing the map files or posting them where they are accessible to units in the same footprint. Things to consider are the classification of the map data once graphics are embedded and the display capabilities of aircraft in the task force.

Contrary to popular belief, the glass cockpit configuration is not common among aircraft. There are differences between aircraft type and among different lots, blocks and configurations within the same aircraft type. All glass cockpits can display 1:250 Joint Operations Graphics and 1:500 Tactical Pilotage Chart scale maps. The OH-58Ds are the most limited, and the CH-47Fs the most versatile when it comes to the various scales and types of maps that can be displayed in the cockpit. EDM users can display any maps FalconView can display and can fly with the very same JOG and TPC maps the glass cockpits are using.

To get a common picture of the battlefield amid aircraft, give priority to these scales of maps when embedding graphics. The subject matter expert for digital map data in aviation units is the tactical operations officer. This is the person to contact to find out which maps your unit aircraft are using to fly and their display capabilities. The TACOPS officers in brigade aviation elements can refine our air-to-ground integration by sharing the driver's maps used in their unit's brigade combat team as well. However, typically on a smaller scale than what we're flying with, key information can be graphically embedded in flight maps to provide a battlefield universal image, making operations safer. Through shared knowledge and products, we can all increase our situational awareness through a common picture of the battlefield.

LOST

Editor's note: Information published in the accident briefs section is based on preliminary loss reports submitted by units and is subject to change. For more information on selected accident briefs, email safe.knowledge@conus.army.mil.

AVIATION

AH-64D

CLASS C

- During refueling, the crew found the No. 1 engine nacelle opened and damaged. The crew reported checking it during preflight and in the closed position. The nacelle required replacement.

CH-47D

CLASS C

- The aircraft contacted a sod berm while landing to a landing zone under night vision goggles. The aircraft was repositioned for exfiltration, and damage was identified on postflight inspection.

CH-47F

CLASS A

- The aircraft was destroyed when it rolled rearward during a pinnacle landing in conjunction with environmental training.

MH-60L

CLASS C

- The aircraft FLIR turret shroud was damaged during landing in brownout conditions.

OH-58D(I)

CLASS C

- The aircraft struck a tree with the tail rotor during nap-of-the-earth training. Postflight and subsequent maintenance inspections revealed one tail rotor blade required replacement.

UH-60A

CLASS C

- The aircraft experienced a No. 1 engine compressor stall with TGT spike, followed by engine failure. The crew landed the aircraft at the closest airport without further incident. Postflight inspection revealed additional damage to a tail rotor blade from engine debris.

UH-60L

CLASS A

- A local national was injured when his helmet was struck by the main rotor blades during a pinnacle single-wheel landing for exfiltration of passengers.

UH-60M

CLASS C

- The aircraft was taxiing when the turret cover of a Mine Resistant Ambush Protected vehicle parked on the landing zone was sucked into the main rotor system. One MRB was damaged.

UAS

MQ-5B

CLASS A

- The unmanned aircraft swerved and came to rest off the runway after contacting the arresting cable. The nose wheel collapsed and the propeller was damaged.

CLASS C

- The UA landed during contractor currency evaluation and sustained damage to the main landing gear and forward propeller.

RQ-7B

CLASS B

- The operator experienced uncommanded airspeed/altitude fluctuations while the UA was at 15,000 feet altitude, after which he received an inertial measurement unit failure and loss of control. The flight termination system was deployed, but it was not reported whether the system was recovered.

CLASS C

- The UA experienced an engine failure and the FTS/recovery chute was deployed. The UA was recovered with damage.

- The UA experienced an engine failure while being flown to base. The operator was able to fly/guide the aircraft within 200 meters of the base and deployed the recovery chute. The UA was recovered.

GROUND

Personnel Injury

CLASS A

- A Soldier died when he was struck in the abdomen by an M72 Light Anti-Tank Weapon warhead. Three nearby Soldiers also suffered injuries.

- A Soldier was killed when he was struck by a .22-caliber round while hunting with three other Soldiers. Their hunting dog reportedly leapt up as one of the Soldiers was taking aim and struck the butt of the rifle, causing it to shift fire.

DRIVING

POV

CLASS A

- A Soldier was killed when he crashed his car while returning from leave.

CLASS C

- A Soldier was injured when he turned onto an interstate exit and was struck from behind by a speeding vehicle.

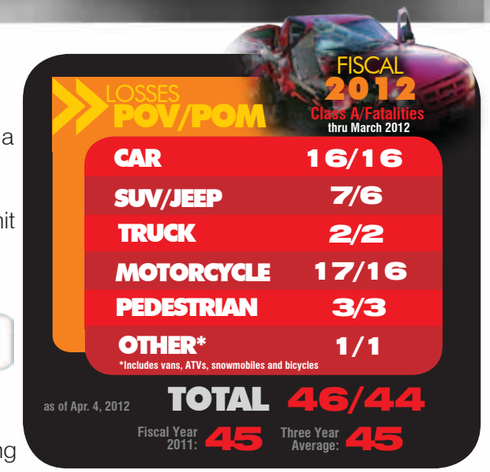
- A Soldier was injured when he hit black ice and slid into a parked van.

POM

CLASS A

- A Soldier was killed when he struck a guardrail while speeding and weaving through traffic. The Soldier was wearing his helmet and had completed the Motorcycle Safety Foundation's Basic *RiderCourse*.

- A Soldier died after he ran a red light and was struck by an SUV. The Soldier was wearing a DOT-approved helmet and personal protective equipment.



CLASS C

- A Soldier was injured when a vehicle driver violated right of way in an intersection and pulled in front of him. The Soldier was wearing his helmet and PPE.

BE A SMART SOLDIER

Be **SMART** – protect yourself and those around you.
When in a car, ensure everyone wears their seat belt.
Learn more at https://safety.army.mil.

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