Spring 2024

Combat Edge

Air Combat Command's Safety Magazine

Tick, Tick, Boom!

pg 4

Top Right - U.S. Air Force Gen. Mark Kelly, commander of Air Combat Command, prepares to disembark an F-15E Strike Eagle at Tyndall Air Force Base, Florida, Sept. 28, 2020. Kelly visited Tyndall as part of his tour as the new ACC commander. (U.S. Air Force photo by Senior Airman Stefan Alvarez)

Top Left - U.S. Air Force Gen. Mark Kelly, Commander of Air Combat Command makes final checks in an F-15E Strike Eagle prior to a training mission against the reactivated 65th Aggressor Squadrons' F-35A Lightning II at Nellis Air Force Base, Nevada, June 9, 2022. Kelly flew his F-15E Strike Eagle against the unit's first assigned F-35A Lightning II and newest commander, Lt. Col. Brandon Nauta, immediately prior to the ceremony. *Center and bottom left* - Gen. Kelly returns after the training mission.
(U.S. Air Force photos by William R. Lewis)

Combat Edge

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Volume 32 Issue 1 ACC SP 91-1

THE COMBAT EDGE (ISSN 1063-8970) IS PUBLISHED QUARTERLY BY AIR COMBAT COMMAND, HQ ACC/SEM, 220 SWEENEY BLVD (BLDG 669, RM 203), JOINT BASE LANGLEY-EUSTIS, VA 23665-2714. PERIODICAL POSTAGE PAID AT HAMPTON, VA 23670 AND ADDITIONAL MAILING OFFICES. POSTMASTER: SEND ADDRESS CHANGES TO HQ ACC/SEM, 220 SWEENEY BLVD, BLDG 669, RM 203, JOINT BASE LANGLEY-EUSTIS, VA 23665-2714.

DISTRIBUTION: F. OPR: HQ ACC/SEM. DISTRIBUTION IS BASED ON A RATIO OF ONE COPY PER 10 PERSONS ASSIGNED. AIR FORCE UNITS SHOULD CONTACT THE COMBAT EDGE STAFF TO ESTABLISH OR CHANGE REQUIREMENTS.

ANNUAL SUBSCRIPTIONS: AVAILABLE TO NON-DOD READERS FOR $51.00 ($71.40 OUTSIDE THE U.S.) FROM THE SUPERINTENDENT OF DOCUMENTS, PO BOX 371954, PITTSBURGH PA 15250-7954. ALL SUBSCRIPTION SERVICE CORRESPONDENCE SHOULD BE DIRECTED TO THE SUPERINTENDENT, NOT HQ ACC/SEM.

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COVER PHOTO BY A1C KATHRYN R.C. REAVES

ACCent

A Reflection of Learning

Gen Mark Kelly
Commander

As I prepare to depart Air Combat Command and our great Service, I'm reflecting on lessons from key Airmen & Mentors from the past 38 years.

I entered the Air Force for personal and parochial reasons, with a narrow objective to fly airplanes. But I stayed because of the quality and character of service of fellow Airmen.

What I learned, I learned by listening and watching you and those who came before you. So, I offer a few pieces of advice that have served me well for nearly four decades.

Choose Wisely. Very early in my career, a Chief Master Sergeant advised me to "Choose wisely – Choose your path and choose your professional circle very, very carefully." "Migrate towards the victors, not the victims. Those looking for life's rewards, not life's regrets. Those seeking to be better, not bitter. Choose to be with Airmen who do not permit the Conditions of their current circumstances to impact the Character of their Service. Find Airmen who focus on what they want most, not what they want now. You will become a mirror image of the circle that you enter."

Choose the Hard Path. Twenty-five years ago, I was serving on an exchange tour with the Royal Australian Air Force. Late one night inside a maintenance hangar with our F/A-18 Hornets in varying states of repair and wondering "how in the world" are we going to get these jets back together in time for the next day's deployment and commenting just how "hard" it would be to make the tight timeline. The Senior Maintenance NCO advised me that: "Hard is what we do." And then offered some fatherly advice: "Choose the hard path and hard work and hard decisions – the path of discipline and temporary failure." "Know that on the other side of temporary pain is a better version of yourself." "So, walk past the donut, walk past the nap, hit the books and hit the gym." "You will not find the "journey of hard" a crowded path – But hard work, works."

Choose the Elite Team. Although not a sport and absolutely not a game, Combat is very, very unfortunately, the ultimate Team Competition. In combat, everything is hard, and nothing goes right unless it is literally "willed" towards right by a relentless and cohesive team. The maintenance and logistics are hard, the weather is against you and the enemy is solely focused to obstruct your efforts. Bringing it all together across multiple domains and a vast region at precise times and effects is hard. It requires capable equipment and skill sets, and top-tier mindsets. And these qualities can only be found in elite teams.

Thank you for 38 years of education – And Thanks for loving our Airmen enough to hold them to a high standard.

Tick, Tick, Boom!

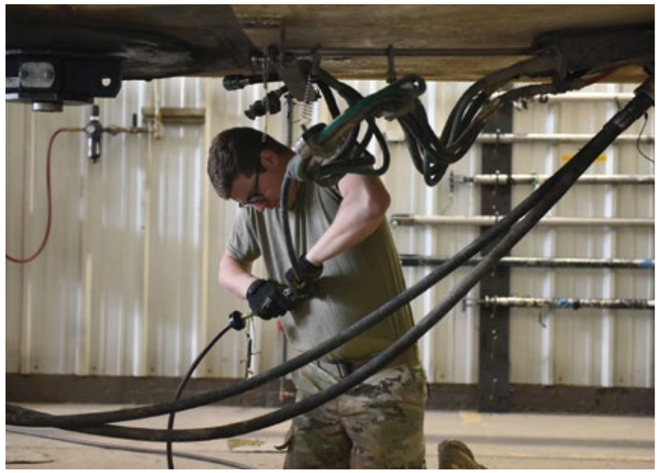
By TSgt Ayaka C. Lopez

We were in a maintenance bay, it was 98 degrees, and the humidity was so high that condensation was running down the walls. Late 2000s hip-hop was blaring on the speakers to drown out the hum of the cicadas lurking in the nearby forest. Next to us was an AIM-9X Sidewinder missile on its brand-new maintenance stand, torn apart and ready to be tested and rebuilt. As a Munitions Certified Crew Chief, I performed the daily safety checks, ensuring the eye-wash station was functional and the fire extinguishers were serviceable. One of my crew members decided to work ahead and started grounding the test set and the power supply point, while the rest of us were reading through the technical data first to ensure all members in the operation understood their tasks.

One hour into the operation, the crew was ready to test the missile. I performed a walk-around inspection to ensure all the cables were correctly and safely connected. Just as I finished the walk-around, I heard a faint clicking and whirring sound, which was odd, since power had not been applied to the missile system or the testing unit. I ran my hand over the missile and felt an abnormal amount of heat coming from the rocket motor, which immediately triggered my fight-or-flight response. The rocket motor was warming up! We'd been shown videos of what would happen if it did, and it was horrible.

AIM -9X Sidewinder Missile
Photo by USAF

Photo by Anelo/shutterstock.com



Senior Airman Ryan Page, 341st Missile Maintenance Squadron missile handling technician, connects two cords in preparation of a missile roll transfer April 20, 2021, at the missile handling facility on Malmstrom Air Force Base, Mont. Missile handlers follow a step-by-step checklist to ensure the Minuteman III intercontinental ballistic missile is able to roll between two vehicles for routine maintenance before it returns to the missile field. (U.S. Air Force photo by Airman Elijah Van Zandt)

As I ran to pull all the cables from their connection points, I noticed a burning smell coming from one of the grounding cables—the one cable connected directly to the power supply, 100 feet away. By the time I got to the power unit, the grounding cable was acting like a detonating cord, burning slowly up the cable. As I disconnected the cable, the plastic was so hot it melted into my hand. What I didn't realize was that the grounding cable, instead of being connected to the grounding point, was connected to an electrically live point.

We evacuated the building immediately, and I directed the Fire Department to our location. The missile was safed shortly thereafter, and the Equipment Specialist and Subject Matter Experts were contacted. The missile was then rendered unserviceable, and we took a loss that day. The section chief had called an emergency meeting with me and the production supervisor, and was clearly distraught with what could have happened. "You all could've died today. What went wrong?" they asked. Their faces weren't painted with the anger I had expected; instead, they looked terribly worried. I'll never forget that look.

Complacency could have killed us. This potentially tragic event would have made our crew an example throughout the career field, and I would have been known for my unfortunate death. Our operation would have set the standard for how not to manage an explosive operation. The crew member who had made the grave error of connecting the grounding cable to the wrong point came to me, profusely apologetic. He said he had a lot going on in his personal life, and had been distracted. We later got him the help he needed.

That day I learned how important grounding was. Before the incident, grounding was just another tedious step. It involved untangling those ridiculous, yellow insulated wires, and connecting them to a grounding point. After that day, I took it seriously.

A key thing to mention was that we had to understand how grounding works. According to AFMAN 32-1065–Grounding and Electrical Systems, it is the supervisor's responsibility to instruct employees on the hazards and necessary precautions. I had not ensured that all personnel knew where the safe grounding point was, and instead had assumed everyone knew just due to their time at the section. We survived only because of the quick response of the team. Who knows what could have happened if we hadn't been trained on explosives operation shut-down procedures. Static grounding of munitions must be taken seriously, or it could be the last time you work with munitions—ever.

Staff Sergeant Quinn Ball, 56th Maintenance Group weapons load crew member, secures an AIM-9X Sidewinder to an F-35A Lightning II during the third quarterly weapons load competition Oct. 6, 2023, at Luke Air Force Base, Ariz. Exercises like the weapons load competition help advance training to produce command focused U.S., allied and partner Airmen to meet warfighting needs.
(U.S. Air Force Photo by Airman 1st Class Katelynn Jackson)

Hydraulic fluid leak on bomb stabilization unit of Laser Guided Bomb Unit - 24.
photo by SSgt Caleb S. Dunlap

TROUBLE in the TAIL FIN

By SSgt Caleb S. Dunlap

The Conventional Munitions section of the 57th Munitions Squadron (MUNS) at Nellis Air Force Base was awarded Air Combat Command's Explosives Safety Award for the second quarter of 2023, for identifying a critical safety defect with the 2,000 lb Laser-Guided Bomb Unit-24 (GBU-24), also known as the Paveway III. Ultimately, their actions resulted in the decommissioning of the munition and the sunsetting of the program.

It all began in late April of 2022, when SrA Madeline Ray, a Conventional Munitions Crew Chief, discovered leaking components on a Bomb Stabilization Unit (BSU-84) fin, a major component for the GBU-24. This led to her questioning the serviceability of the assets to her Pad Supervisor, TSgt Robert Urango. TSgt Urango stated that he wanted all assets to be inspected for serviceability. Upon inspecting all sixty assets at the operating location, it was discovered that fifty-eight of the fins were leaking – a 97% failure rate. As a result, a Special Inspection was requested for the remaining assets in the stockpile.

Background photo by William R. Lewis

"The malfunction of a single BSU-84 fin kit during flight could have been catastrophic, causing a great deal of damage and possibly loss of life."

Unserviceable BSU-84 fin kits at Nellis AFB, NV
Photos by SSgt Caleb S. Dunlap

GBU-24 Paveway III on trailer at Nellis AFB, NV
Photo by SSgt Caleb S. Dunlap

Senior Munitions Inspector TSgt Louis Werner initiated the Special Inspection for the BSU-84s in Nellis' stockpile. In just one duty day, all fin kits were inspected. Of those, only a small number were deemed serviceable. Equipment Specialist Daniel Finsen was notified of the issue, and requested that 57 MUNS test two fin kits by actuating them to determine hydraulic fluid functionality. The test was accomplished by attaching the BSU-84 fin kit to a bomb body and pulling the actuation lever to release the folding wings into their guiding position. While testing one of the BSU-84s, a major break in internal components caused two of the fin kit wings to rapidly decompress into the extended position, almost impacting the Airman who actuated the fin.

Video footage of the test was sent back to the Equipment Specialist for further guidance. The response was to code the assets unserviceable and send two fin kits to Hill AFB for further testing. The depot test resulted in the entire BSU-84 shipment being returned to depot for demilitarization.

A review of the Technical Order (TO) guidance covering the inspection criteria revealed that there was no coverage on inspecting for hydraulic fluid leaking. A change to the TO was submitted, and the steps were added. Once the change was made, an increasing number of fin kits across the Air Force were deemed unserviceable.

In January 2023 during a mass bomb build exercise, several BSU-84 fins showed delayed evidence of leakage after the bombs had already been assembled. The assets were analyzed for a week to determine leakage rates before it was determined that there was potential for the munitions to start leaking after being loaded on aircraft. Once this was determined, the section routed their concerns to the 57th Wing Flight Safety office. The Chief of Safety recommended a local suspension of GBU-24s at Nellis altogether due to the increased probability of catastrophic fin failure, risk of damage to aircraft, and potential impact to pilot safety. After receiving this information, the Equipment Specialist made the determination to sunset the program entirely. His office directed all Air Force units to place their BSU-84 fins in an unserviceable condition code and submit them for disposition. This drove inspections on additional fin kits over two months, preparing them for shipment and demilitarization.

The malfunction of a single BSU-84 fin kit during flight could have been catastrophic, causing a great deal of damage and possibly loss of life. The vigilance, hard work, and dedication of the Conventional Maintenance Team in identifying and addressing a serious safety concern led to the restriction of all BSU-84s from use, and the sunset of the GBU-24 munitions system. The identification and elevation of this critical safety concern eliminated a very dangerous safety risk to pilots and aircraft across the Air Force.

How Tired Are You?

By SSgt Alyssa Ebben

"Eventually, we grew to ignore the signs of fatigue, becoming desensitized to how our bodies felt."

Photo by SSgt Christopher Thornbury

Fatigue affects American workers and military members daily. According to the National Safety Council (NSC), 4 out of 10 workers suffer from sleep deprivation, and consequently are more likely to suffer an injury. My own experience with fatigue and cognition impairment includes effects in my decision-making every day; however, this was not always the case.

Before retraining into Occupational Safety, I worked as a weapons loader on the F-35 Lightning II. The flightline is a difficult environment. The shift work, unscheduled maintenance, scheduled inspections, and extra duties combined to create a taxing workplace. These conditions occurred so often they became normal to us maintainers. Eventually, we grew to ignore the signs of fatigue, becoming desensitized to how our bodies felt.

In 2021, I was completing an inspection on a 25 mm gun system with two other airmen. There was a known issue with the system, and we were tasked with troubleshooting it, as well as completing an inspection. The inspection required me to clean the hydraulic doors, and the only safety measure involved draining the hydraulic fluid from the system…which I did not do. That was the first mistake.

I decided to troubleshoot the issue while my crew completed the inspection. I needed to test

Maintainers assigned to the 388th Maintenance Group at Hill AFB, UT, preforming a pre-flight maintenance check on a F-35 Lightning II assigned to the 4th Fighter Squadron, 6 March 2023.
Photo by SSgt Scott Warner

the system in order to ensure it worked properly, but I was unsure as to what testing would do to the system. I was so tired I wasn't thinking clearly. I began the test anyway, without knowing what would happen. The result wasn't good: The hydraulic door closed on the hand of one of my crewmembers. The member lost the tip of his middle finger and broke three other fingers.

The hours were long, with our crew performing maintenance using fewer than the usual number of people, while still generating aircraft. The workload seemed impossible. I didn't realize it, but I was exhausted. I was getting only about four hours of sleep per night, and I also had stressors in my personal life. According to the NSC, the average person needs seven to nine hours of sleep per night, and losing even two hours can be equivalent to drinking three beers. I was already impaired, but did not understand what that meant until it was too late.

In the end, the decision I made was my own, and I take full responsibility for hurting my crewmember. There were some other factors that affected my decision. I did not understand the danger of continuing to work while exhausted and fatigued. The symptoms range from general tiredness, headache, and muscle weakness to impaired decision-making and judgment, and slowed responses. Some of these symptoms became so constant for me that they seemed normal. In fact, they weren't normal at all. I should have recognized them as warning signs. I could have made a better-informed judgement call if I had not been so fatigued.

I hope my experiences may enlighten people about the dangers of fatigue. All Airmen, no matter their career field, need to be mindful of the amount of rest they get. Something as ordinary as getting proper rest can help prevent mistakes that could cost lives. Stay safe!

What's Your Story?

Wisdom comes with age. Share yours with us.

You've spent years training to be a member of the world's greatest Air Force. Not only do you have skills, but you also have experience—and the wisdom that comes with it.

There have been countless times when you were confronted by challenges you met, obstacles you overcame. Each of them made you grow as an Airman.

Share a tale from your experience. Tell us about the time when ___. Write a "There I was ..." account of a mishap. Help other Airmen learn and grow. Give us the benefit of your wisdom.

Throughout the long history of our safety magazine, from TAC Attack (1961) to The Combat Edge (1992), the message of safety has remained the same. Help keep it current by telling it in your own, unique way. Write your safety story and send it to us at thecombatedge@us.af.mil.

You have something to say, and we're listening.

Photo by GAS-photo/Shutterstock.com

Photo by A1C Parker Dubois

Photo by Phonix_a Pk.sarote/shutterstock.com

CLOSE QUARTERS

By TSgt Seth A. LaFleur

Of the top three hazards in the world of Occupational Safety, perhaps the most insidious is that of working in confined spaces. Unlike falling or being struck by an object, working in a confined space is not so straightforward. The danger usually hides in the air. Odorless, toxic gases can collect in enclosed spaces, and are often deadly. On average, confined-space mishaps claim the lives of 128 workers annually (civilian and military), mainly because most don't realize the seriousness of the hazard. A confined space is defined as an area that

1. is large enough and so configured that an employee can bodily enter and perform assigned work; and
2. has limited or restricted means for entry or exit (for example, tanks, vessels, silos, storage bins, hoppers, vaults, and pits); and
3. is not designed for continuous employee occupancy. *

These conditions are found in several areas on military installations, as well as in industries in the civilian sector. The problem arises when workers aren't made aware of the dangers associated with working in confined spaces.

When entering a confined space, a major consideration is whether the space requires a permit or not. Permit-required spaces must be extensively evaluated, and workers must use Personal Protective Equipment (PPE) to ensure the environment is safe from hazardous physical or atmospheric conditions. Non-permit-required spaces carry a reduced level of exposure to hazardous conditions. In either case, where there is potential for personnel to be exposed to hazardous conditions while in a confined space, some level of safety training is necessary.

An example: Two Airmen were sent out to a job site to remove a section of piping that needed to be replaced. They didn't fill out any paperwork, didn't secure the proper tools, and didn't take along any PPE. They simply headed out and got to work.

The job required them to enter a confined space via a manhole. They had brought a gas-powered saw with them to cut the pipe. What they hadn't considered was that using the saw in a confined space meant the engine would use much of the available oxygen, and also would create toxic fumes, including carbon monoxide. Both of these conditions would create a breathing hazard that could lead to injury or death.

Fortunately, after working only for a short time, the saw broke down. The two Airmen climbed out of the manhole, frustrated that they couldn't continue with the job, but glad for the change of pace they would enjoy for the rest of the day. They called the shop supervisor to let them know about the broken saw. The supervisor recognized the dangerous situation the Airmen had created, and contacted the local safety office to let them know of a confined space entry that had gone wrong.

The Airmen were not ignorant of the seriousness of the situation. In fact, they had completed training for working in confined spaces, and knew the dangers. Yet, they still didn't realize how close they had come to disaster. The incident signaled a need for further training, and reinforced efforts in procedures to ensure that near misses like these are mitigated. The Airmen learned a valuable lesson that day, and were fortunate not to have paid a high price for it. Work safely!

** Source: Occupational Safety and Health Administration (OSHA)*

Turning the Corner

"Turning the corner is a phrase that essentially means moving past a difficult period and beginning improvement."

BY CMSGT JAKOB KURTZ

At first glance, this article may appear to be about the risks of operating a motor vehicle. No doubt there is no shortage of material on that subject; however, this is an article about leadership. This is about what we get right, what we get wrong, and the messes we leave in our wakes. It's also about the effects leadership has on safety.

Let's begin this with a simple idea: Leadership has a cost, and the fruits of our labor can be good or … rotten. If I'm a rotten apple, every apple around me is in jeopardy of the same fate. What's true for apples also is true for us. Sadly, I don't believe we fully realize the influence and effect we have on others. We have the capability to destroy and tear down. Think of all the future ripple effects of bad leadership, such as neglecting our Airmen and teaching them shortcuts. This style of leadership certainly is an easy road to take, but the consequences are astounding, and the potential result is a hollow, ineffective military force in which every Airmen is only out to get something for themselves. It's a self-before-service mentality.

We also have the capability of building others up. What would happen if we invested in Airmen, trained them thoroughly, and genuinely cared for their well-being? Maybe that investment results in future leaders who can uphold standards while maintaining fairness and compassion. More importantly, maybe we're left with a cohesive force and leaders who keep the cycle of investment going. The problem is that it's not difficult to be a bad leader; in fact, it's super easy. The willingness to take the easy road shows up everywhere. As a safety professional, where have you seen this show up? I've been a part of many mishap boards where leadership was a contributing factor. Let's look at one.

Remember the mishap involving aircraft maintenance – the one in which the Airmen was working on the wing and was crushed by the flaps? The audio for the mishap sequence is chilling. Here we have an NCO who is training a new Airmen on how to take shortcuts. Not only did his actions lead to a fatality, but his training was a result of a culture of training.

Every Airmen learns in accordance with how they were trained. I don't necessarily fault the trainer that day because I know there were a long line of trainers who trained him. It was easy. The shortcut saved time. The results were unintended. Nevertheless, not only were we left with a fatality, but the trainee also will experience emotional trauma for the rest of her life. Bottom line, our actions have consequences. Bad leadership has a long list of victims.

Turning the corner is a phrase that essentially means moving past a difficult period and beginning improvement. Let's look at two pivotal points in an enlisted Airman's career in which difficult transitions occur. The first is from airman to NCO; the second is NCO to SNCO. While the first transition is the easier of the two, don't overlook its importance. That first transition has NCOs working on becoming technical experts (comfortable), to leading and training others (uncomfortable).

Typically, this dual responsibility is well understood, and the focus of the effort is clear: There is a mission to accomplish and I'm leading my airmen to accomplish it. The overall expectation is you switch from pure jobbing it, to supervising others to pure job it. If you make it to SNCO, you really need to switch mindsets. Unfortunately, this is where I see prior NCOs struggle. You are no longer needed to be the technical expert doing the work. You are needed to manage and lead the operation, and, depending on the size of the organization, you will need to be flexible. I see many SNCO evaluations in which they are still writing about how they are tactically performing the job, and yet they are in leadership roles. The reality is, it's hard to let go and mentally the corner is never turned. What does this have to do with our safety enterprise? Everything.

Photo Illustration - Original Photos by Miriam Thruber and maximmmmum/shutterstock.com

Turning the Corner

E GO

"As a leader, you need to have a servant mentality."

We are a small career field, and bad leadership is keenly felt across the enterprise. If we neglect to train and lead the next generation properly, we won't have the numbers to absorb the consequences. The traits that I think make a bad leader might surprise you. It's not someone who's tough on upholding standards and expects excellence. The worst two traits in my mind are neglect and ego. I can't say which one is worse, but I know I don't want any of them in my organization. Unfortunately, humans are messy and complex. I know there always will be occasions when we need to address the fallout from neglect and ego. My plea is that we identify these weaknesses in ourselves and others, and work to get ahead of them. What can we do better?

First, let's check our egos at the door. As a leader, you need to have a servant mentality. Do you sacrifice for the good of the Airmen under your authority? You can't if you are constantly thinking about self-promotion and belittling subordinates. One of the best quotes I've seen on ego is this: An egotist is not a person who thinks too much of themselves, they are a person who thinks too little of others. If you are one of those who frequently battles with the notion of self-importance, just remember this: You are not doing anything that someone else can't/didn't do. There have been many who came before you, and many will follow.

Second, a simple request: Don't neglect the subordinates under your authority. Instead, invest in them. Role up your sleeves and commit to ensuring they receive the best training possible. Our new 3-levels coming into the career field need guidance and proper upgrade training throughout that whole process. Don't leave them to figure it out for themselves. I had the privilege late in my career to work alongside a Master Sergeant who was genuinely interested in ensuring Airmen were properly trained. He made it a staple of his career. I think he trained more Airmen in his time than any other Master Sergeant I know. You could also tell it brought him joy to see others succeed. His attitude was infectious. He also knew how to enforce standards without being a jerk. That kind of leader leaves all the right impressions. Be that kind of leader. What's the benefit in all this?

Let me connect the dots from a wing-level perspective. As the eyes and ears of the commander for all things safety, we are entrusted to know what right looks like. No other entity on base is required to know the things we are supposed to know. How to inspect, what to inspect, and the advice we give needs to be grounded in solid education and proper upgrade training. We have many complicated programs to oversee. If we don't teach them right, or just treat training as an exercise in paperwork, things will go off the rails quickly.

Think about the confined-space program. Is it effectively overseen at your wing? Read the regulation, and look at your program. Are you doing all the things it says to do? Do you even understand what the regulation is telling you? How can you if you weren't trained? Were you taken out to the field and "boots-on-the-ground" involved in confined-space training and exercises?

I want to end with a real conversation I had with a MSgt over the phone. Her issue was she couldn't get wing leadership to adhere to confined-space regulations, and they were pushing back on her inspection findings. She called our office because we had the same airframe and she wanted to know what we were doing. She described open fuel-cell operations in the desert under a clamshell (a fabric-and-steel hangar that opens on both ends). She said that, according to her meter, the maintenance team was over the lower explosive limits, and the clamshell was now a permit-required confined space. I don't blame her for getting it wrong. Bad training. But can you see the effect that has on leadership? We mismanage our programs; we lose credibility. People get hurt.

Turn the corner. Invest in Airmen. Leave the Air Force better than you found it.

Photo by Banana Oil/shutterstock.com

HOLD MY RIP-IT


Photo by A1C Elizabeth Davis

By TSgt Jason J. Ewald

It was another hot day in Djibouti, Africa. We were replacing an engine on a C-130J, and had to work out on the flightline because hangar space was limited. The job would take two shifts 18 hours to complete. Our team had five qualified members.

We began with a briefing, then set up a speaker for music and got to work. While working on the outboard side of the engine, I talked with the Airman working on top of the wing, who said that he hadn't been sleeping very well. As we talked, he mentioned worrying about his father's health. I reassured him, and agreed that worry was a reason he couldn't sleep.

As we worked, I noticed he wasn't sweating like the rest of us. I asked if he was hydrating, and he held up a can of Rip-It energy drink. When I asked if he had any water, he held up a bottle. I suggested he drink more fluids, and we continued working.

At lunchtime, he packed up his tools and prepared to come down off the wing. As he walked toward wing tip, he fell. We asked if he was all right; when he didn't respond, we realized that things were far from OK. Two of us rushed to the top of the wing, and provided first aid while a member notified Emergency Medical Services (EMS).

We suspected dehydration and heat exhaustion, and applied wet rags to the Airman. Thankfully, he opened his eyes and became responsive. We gave him water and kept him in place until EMS arrived. EMS finally arrived and took over, and we helped bring him down off the wing. They asked about his hydration, and I told them that he had water and an energy drink.


Photo by A1C Christian Conrad

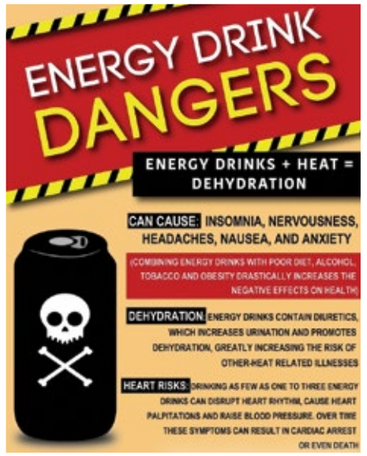


Photo by PO3 Danielle Serocki

We inspected his bag, and found six empty energy drink cans along, with a single, unopened bottle of water. Fortunately, he was treated and released with no significant issues. Later, he said he compensated for his lack of sleep by drinking energy drinks to stay awake. He had been more concerned with not letting the team down than with his own health and well-being.

The lesson is simple. We often are concerned more with not letting the team down than with our own safety. The thought is noble, to be sure; however, dehydration and heat exhaustion are not to be taken lightly. Don't neglect your body. Stay hydrated when working in hot conditions, and look out for your peers. They may not be looking out for themselves.

Photo by TSgt Devin Boyer

TACOS, ANYONE?

By 1 Lt Robert "ZB" Barnes


A-10 taco panel recovered from runway

On 15 March 2023, Mr. Lee Walters, 23d OSS Airfield Manager, was holding short of runway 36L at Moody Air Force Base, GA. He was awaiting the departure of an A-10C Thunderbolt II aircraft prior to conducting a routine Foreign Object Damage (FOD) check of the runway surface.

As the A-10 rolled down the runway and began to get airborne, Mr. Walters saw a large piece of metal fall from the aircraft. He immediately notified the Control Tower of the situation and requested they contact the Supervisor of Flying (SOF) immediately to report the dropped object to the pilot.

Runway operations were immediately suspended in order to ensure the safety of flight for eight other airborne A-10s. Mr. Walters immediately began a runway surface check to find the dropped metal object. While conducting the check, he requested that the Airfield Management (AM) section contact the Maintenance Operations Center. He also requested an A-10 Production Supervisor report to the AM duty section in order to identify the dropped object and determine its relevancy.

A few minutes later, Mr. Walters returned to the AM duty section with the dropped object he had recovered from the runway surface. MSgt Frank Barret, 74th FS Production Supervisor, identified the object as a Trailing Edge Flap Cover Panel, commonly referred to as a "Taco Panel." This information was relayed to the SOF, and the wounded A-10 was immediately recalled because of potential structural/FOD damage that may have resulted from the dislodged panel.

Within eight minutes of the panel's recovery, the A-10 pilot declared an In-Flight Emergency for "structural right wing tip damage." Less than twenty minutes later, the aircraft safely landed, and shut down engines on the runway in order to reduce the possibility of damage to other aircraft.

The keen situational awareness, decisive actions, and professionalism of Mr. Walters and the AM team prevented a potentially catastrophic mishap, and saved an $11 million combat aircraft and its pilot.

Note: The incident was briefed at the 2d Quarter FOD meeting chaired by the 23d Vice Wing Commander for trend analysis. The recovery of the object helped the 74 FGS to gain a one hundred percent recovery rate for lost objects in the 2d Quarter FY 23.


Mr. Lee Walters

4th Quarter FY23 Awards

Aircrew Safety Award
Crew of OMAHA 77
343 RS, 55 WG
Offutt AFB, NE

Aviation Maintenance Safety
Aircraft Fuel Systems Repair
552 AMXS, 552 ACW
Tinker AFB, OK

Explosives Safety
F-15 Load Standardization
57 MXG/MXL, 57 WG
Nellis AFB, NV

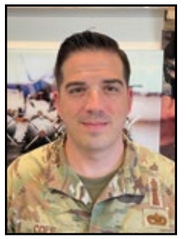
Flight Line Safety
Maintenance Supervision Quality Assurance
334 FGS, 4 FW
Seymour Johnson AFB, NC

Unit Safety
Facility Management
488 IS
RAF Mildenhall, UK

Pilot Safety
Mr. James A. Schreiner
82 ATS Det 1, 53 WG
Holloman AFB, NM

Safety Career Professional
SrA Trivaris L. Feazell
20 FW/SEG
Shaw AFB, SC

Unit Safety Representative
SSgt Nicholas B. Cocco
NTTR/MSXT
Nellis AFB, NV



Weapons Safety Professional
TSgt William A. Cole
53 WG/SEW
Eglin AFB, FL

Air Combat Command Annual Safety Awards

Congratulations

Fiscal Year 2023 Award Winners!

ACC AIRCREW AWARD*
Crew of SENTRY 61
552 ACW/966 AACS
Tinker AFB, OK

ACC PILOT AWARD*
Capt Truman A. Smith
552 ACW/552 OSS
Tinker AFB, OK

ACC AVIATION MAINTENANCE SAFETY AWARD*
TSgt Derek T. Malecki
4 FW/SEF
Seymour Johnson AFB, NC

ACC ACHIEVEMENT AWARD FOR OCCUPATIONAL SAFETY CATEGORY II*
Occupational Safety Office
23d Wing
Moody AFB, GA

ACC ACHIEVEMENT AWARD FOR OCCUPATIONAL SAFETY CATEGORY III*
Safety Office
319th Reconnaissance Wing
Grand Forks AFB, ND

ACC ACHIEVEMENT AWARD FOR OCCUPATIONAL SAFETY CATEGORY IV*
Safety Office
552d Air Control Wing
Tinker AFB, OK

ACC ACHIEVEMENT AWARD FOR WEAPONS SAFETY*
TSgt Nathen L. Inman
366 FW/SEW
Mountain Home AFB, ID

ACC SAFETY SPECIAL ACHIEVEMENT AWARD*
Flight Safety Office
552 ACW/436 TS
Dyess AFB, TX

ACC SAFETY CIVILIAN PROFESSIONAL OF THE YEAR AWARD*
Mr. Brian J. Reynolds
366 FW/SEG
Mountain Home AFB, ID

ACC SAFETY NCO OF THE YEAR AWARD*
TSgt Michael E. Uriostegui
HQ 16 AF/SEG
JBSA-Lackland, TX

ACC SAFETY SENIOR NCO OF THE YEAR AWARD*
MSgt Nathaniel R. Kane
HQ 16 AF/SEF
JBSA-Lackland, TX

ACC SAFETY OFFICER OF THE YEAR AWARD*
Capt Mark A. Guschka
552 ACW/SEF
Tinker AFB, OK

ACC FLIGHT LINE SAFETY ACHIEVEMENT AWARD
SSgt Austin W. King
319 RW/4 RS
Andersen AFB, Guam

ACC SAFETY UNIT SAFETY REPRESENTATIVE OF THE YEAR
MSgt Jordan J. Haller
800 RHG/ 820 RHS
Nellis AFB, NV

ACC COMMANDER'S AWARD FOR SAFETY
Safety Office
HQ 16 AF
JBSA-Lackland, TX

ACC WING CHIEF OF SAFETY OF THE YEAR
Lt Col Toby J. Miller
379 AEW/SE
APO/AE

ACC WING SAFETY PROGRAM OF THE YEAR
Safety Office
378 AEW/SE
Prince Sultan AB, Saudi Arabia

** These winners also represented ACC at the Air Force-level safety awards competition.*

Mishap Statistics Scoreboard

FY24 Flight

Thru 31 Dec 2023

	Fatal	Aircraft Destroyed	Class A Aircraft Damage
15 AF	0	┼	0
16 AF	0	0	0
USAFWC	0	0	✈
ANG	0	0	0
AFRC	0	0	0
CONTRACT	0	0	0
COCOM	0	0	0

FY24 Occupational

Thru 31 Dec 2023

	Class A Fatal	Class A Non-Fatal	Class B
AFCENT	0	0	0
USAFWC	0	0	0
12 AF	0	0	0
15 AF	0	0	1
16 AF	0	0	0

FY24 Weapons

Thru 31 Dec 2023

	Class A	Class B	Class C	Class D	Class E
ACC	0	0	1	2	2

Legend

Class A - Fatality; permanent total disability; property damage $2.5 million or more
Class B - Permanent partial disability; property damage between $600,000 and $2.5 million
Class C - Lost workday; property damage between $60,000 and $600,000
(Class description effective Oct. 1, 2019)

(RED) = On-duty (BLACK) = Off-duty

Symbols for Mishap Aircraft

Flight Notes

The fiscal year started with significant damage to an F-22, and followed shortly by the loss of an MQ-9 Reaper. The Safety Investigation Boards are nearly complete, and the finely-tuned process of capturing the lessons learned and creating recommendations to prevent similar mishaps will follow shortly. There is no question that the process that follows a mishap is a well-oiled machine, but the ultimate goal should be never to need those processes. Achieving that goal requires a proactive mindset: Are you doing everything you can to be ready? Risk is inherent in aviation, with every sortie bringing different risks for each crew member. Know the risks, know yourself, and focus your energy on keeping the odds in your favor through dedicated, disciplined effort.

Occupational Notes

Air Combat Command sustained one Class B on-duty property damage mishap during the first quarter of FY24. The mishap occurred when an unmanned aerial vehicle (MQ-9 Reaper) sustained water damage while being transported on a cargo ship. During this same period of FY23, the command sustained three Class A (2WL PMV) fatalities. While our first quarter numbers are encouraging, we should not let our guard down. As we move forward into the winter months, everyone is encouraged to stay alert to their surroundings, and to use good judgment and sound risk management when making decisions. Remember: You are the key to your safety, your family's safety, and the safety of your coworkers.

Weapons Notes

In the initial quarter of FY24, ACC encountered a total of five incidents, comprised of one Class C, two Class D, and two Class E mishaps. The first Class C and the initial Class D occurrences were attributed to the mishandling and subsequent damage of KMU-556 tail kits. The second Class D incident stemmed from a team member's straining their shoulder while loading a missile onto the aircraft. The first Class E event resulted from the inadvertent damage of egress components during a scheduled time change maintenance activity. The final Class E mishap occurred when a guidance control section was accidentally dropped during an AIM-9 disassembly. Considering the challenging start to the new year, it is imperative to maintain a focus on safety. Let us collectively commit to a goal of zero mishaps in the upcoming second quarter!


OVER the Edge
MAGAZINE
VICTORY
100
May is
Motorcycle
Safety Awareness Month
PAGE 6

OVER the Edge MAGAZINE

Cover–US Air Force Photo by Samuel King Jr.

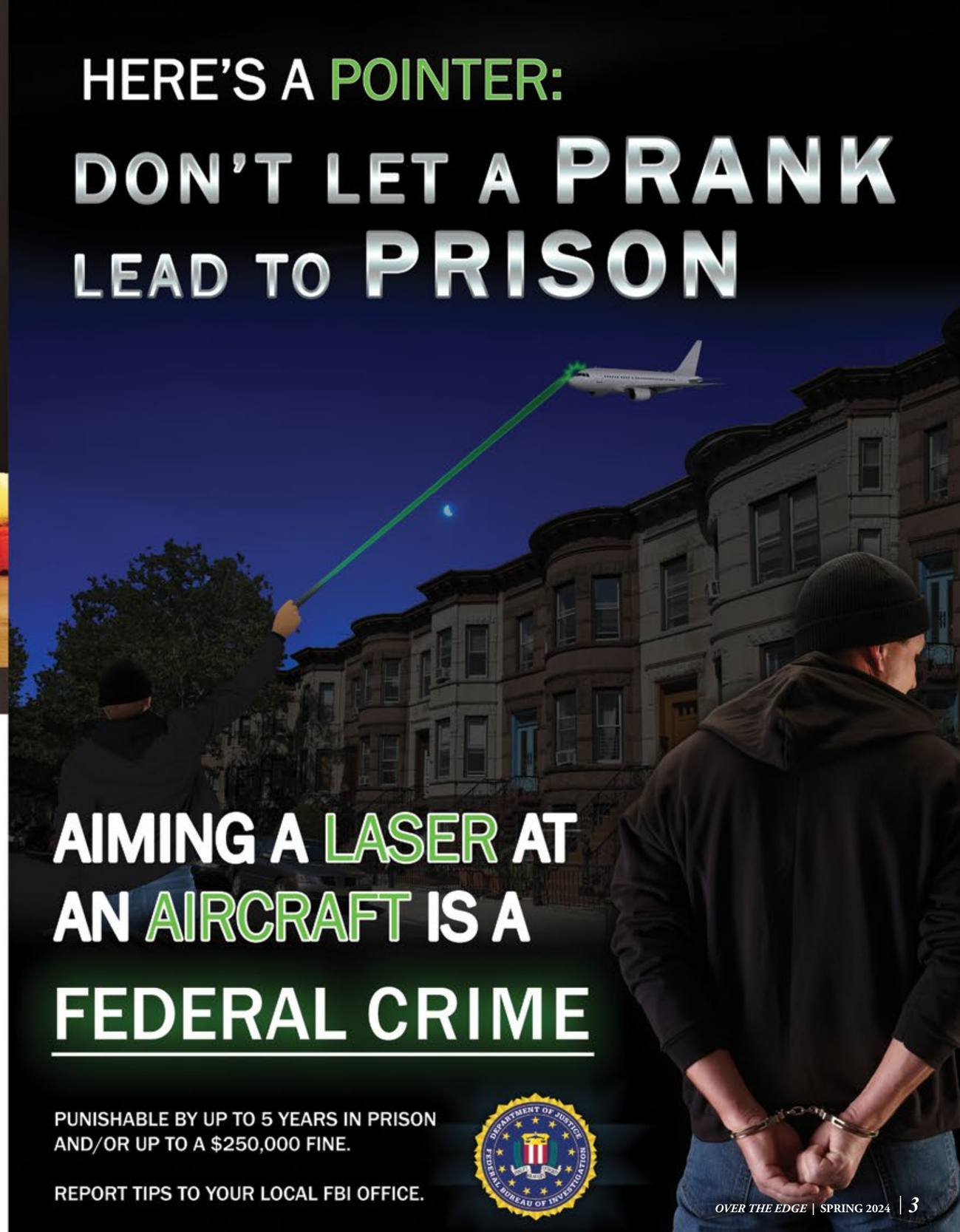


Photo by viviamo/Shutterstock.com

Photo by Anna Tryhub/Shutterstock.com

The SOBERING SAW Wake Up Call

By SSgt Adrian Gonzalez

One Friday evening, John, an enthusiastic woodworking hobbyist, decided to unwind in his garage workshop after a long week at work. He thought it would be the perfect time to enjoy a drink while making some progress on a project. Little did he know that the combination of alcohol and power tools would lead to a nightmarish accident, and teach him a life-changing lesson about safety.

With a beer beside him, John stood before his table saw, eager to complete the project that had been on hold for several days. He switched on the saw and began cutting, trying to work precisely; however, he failed to recognize the risks associated with mixing alcohol with power tools. He was already tired from work, and his coordination, judgment, and focus were impaired further by his drinking. His work was far from precise; it was clumsy and dangerous. As he reached to guide the wood through the saw, his hand slipped, and the spinning blade deeply cut his hand. Overwhelmed by pain and panic, he shut off the saw and grabbed a towel to apply pressure to the wound in an attempt to stop the bleeding.

Feeling lightheaded from the combination of alcohol and pain, John called 911 for help. An ambulance arrived, and paramedics tended to his injury while offering kind words of caution and understanding. At the hospital, John received stitches and treatment for his mangled finger, but the impact of the accident went beyond his physical wounds.

The pain was excruciating, and John's grief was overwhelming. He regretted the decision to drink while operating power tools. He had known better, but he was careless, and had chosen to ignore an important safety rule. He should have kept alcohol out of his workspace, and instead made sure he remained sober and focused on the task at hand.

From that day forward, John vowed never again to mix alcohol with woodworking or any other activity that involved power tools. He realized that safety always should come first in the workshop. He shared his tale with other friends and woodworking enthusiasts, urging them to learn from his mistake and prioritize safety in their own workshops. John shared his story in the hope that it would spare others the pain and regret that he had experienced. He became more cautious, responsible, and mindful of his own actions. Woodworking remained his passion, but he approached it with a greater sense of respect for the tools, along with a deep appreciation for a safety lesson learned the hard way.

May is Motorcycle Safety Awareness Month

Motorcycle riders continue to be overrepresented in fatal traffic crashes. In 2021, there were 5,932 motorcyclists killed — 14% of all traffic fatalities. According to the National Highway Traffic Safety Administration (NHTSA), this is the highest number of motorcyclists killed since 1975. To help keep everyone safe, we urge drivers and motorcyclists to share the road and be alert. We also remind motorcyclists to make themselves visible, to use DOT-compliant motorcycle helmets, and always to ride sober.

MOTORIST AWARENESS
Safe riding practices and cooperation from all road users will help reduce the number of fatalities and injuries on our nation's highways. It's especially important for drivers to understand the safety challenges faced by motorcyclists, such as their size and visibility. By raising motorists' awareness, both drivers and riders will be safer sharing the road.

MOTORCYCLIST SAFETY
If you ride a motorcycle, you already know how much fun riding can be. You know the exhilaration of cruising the open road and the challenge of controlling a motorcycle; however, motorcycling also can be dangerous. NHTSA data from 2021 show that motorcyclists were about 24 times more likely to die in a motor vehicle crash than passenger vehicle occupants, and were four times more likely to be injured. Safe motorcycling takes balance, coordination, and good judgment.

ROAD READY
Driving a car and riding a motorcycle require different skills and knowledge. Although motorcycle-licensing regulations vary, all states require a motorcycle license endorsement to supplement your automobile driver's license. Of the motorcycle operators involved in fatal crashes in 2021, 36% were riding without valid motorcycle licenses. To receive the proper endorsement in most states, one must pass written and on-cycle skills tests administered by the state's licensing agency. Some states require a state-sponsored rider education course. Others waive the on-cycle skills test if the rider has taken and passed a state-approved course. Either way, completing a motorcycle rider education course is a good way to ensure you have the correct instruction and experience it takes to ride. Contact your state motor vehicle administration to find a motorcycle rider-training course near you.

Photo by A1C Aaron Jenne

Motorcycle Safety Awareness Month is a nationally recognized campaign to educate motorcycle riders and non-riders on the importance of vehicle safety. To help kick off Motorcycle Safety Awareness Month, the 509th Bomb Wing Safety Office and Green Nights Military Motorcycle Club held a Motorcycle Safety Day. During this event motorcyclists were offered information on available Motorcycle Safety Foundation classes, a safety course to practice their riding skills, and opportunities for mentorship from experienced riders. (U.S. Air Force photo by Airman Michaela Slanchik)

PRACTICE OPERATING YOUR MOTORCYCLE
Not all motorcycles are the same, and handling and responsiveness can vary. Be sure to take the time to get accustomed to the feel of a new or unfamiliar motorcycle by riding it in a controlled area. Once you feel comfortable with your bike, you can take it into traffic. Make sure you know how to handle your motorcycle in a variety of conditions (e.g., inclement weather or encountering hazards such as slick roads, potholes, and road debris).

BEFORE EVERY RIDE
Check your motorcycle's tire pressure and tread depth, hand and foot brakes, headlights and signal indicators, and fluid levels before you ride. You also should check under the motorcycle for signs of oil or gas leaks. If you're carrying cargo, secure and balance the load, and adjust the suspension and tire pressure to accommodate the extra weight. A passenger should mount the motorcycle only after the engine has started, and should sit as far forward as possible, directly behind you. They also should keep both feet on the foot rests at all times, even when the motorcycle is stopped. Remind your passenger to keep his or her legs and feet away from the muffler. Tell your passenger to hold on firmly to your waist, hips, or belt, and keep movement to a minimum. They also should lean at the same time and in the same direction as you do. Do not let your passenger dismount the motorcycle until you say it is safe to do so.

Photo by Samuel King Jr.

ON THE ROAD
If you're ever in a serious motorcycle crash, the best hope you have for protecting your brain is a helmet. Always wear one that meets U.S. Department of Transportation Federal Motor Vehicle Safety Standard 218. Look for the DOT symbol on the outside back of the helmet. Snell and ANSI labels located inside the helmet also show that the helmet meets the standards of those private, non-profit organizations.

Arms and legs should be completely covered when riding, ideally by wearing leather or heavy denim. In addition to providing protection in a crash, protective gear also helps prevent dehydration. Boots or shoes should be high enough to cover your ankles, while gloves allow for a better grip and help protect your hands in the event of a crash. Wearing brightly colored clothing with reflective material will make you more visible to other vehicle drivers.

RIDE RESPONSIBLY
Experienced riders know local traffic laws, and they don't take risks. Obey traffic lights, signs, speed limits, and lane markings. Ride with the flow of traffic and leave plenty of room between your bike and other vehicles. When changing lanes, be sure check behind you and signal. Always ride defensively. The majority of multi-vehicle motorcycle crashes are caused when other drivers don't see the rider. Proceed cautiously at intersections, and yield to pedestrians and other vehicles as appropriate. Increase your visibility by applying reflective materials to your motorcycle, and by keep your motorcycle's headlights on at all times.

BE ALCOHOL AND DRUG FREE
Alcohol and drugs, including some prescribed medications, impair your alertness and reduce your reaction time. Always ride sober, or you'll be heading for trouble.

Motorcycle riding is a great way to travel. The culture of the riding community is characterized by camaraderie and respect, including respect for the rules of the road. Enjoy the ride–safely!

National Weather Service

TORNADO WATCH VS. WARNING

TORNADO WATCH: BE PREPARED!

Tornadoes are possible in and near the watch area. Review and discuss your emergency plans and check supplies and your safe room.

Be ready to act quickly if NWS issues a warning or you suspect a tornado is approaching. Acting early helps save lives!

Watches are issued by the Storm Prediction Center for counties where tornadoes may occur. The watch area is typically large, covering numerous counties or even states.

TORNADO WARNING: TAKE ACTION!

A tornado has been sighted or indicated by weather radar. There is imminent danger to life and property. Move to an interior room on the lowest floor of a shelter. Avoid windows.

If you are in a mobile home, a vehicle or outdoors, move to the closest substantial shelter and cover your head to avoid flying debris.

Warnings typically encompass a much smaller area, around the size of a city or small county. Warnings are issued when a tornado is spotted on the ground or identified by a forecaster on radar.

WIRELESS EMERGENCY ALERTS CAPABLE

Photo by Brad Goddard

For more information, visit **weather.gov/safety/tornado**

MOTORCYCLE SAFETY Word Search

C	Z	H	A	R	L	E	Y	T	E	D	U
R	L	E	B	U	Z	O	T	M	W	N	Q
U	T	U	D	Q	O	O	F	V	L	A	S
I	C	U	T	K	D	X	I	M	E	T	O
S	L	T	I	C	H	A	I	N	M	S	F
E	O	C	R	U	H	N	B	X	Q	K	T
R	C	S	E	T	E	I	V	N	W	C	A
T	S	H	S	V	L	M	M	S	R	I	I
T	O	F	G	U	M	U	S	T	T	K	L
R	Y	M	Q	C	E	Y	J	M	Z	R	Y
A	H	A	R	D	T	A	I	L	B	A	I
I	E	G	O	G	G	L	E	S	R	A	J
N	L	T	S	D	A	Y	V	K	L	N	D
I	M	Z	S	Q	T	D	E	K	L	I	S
N	E	T	U	K	I	L	S	A	E	P	U
G	T	R	Q	G	H	T	U	T	A	B	S
D	G	R	C	S	M	J	K	R	E	U	P
T	U	I	Q	R	A	B	E	T	T	R	E
H	G	I	R	E	D	T	M	N	U	I	N
S	F	V	B	H	S	U	A	M	B	I	S
E	R	C	G	T	E	Z	M	Y	P	O	I
K	Y	W	R	A	L	P	B	U	I	S	O
O	F	O	P	E	I	U	Q	U	M	R	N
P	P	F	G	L	O	V	E	S	U	M	D
S	I	D	E	C	A	R	T	Y	I	Y	R

CHAIN
CLUTCH
CRUISER
DOT
ERC
GLOVES
GOGGLES
HARDTAIL
HARLEY
HELMET
KICKSTAND
LEATHERS
MSF
MSR
MUSTT
SIDECAR
SOFTAIL
SPOKES
SPORTSTER
SUSPENSION
TCLOCS
TIRES
TRAINING

Blue skies, birds chirping, and warm temperatures — looks like Spring, the perfect time and perfect weather to spend outside getting your yard in shape.

9 yard-work safety tips that can help you and your family avoid a trip to the emergency room.

1. **Equipment.** Read the owner's manual for any new equipment, and check with the manufacturer of your other tools about possible recalls.
2. **Ladder Safety.** Always make sure your ladder is on a level surface. Never stand on the top step.
3. **Children.** Keep small children inside while mowing/trimming. Do not allow young children to operate a push or riding lawn mower. Do not take children on rides with a riding mower.
4. **Extension Cords.** Before use, check your extension cords for cracks and seal them with electrical tape. Replace any frayed or damaged cords. Never run extension cords through puddles.
5. **PPE.** Lawnmowers can throw rocks, sticks and other items. Wear long pants, and non-slip, closed-toe shoes instead of sandals. Always wear eye and hearing protection
6. **Call Before You Dig.** Check with your local utility companies (gas, water, sewer, electric) before any digging.
7. **Electricity.** Don't leave electrical tools plugged in while not in use. Make sure equipment is in the off position before you plug it in.
8. **Toxic Weeds.** Before you do any weeding, know how to identify poison ivy, sumac, oak, and similar toxic plants. Find out ahead of time how to treat the rashes they cause to reduce the irritation.
9. **Be Smart.** Never attempt any outdoor work while under the influence of drugs or alcohol.

Photo by ALPA PROD/Shutterstock.com

DON'T TAKE UNNECESSARY RISKS

Perform a hazard assessment before starting work.

38% of reported tree work mishaps are fatal.