

Combat Edge

Summer 2021

Air Combat Command's Safety Magazine



Owning Your
LICENSE TO LEARN

Stay Cool
Stay inside an air-conditioned place or go to a pool

Stay Hydrated
Fill a reusable bottle with water and bring it with you

Stay Healthy in the Heat

Summer Clothes
Wear lightweight, light-colored clothes

Plan Your Day
Avoid going out or exercising during the hottest times of the day

Source: weather.gov/dlh/beattheheat

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GEN MARK D. KELLY
COMMANDER

COL ANTHONY A. KLEIGER
DIRECTOR OF SAFETY

RICHARD E. COOK
EDITOR

KURT REILLY
ART DIRECTOR

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CONTRIBUTIONS: PLEASE SEND ARTICLES WITH NAME, RANK, DSN PHONE NUMBER, E-MAIL, COMPLETE MAILING ADDRESS AND COMMENTS TO ACC/SEM COMBAT EDGE MAGAZINE:

THECOMBATEDGE@US.AF.MIL
TELEPHONE: 757-764-8846
DSN: 574-8846
FAX: 757-764-8975

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Disciplined Maintenance and Culture

Leaders at every level demonstrate what they value by their actions and how they lead those around them. Whether it is a commander or Chief providing direction to hundreds if not thousands of Airmen, a Staff Sergeant leading a team under a jet, or an individual Airmen First Class accomplishing a task they have been qualified on by themselves for the first time—leadership is exhibited in all those situations. What we value is obvious in our words and our actions.

Words are important, and in aircraft maintenance we talk about the importance of disciplined maintenance and a culture of compliance frequently. Aircraft maintenance has a culture just as other mission areas within the Air Force do. Disciplined maintenance is central to being a maintainer, and it is vital in even the most basic tasks. Many tasks are accomplished every day (and night) under harsh environmental conditions, with constrained resources and tight timelines. As leaders make choices in the execution of tasks, those they lead pay attention. The lesson taught might be a good one, it might be a bad one, but make no mistake, a lesson is being taught. What we talk about, what we pay attention to, and what we do is indeed communicating what we value whether it is intentional or not.

So what is the difference between the unit that has a rock-solid approach to aircraft maintenance and safe effective flying operations and those that don't? I'd offer to you that it is the culture of compliance that is rooted in our past that includes the loss of treasure (in damaged or destroyed equipment) and more importantly blood (of aviators and other maintainers). We have collectively learned some important lessons and made incredible advances since the beginning of powered flight. We've developed sophisticated troubleshooting equipment, advanced repair processes, and grown to be an Air Force of unequaled experience and capability. We've also relearned tough lessons of how important the O in TO is, that it is indeed an order. That executing safe effective flying operations is challenging, that doing it with a fleet that is an average of 30 years old and constrained resources is more challenging. That the hard work of planning then executing disciplined maintenance has a direct impact on not only preserving hundreds of millions of dollars of taxpayer hard-earned money, but also lives—of our fellow Airmen.

Maintainers have a moral obligation to Aviators and the families of those aviators. The standards are high and the work is challenging. In my opinion, the most vital component of a unit's compliance culture is the NCO culture. I've seen units with deep permeating NCO leadership that teaches what the standard is, corrects when required, and in the cases where the correction is not accepted, finds another path for the individual who doesn't uphold the standard. Unfortunately, I've also seen units where that fabric of leadership was much less effective or even absent. If you are a maintainer, you have probably been in multiple units where you've had similar observations. This fabric is what makes who we are, and it takes relentless attention to deliver for our Airmen.

Thank you to the great Airmen who execute flying operations around the world every day. I'm honored to be on the team with you, thanks for leading and maintaining the culture we need to be successful.



Maj Gen Tom Miller
Director of
Logistics, Engineering
and Force Protection



SAFETY

BY MR. JOHN L. BLANTON

MENTORS

Like most Airmen, I have several interesting stories I could tell about things that have happened during my safety career of more than 18 years. I'll tell you about two incidents that made me choose safety as my primary job.

Back when I was a junior officer, fresh out of flight school, I attended the Tactical Operations (TACOPS) Course. I couldn't wait to get some experience and start logging flight time. When you graduate flight school, you know all the basics, but need to log flight time with a unit in the real world, outside the school environment. You need to gain experience and confidence, and perfect your flying skills.

One afternoon, I volunteered to assist the Maintenance Test Pilot (MTP) on some test flights in an AH-64 Apache helicopter. Our task was to test the tail rotor that had been fitted with some new parts. Filled with excitement and energy, I did the preflight check, prepped the log book, and prepared for our crew briefing. After the briefing, I strapped into the front seat, and the MTP did his walk-around and strapped in the back. Talking back and forth, we went through the checklist, started both engines, and then stayed at idle. I was at the controls while the MTP was working on some issues in preparation for our flight.

While sitting at the controls, I noticed a stronger-than-usual vibration in the pedals that control the tail rotor; however, being a new pilot, I didn't feel I knew enough to say anything. I didn't mention it, and we sat at idle for a little over five minutes. After the MTP finished dealing with pre-flight issues and took the controls, he said he felt the unusual vibration in the pedals. Just as he began to shut down the aircraft, the tail rotor section vibrated violently, and pieces of the tail rotor literally broke off of the aircraft. Luckily, we were at flat pitch, and the aircraft was winding down. By the time we had shut down and exited the aircraft, the Safety Officer was already there.

After a thorough investigation was completed, it turned out that the Technical Inspector (TI) had not checked the tail rotor as the maintainers were putting it back together, and simply had signed off on it without doing a proper inspection. It was determined that the cause of the mishap was something we would not have seen during the pre-flight check. Needless to say, the TI lost his certification (and other things, as well!).

Another contributing factor was discovered. During any crew briefing, a pilot is supposed to speak up if he or she feels something is not right. As a young pilot, I was afraid to rock the boat or appear dumb. I failed to mention the vibration, and instead let it go on for over five minutes. If I had said something earlier, we could have shut down the engines and figured out the problem before anything flew off the aircraft. We were very fortunate that no one was injured.

The second mishap took place less than a week later, and I was on the flight line again. I had volunteered with a different MTP to do some test flights, and

get more stick time and gain experience. This time, work had been done on the main rotor system, and we were to fly up to 10,000 feet Mean Sea Level (MSL), and "bump the head" - a maneuver designed to put stress on the main rotor. I should mention here that the main enemy of every aviator - fixed wing or rotary wing - is Foreign Object Debris (FOD). Harry Reasoner said it best when he described helicopters in a 1977 article: "A helicopter does not want to fly. It is maintained in the air by a variety of forces and controls working in opposition to each other, and if there is any disturbance in the delicate balance, the helicopter stops flying, immediately and disastrously. There is no such thing as a gliding helicopter." Let me reiterate: FOD is bad - very, very, very, very bad.

Back to the story. We did our pre-flight check and crew briefing, and strapped in. We started the aircraft, contacted ground control, headed out to the runway, and took off for the test flight area. We slowly climbed to our 10,000 MSL altitude, and started our maneuvers for testing the rotor system. The MTP climbed, and then made a rapid descent to test the rotor head. At that moment a Leatherman multi-tool fell out of nowhere, hit my front windshield, and got stuck on my wiper blade. In case you're wondering, tools don't just fall out of the sky through a spinning rotor and land on the front window. Flying around at 10,000 feet with possible FOD in your rotor system is not fun. Needless to say, the MTP and I were very angry, and landed immediately.

There were all kinds of issues associated with this incident, including tool-control. You should use only tools that are required/approved for the job. You then will be able to account for them all after you have finished.

NEVER use personal tools. The incident made us wonder about several other things: Had our pre-flight check been done as well as we had thought? Were the maintainers lazy? What about the TIs?

There were other issues, and an investigation was conducted. Here was where the Safety Officer was my hero. After the incident, the Safety Officer contacted the command. Having noticed a trend, he insisted that we have a Safety Stand-Down Day. During this time, everyone, from maintainers to administrative personnel and pilots, took part in safety activities. These included everything from flight-line safety and FOD, to proper tool-control and maintenance procedures. It

was an all-day activity, one in which everyone learned, took part in exercises and scenarios, and basically just got their acts together. After the Safety Day, our incident rate went down to near-zero. The Safety Officer had identified a trend and taken immediate action, and I am confident that this resulted in saved lives. If the trend had continued, there is no doubt there

would have been a serious accident, and someone would have been injured or killed.

Every junior officer and pilot is encouraged to identify someone who can be their mentor. After seeing how all this was handled, I chose the Safety Officer as my mentor. I then went on to become an Aviation Safety Officer myself, and I'm very glad I did.✈





Owning Your

LICENSE TO LEARN

BY LT COL MICHAEL J. CHEATHAM

In 2018, I committed to earning my private pilot certificate, otherwise known as my “license to learn.” I watched instructional videos, memorized regulations and manuals, and took detailed notes. In flight, I adapted to my instructor’s feedback quickly and flew his prescribed numbers, earning the nickname “Mr. Precision.” I cruised through my testing, stage checks, and local flight requirements. All that remained was a solo cross-country flight leading up to my check ride.

I planned a detailed cross-country plan on a perfect flying day with my favorite aircraft. A fellow student was also completing his solo cross-country requirement that day, and departed as I finished my pre-flight checks. After take-off, I assessed my pilot, plane, plan, and programming aspects as optimal.

I was ready to ace this flight!



As I approached my first landing point, I could hear my training peer talking to the tower in preparation for his landing. I had the unexpected advantage not only of hearing the conditions to expect ahead of time, but also of seeing my training peer's aircraft enter the pattern and subsequently land smoothly. Observing him, I predicted my future. My confidence grew, and I imagined how my clean landing would feel in a few minutes as I prepared to enter the pattern.

Oshima Island (Japan) is notorious for swiftly-changing winds because of its shape. As I should have expected, the reported wind conditions shifted significantly in just a few minutes. I was overly confident about my skills, and proceeded on. As I turned onto the base leg, the

strong winds differed from what I had anticipated, making my final approach much too short. Despite powering to idle and fully extending my flaps, I failed to descend until midfield; the projected headwind had become a tailwind. I realized this landing was not viable and initiated a "go-around." This eroded my confidence, as my imagined "perfect" flight began slipping through my fingers.

After reentering the pattern, the tower repeated the same wind conditions given to me during my previous attempt. I maintained the same approach despite feeling a discrepancy between what the tower reported and what I had felt previously. I decided to change my plan and extend my downwind leg to lengthen my final approach. I also powered

to idle and extended my flaps sooner, but my speed was still too fast; the tailwind remained, and continued to push me. Unable to land safely, I completed a second go-around. Frustrated, I entered the pattern again, conducted a teardrop maneuver, and approached from the opposite direction. At this point, "Mr. Precision" was gone. I bungled my third landing attempt and bounced down the runway before initiating my third go-around.

Embarrassed and confused, I informed the tower I was exiting the traffic pattern and would circle out of the way. I had to regain my bearing and process what happened. In those few minutes of solitude, three primary lessons came to my mind that, upon reflection, are applicable in all situations:



Photo by SSgt Craig Cisek



Photo by A1C Elizabeth Baker

1. *If you're not assessing, you're guessing.* Initially-assessed conditions must be assessed, tested, and periodically reassessed. A pilot-in-command (or leader) must remain agile and adaptive by continuously running an assess-test-reassess loop, especially in dynamic environments or complex situations.

2. *Under stress, revert to training.* Training mnemonics and neural chunks help you remember critical data under stress. The system rules, regulations, and associated training are written in blood. A leader must develop the self-discipline to train well up

front, according to the defined boundaries, and then rely on that training in the midst of friction.

3. *Perfectionism is a fool's errand.* History is filled with failed ideas of perfection. Perfection requires governing both controllable and uncontrollable factors, or luck. Leaders cannot own the wind or weather, but they can prepare for it, and control their reactions. Control the controllable, and "go-around" when conditions call for it.

My composure regained, I reclaimed my Mr. Precision title, completed my fourth approach, and landed "squeaky." With the

catastrophe averted, I completed my second and third leg landings with clean first attempts and went on to ace my check ride. I learned from the errors of my first solo cross-country flight, and continue to reflect on them often as a leader today.

Unfortunately, the day after my cross-country solo, another experienced (commercial) pilot encountered similar wind conditions on the same island. He refused to go around, bent metal, and forced a multi-day airfield closure after running off the far end of the runway. You don't need a private pilot certificate to have a license to learn; you already own one—use it! 🗡️

NOT THE THUMB

BY SSGT MICHAEL T. CHAPMAN

There I was: circa May 2018, working in equipment maintenance at Moody AFB, Georgia. My unit was preparing for deployment to Kandahar Airfield, Afghanistan, in support of Operation Freedom's Sentinel. As the primary crew chief for equipment maintenance, I was responsible for building and preparing a large portion of our Unit Type Code (UTC) package. UTCs are specialized kits of specific, itemized equipment that are pre-positioned on U.S. military bases for contingency use by civil engineer units during deployments. It was my job to make sure all Munitions Handling Units (MHU), specifically MHU-141 and MHU-226 trailers, had undergone

major inspections, and were triple stacked for air shipment.

Triple-stacking trailers was a big portion of our work. The process involved taking off the trailer tongues, stacking two trailers, and then loading them onto a base trailer. We used chains and binders to secure them to one another for air transport. On this occasion we were using a locally-written Operating Instruction (OI). To be honest, we all new this OI was pretty outdated, but it worked. For this particular task I always was very careful, and went absolutely "by the book." The operation is dangerous: It involves lifting very heavy objects and stacking them, with very little room for error. Now that you know the back-story, let me tell you how this involved Weapons Safety, and how someone now has only half a thumb.

My crew and I were very experienced in stacking trailers, and followed the OI every time. This time, we had problems with the deck rings and the tines of the forklift. The tines had to slide into very small, specially-designed slots

under the deck of the trailer. Naturally, there is a lot of weight concentrated on these slots. The problem had to do with the side deck rings. Their placement prevented the forklift tines from resting properly on the deck. This directed all the weight onto the rings, which could not handle the load. There were no steps or procedures for this problem at the time. We simply had two people hold the rings back to keep them out of the way. They always stood away from the trailer and forklift in order to avoid a smashing hazard.

Well ... one day there was an accident. We were stacking trailers as usual. I was the spotter for the forklift driver, and was holding back a deck ring. A1C-X was on the other side, holding the other ring. I was directing the forklift into position for lifting the trailer. Unfortunately, A1C-X was not paying attention to how close the tines were coming to the ring he was holding. A tine made contact with

a ring, wedging A1C-X's thumb between them. In a panic, A1C-X pulled back as hard as he could, de-fleshing his entire thumb in the process. I remember seeing him jerk his hand back, and throw off his glove to reveal only bone. It was quite a disturbing sight. Don't worry: A1C-X recovered.

Following the incident, I had the privilege not only of transporting A1C-X's thumb to the hospital, but also of working with weapons safety personnel to re-write the OI. I was able to demonstrate the new process from start to finish, and helped modify the local instruction. We may have had a terrible incident, but I'm confident that there will not be another similar mishap involving a deck ring. Thanks to the people in Weapons Safety, we now are much safer. ✦

In memory of A1C-X's thumb



Crisis Averted!

The Story of One Eagle-Eyed Maintainer

BY MSGT CRAIG P. WATSON

During the late hours of a frosty October evening, in the unforgiving wind of the Midwest, Airmen stationed at Offutt AFB prepared an aircraft for a routine training mission. A1C Jacob Sedlik, a Propulsion Journeyman from the 55th Aircraft Maintenance Squadron, would soon realize this night would prove to be anything but routine. His actions during an engine inspection prior to launch were invaluable, and probably saved the lives of eight aircrew members and their aircraft.

Maintainers are required to adhere to Technical Orders (TO) in the completion of all tasks. The TOs detail the tools, hardware, safety equipment, inspections, and steps required to complete each task efficiently and, most importantly, safely. The use of these resources is pivotal to ensuring personnel, aircraft, and equipment are safe and ready to execute their assigned missions in any corner of the globe, at any time. They know they have to do it right the first time, or there might not be a next time. This is why they do what they do. It's for the mission, and for the pride every maintainer feels

when an aircraft is airborne and accomplishing its mission. The feeling is immeasurable, and it drives them to pursue excellence.

These qualities were evident in a scenario that could have been devastating for one aircraft of a small fleet that performs the nation's particularly sensitive missions in intelligence, surveillance, and reconnaissance. These aircraft are highly valued throughout the eight combatant commands in which they currently operate. The data they collect provide information for the planning and execution of future campaigns. They also are vital assets in close air support for our allied ground personnel, and aid in the destruction of high-value military targets.

That night in October, hours before takeoff, the team of Airmen performed their pre-flight inspections. It was the job of subject-matter expert A1C Jacob Sedlik to inspect the engines. Upon reaching the right wing, A1C Sedlik, armed with his extensive engine knowledge, found the No. 3 engine's high-bypass fan spinning in the wind, also known as wind-milling. He also noted the motion was producing an abnormal sound.

He found that the abradable cartridge surrounding the high-bypass fan in the front of the motor had deteriorated, revealing the fiberglass housing. This minor defect rendered the engine unserviceable. The cartridge material is crucial to ensuring the titanium engine blades do not come in contact with the metal case of the engine. A scenario in which forty-four metal blades grind against another piece of metal usually does not end well for the equipment – or for personnel involved. Without this abradable cartridge, the fan blades would be free to shift fore and aft, wobbling within the engine nacelle. Eventually they could break free from the engine, and the result would be nothing short of catastrophic.

A1C Sedlik called his supervisor and made him aware of the danger just as the aircrew arrived to take possession of the aircraft for that night's sortie. The supervisor agreed that the engine was a safety hazard, and decided the aircraft could not be turned over to the aircrew. The crew members had a number of questions, and A1C Sedlik expertly briefed them on the

situation and addressed all the crew's questions and concerns. In addition, he gathered the crew, and showed them where the abradable cartridge was located, where it had deteriorated, and how to listen for abnormal sounds.

A1C Sedlik's exceptional knowledge, quick-but-calm thinking, attention to detail, and clear-headed decisiveness very likely saved an engine from vibrating itself apart, and possibly losing the entire \$100 million workhorse aircraft, along with the lives of the eight crew members planning to fly that evening. At the end of the day, that's what being an aircraft maintainer is all about! The Airmen of the 55th Aircraft Maintenance Squadron are proud of what they do every day – overcome challenges. They work to ensure aircrew members have safe and reliable aircraft with which to project the nation's AIR POWER across the globe! ✪

Photo by Joel Diller



As the Rotor Turns

BY SMSGT JOHN B. KNEEN

On a surprisingly cold desert night in Tucson, Arizona, A1C Michael Hatch left the warmth of the tool room and headed out, pushing his toolbox to his assigned aircraft. The crew had just left, and only the rumbling of a distant generator echoed from somewhere down the flight line. He had been a Helicopter Crew Chief long enough to understand the importance of these preflight inspections. At this point in his career, his biggest concern was recognizing the very real danger of complacency that can result from performing the same task repeatedly.

With his flashlight and checklist in hand, he climbed aboard the aircraft to begin his inspection. Immediately, a peculiar color screamed at him: One of the main rotor blade indicators was red instead of the familiar yellow. This was an indication that the blade's nitrogen pressure was below a serviceable threshold. This was not entirely uncommon, and usually was the result of a leaky fitting. By the end of his shift, Airman First Class Hatch had completed his inspection, replaced the indicator's fitting, serviced the blade, and successfully prepped the aircraft for the next day's flight.

Two weeks later, A1C Hatch experienced an eerie sense of *déjà-vu* as he ascended the aircraft and again was

greeted by a red blade indicator. He confirmed it was the same blade, and notified his supervisor of the recurring problem. A1C Hatch discussed the situation with SrA Eddie Cano, and the two agreed that the problem could be caused by a slow leak in the indicator. They replaced the component and successfully serviced the blade. As an extra precaution, they performed a final check at the end of their shift, to ensure the blade pressure was holding steady.

The next night, as A1C Hatch pushed his toolbox to the aircraft, he had a surreal premonition of what he would discover. He grabbed his flashlight from the toolbox and shined it at the bright red blade indicator. At this point, SrA Cano and A1C Hatch both agreed that something was awry, and it wasn't as simple as a leaky indicator. Clearly the system was incapable of holding a steady pressure, despite the servicing equipment stating otherwise. They removed the blade for further inspection in an attempt to save the asset and the next day's flights.

With the blade now on a maintenance stand, several maintainers examined the entire blade for any indication of a leak. Under the scrutiny of seasoned maintainers, the blade appeared to be serviceable. The indicator held yellow, with no visible indication of structural damage.

During the next shift, SSgt Lucas Brogdon was assigned 3 key tasks to complete. First, he had to install the new blade. Second, he had to perform a track-and-balance check. Finally,

he had to figure out what was wrong with the removed blade. As a Flying Crew Chief, his duties required him to fly with the aircraft to perform in-flight maintenance. Fortunately, the installation and functional checks for the new blade went smoothly, and the aircraft successfully flew for the night's training.

The next day, he was able to dedicate himself fully to working on the suspect blade. Just as before, the indicator still showed the blade to be serviceable. He covered the blade with soapy water, and led a team of Airmen in examining the blade's surface closely. If it had a slow leak, the released nitrogen would form small bubbles that would reveal structural damage; however, after an hour, the blade still showed no indication of a leak.

Something was occurring in-flight that was causing this blade to leak.

SSgt Brogdon realized that the only difference between the blade sitting on the maintenance stand and the blade installed on the aircraft was its position. As the rotors of a helicopter begin to turn, centrifugal force raises the blades' tips into a level position. Inputs from the flight controls further alter the blades' angle, and their tips are raised or lowered as the aircraft ascends or descends. It was possible that the blade in question was leaking while in a flight position, instead of in its normal resting state.

Each main rotor blade on an H-60 is 26 feet long, and weighs

250 lbs. With a team of 12, SSgt Brogdon lifted the blade and placed it onto 2 saw-horses. Again, he covered the surface with soapy water, and manipulated the assembly into positions simulating flight. With the blade's tip raised, SrA Louis Severson spotted a small cluster of bubbles forming near the blade's cuff, a location not easy to inspect when the blade is installed. They removed the protective paint and primer to reveal a severe crack.

The discovery of the cracked blade drove a joint investigation by Army and Air Force Engineers. In the end, 3 other suspect blades were linked to potential manufacturing defects.

The creative and adaptive thinking of the Crew Chiefs of the 55th Helicopter Maintenance Unit undoubtedly prevented a catastrophic mishap. More importantly, it saved lives. Their thorough inspection and commitment to excellence restored the aircraft's safety of flight with positive fleet-wide and DoD impact. Their exemplary efforts also resulted in their being recognized by Air Combat Command as the Crew Chief Safety Award winners for the First Quarter of FY21. 🇺🇸



Saved From Destruction

BY SMSGT JOHN D. EASLEY, JR.

On 16 Nov 2020, the pilot of an A-10C aircraft assigned to Moody AFB, Georgia, encountered a mishap while flying a training mission. During the flight, the pilot fired the 30 mm Gatling gun; however, the gun abruptly stopped after about

100 rounds. This created a hazardous condition, and the pilot immediately radioed the control tower, declaring an in-flight emergency. The aircraft landed and parked at the designated location, to be evaluated by both the 23d Armament Response Team and the 23d Aircraft Maintenance Squadron's Weapons

Load Crew. After the load crew tried for several minutes to disarm the gun system, it was evident that the Armament Response Team would have to step in.

Within minutes, the Armament Response Team had identified the problem: three bullets were lodged in the gun. The Team also discovered several interior gun

parts had been damaged, and were wedged in the gun-clearing path. This prevented the team from placing the gun system (and the aircraft) into a safe condition. The bullets themselves were a type of percussion-fired round, which served only to make the extremely dangerous situation even more so. The Armament Response Team continued to look, and finally identified the damaged part and its location within the jammed system. With limited options, the team formed a critical plan to remove the part. If successful, the gun system could be made safe.

Following the Technical Order (TO) procedures, the team began to disassemble the gun system,

removing two of the 9-foot gun barrels. This allowed them to reach 2 of the 3 bullets lodged in the system. Exercising extreme caution, they carefully removed the two bullets. The team then tried to remove the third bullet, but it was too far back in the system. There appeared to be only one way to remove this bullet, and the Armament Response Team devised a rather clever plan: They realigned the damaged breech bolt assembly by shifting it backward with a pry bar, while simultaneously rotating the gun system with another pry bar. After a few frustrating attempts, the gun system rotated just enough for the team to realign the assembly with the mid

rotor tracks. This allowed the gun system to rotate freely, and enabled the Team to extract the last bullet. The gun and aircraft were safe at last.

As the 2W1X1 career field saying goes, "WITHOUT WEAPONS, THE AIR FORCE IS JUST ANOTHER AIRLINE." Weapons are essential to the success of the mission, but they require careful handling, and dangerous situations can create mishaps. The Armament Response Team's quick and meticulous actions prevented a gun system from inadvertently firing. They prevented catastrophic damage to the aircraft, and, more importantly, they protected Airmen's lives. 🇺🇸

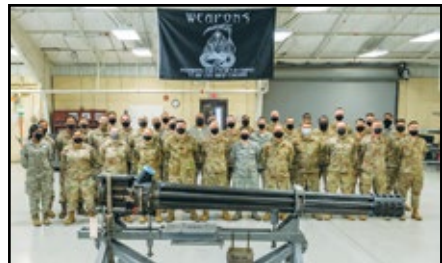
1st Quarter FY21 Awards



Aircrew Safety
Aircrew of MELT 01
1ERS
Akrotiri AFB, AE



Crew Chief Safety
55 HMU
Davis Monthan AFB, AZ



Explosives Safety
23 MXS Armament Flight
23 MXS/ MXMR
Moody AFB, GA



Flight Safety
MSgt David C. Barber
55 WG / SEF
Offutt AFB, NE



Flight Line Safety
A1C Jacob D. Sedlik
55 AMXS
Offutt AFB, NE



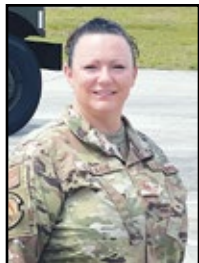
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55 WG/SEG
Offutt AFB, NE



Unit Safety
71 AMU
723 AMXS / MSAB
Moody AFB, GA



Unit Safety Representative
MSgt Angela B. Hearn
325 LRS / LGRF
Tyndall AFB, FL



Weapons Safety
MSgt Ricardo R. Perez
53 WG/ SEW
Eglin AFB, FL



SHARE THE ROAD



Briefing Requirements

- Initial brief within 30 days of arrival at your unit or when identified as an operator
- Annual preseason brief (every year)

Training Requirements

- State-Issued Motorcycle License
- Initial Motorcycle Safety Foundation Training Course
- Intermediate Training Course
 - No later than 1 year after initial training
- Refresher Training Course
 - Completed at least every 5 years



HQ/ACC Occupational Safety
(757) 764-8840 | ACC.SEG@us.af.mil






The motorcycle-riding season is upon us, and many of you are dusting off your bikes and getting ready. Before you ride, make sure that you are prepared. Have you received your annual preseason motorcycle safety briefing? **Did you document that in the Motorcycle Unit Safety Tracking Tool (MUSTT)?** If you are required hands-on training this year, has it been accomplished? If you're unfamiliar with the briefing and training requirements, stop by and see your unit Motorcycle Safety Representative. Keep in mind that last year, ACC lost four members in motorcycle mishaps, and another sustained a permanent disabling injury. The following is a snapshot of those motorcycle fatalities:

- Member with newly purchased motorcycle, drove off parking lot and struck tree.
- An automobile made a U-turn in front of the motorcycle.
- An automobile failed to yield and made a left turn in front of motorcyclist.
- A motorcyclist failed to properly negotiate a curve.

Mishap Statistics Scoreboard






FY21 Flight

Thru 31 March 2021

	Fatal	Aircraft Destroyed	Class A Aircraft Damage
15 AF			 
16 AF			
USAFWC			
ANG (ACC-gained)			
AFRC (ACC-gained)			
AFCENT (ACC-gained)			

FY21 Occupational

Thru 31 March 2021

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


FY21 Weapons


Thru 31 March 2021

	Class A	Class B
ACC	0	0

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)

 = On-duty

 = Off-duty

Symbols for Mishap Aircraft



Flight Notes

ACC Flight Safety investigated two Class A mishaps this quarter; both of which ended on the runway. Including these two, ACC has seen a total of five Class A mishaps for this fiscal year. While some things seemingly "just happen," we should remind ourselves that attention to detail never goes out of style. As we approach the longer days of hot, sweat-in-our-eyes summer months, let us each take a second for self-analysis. By reflecting and finding our weak points, we might better study, focus, double-check, and out-prepare an unfortunate chain of events. Fly safe and check 6.

Occupational Notes

Air Combat Command had one off-duty fatal mishap during the second quarter of Fiscal Year 2021. An Airman was operating a 2004 Toyota Tacoma on the interstate when he was struck and killed by an intoxicated driver operating an automobile in excess of 100 mph. This investigation is ongoing; however, initial reports indicate that the Airman had done nothing wrong.

Weapons Notes

Greetings, Weapons Safety community. During the second quarter of FY21, ACC experienced one Class D and seven Class E mishaps. Of the eight mishaps, six were damaged munitions during handling, one was a small arms incident, and the last one was an unintentional release during flight. Only minor injuries occurred during the small arms incident. These types of mishaps might be small in the grand scheme of things, but let's continue to work on the small stuff to prevent the big mishap. Please take your time and do it right the first time. Thanks for all you do for the ACC Weapons Safety community.





Photo by AJR_photo/Shutterstock.com

Sunburn Top 10

BY LT COL JEANETTE SANDERS

When it comes to summer fun, nothing beats outdoor activities like boating, swimming, hiking, camping, playing sports, spending a day at the lake or beach, or just grilling in your back yard. When it comes to ruining a great day outdoors, nothing beats sunburn. The pain and skin damage caused by even a mild case of sunburn can put you out of commission for several days. Don't let sunburn spoil your summer. Follow these tips on preventing and treating overexposure to the sun.

- 10** Take a pain reliever. For pain relief after a sunburn, take an over-the-counter pain reliever such as ibuprofen (Advil, Motrin IB, others) or naproxen sodium (Aleve) as soon as possible after sun exposure. Some pain relief options come in the form of gels or sprays that are applied directly to the affected areas.
- 5** Treat peeling skin gently. Within a few days, the affected area may begin to peel. This is your body's way of getting rid of the top layer of damaged skin. While your skin is peeling, continue to moisturize.
- 4** Take an anti-itch drug. An oral antihistamine such as diphenhydramine might help relieve itching as the skin begins to peel and heal underneath.
- 3** Apply a corticosteroid cream. For a mild to moderate sunburn, apply an over-the-counter corticosteroid cream to the affected area.
- 2** Protect your sunburn from further sun exposure. While your skin heals, stay out of the sun, or protect your skin if you do go out. Spending a prolonged amount of time in the sun when you have a sunburn will slow the healing process, and possibly damage the existing sunburn further. If you have to spend time in the sun, wear clothing made from tightly woven fabrics. When you hold the fabric up to a bright light, you should not see any light coming through.
- 1** Wear Sunscreen! Prevention is the best "medicine". Sunscreen reduces your overall UV exposure and lowers your risk of skin cancer and sun damage. To prevent further damage and pain, apply a wide broad-spectrum sunscreen with a sun protection factor (SPF) of 15 or more, and wear UV-protective clothing. The American Academy of Dermatology states, one in five Americans will develop skin cancer during their lives. Protect yourself. Wear your sunscreen.
- 8** Apply a moisturizer, lotion, or gel. A moisturizer with aloe vera or calamine lotion can be soothing. Avoid lotions that include petroleum, benzocaine, and lidocaine. Petroleum traps heat, while benzocaine and lidocaine can irritate the skin.
- 7** Drink water. A sunburn draws fluid to the skin's surface and away from the rest of the body. Drinking water is important to prevent dehydration.
- 6** Don't break intact blisters. If a blister does break, clean it with mild soap and water followed by application of an antibiotic ointment to the wound covered by a nonstick bandage.
- 9** Cool the burned skin. Apply a clean towel dampened with cool tap water. Take a cool shower, or a bath with baking soda added to the water—about 2 ounces (60 grams) per tub. Cool the skin several times a day. Lots of Cool!

OVER the
Edge
MAGAZINE

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THAT YIELD SIGN IS FOR YOU !

BY MR. RODNEY ROBINSON

Driving around this great country of ours can be challenging at times. Defensive driving is the key, because, from my point of view, the problem is always caused by the other driver. It could be my male ego, because, of course it couldn't be me. I have no problem driving, talking on my cell phone, eating my lunch, while at the same time giving my full attention to the task at hand – DRIVING.

During my years behind the wheel, I have had a few close calls, to say the least; however, I do try to follow proper driving protocol. One of the most important is the *Yield*. From what I was taught in driver education class, the Yield sign means just that: you yield to the other vehicle. A great example of this is an on-ramp to the interstate.

For most drivers, the Yield sign is merely a suggestion. To them, it's really for the other driver. As vehicles attempt to merge from the acceleration ramp onto the interstate, they pick up speed, with no intention of slowing down. The Yield sign they passed 50 feet back is the furthest thing from their mind at this point. It can become a challenge to see who hits the brakes first. Will it be the vehicle on the interstate, traveling at 65 mph and getting ready to exit, or will it be the vehicle that just came off the ramp and is attempting to merge onto the interstate?

From what I learned in driver-education class, the car preparing to exit the interstate has the right of way. They are, after all, going 65 mph, and traffic behind them is traveling at the same speed. During the merge, both operators – the one exiting the highway, and the one entering – should be paying attention because of the risk involved. They each know, or believe they know, what the other driver is trying to do. With a little patience and defensive driving by both operators, this merge can take place incident-free.

The driver *wishing to leave* the interstate maintains speed until they can get over into the deceleration lane, and then slows down. The driver *attempting to merge onto* the interstate increases speed. If both operators pay attention, a simple zipper maneuver can occur. Unfortunately, we all know this is not always what happens.

There are three ways to execute a merge: my way, my wife's way, or the proper way.

MY WAY:

While placing my phone and burger down, I accelerate, passing cars from the far left lane. After all, my exit is only half a mile away. I see the exit sign and immediately realize I need to get over, so I find a quick way over. It just takes a few seconds flat before I cut off all oncoming traffic and merge over. Once in the deceleration lane I apply my brakes to quickly slow down. After all, you have to keep up with the flow of traffic.

MY WIFE’S WAY:

She stays in the right lane well before her exit. She proceeds to put on her signal 2 miles before the exit, to let the other cars know she will be getting off. Then she panics when she sees other cars merging onto the interstate in front of her. She brakes while still on the highway, creating confusion for all drivers, before merging onto the deceleration lane.

THE RIGHT WAY:

Move over into the lane that is next to the exit. Once you are in the lane put on your signal to let others know your intention to exit. Keep your speed up on the interstate until you get over into the deceleration lane then slow down to the ramp speed.

A zipper merge is recommended because leaving a lane unoccupied as a result of early merging is inefficient. It only makes traffic heavier, proponents say.

Who has the right of way when exiting a freeway?

- 1) Drivers on an access ramp must yield to vehicles on the exit ramp.
- 2) Traffic leaving an interstate has the right of way.

Three Things you should do to exit a freeway safely:

- 1) Plan ahead and merge into the lane closest to your destination exit.
- 2) Signal when changing lanes.
- 3) Follow the freeway exit’s speed limit.

What should you do before merging onto the highway?

- 1) Identify a gap between cars on the freeway.
- 2) Continue to increase your speed until you reach the gap you selected.

What is the safest procedure for leaving the freeway by moving into an exit lane?

- 1) Avoid slowing down while on the freeway.
- 2) Wait until you are in the deceleration lane.
- 3) Once in the deceleration lane, gradually slow down to the posted speed limit.
- 4) If you miss your exit ramp, never turn around or back up.

Yield to Other Drivers in these circumstances:

- 1) At a yield sign
- 2) Pedestrians in a crosswalk
- 3) Persons using a seeing-eye guide dog
- 4) Persons using a white cane, with or without a red tip
- 5) Uncontrolled intersections where vehicles are already in the intersection
- 6) “T” intersections, where you must yield to vehicles on the through road

- 7) Turning left, in which case you must yield to oncoming pedestrians, cars, etc.
- 8) When driving on an unpaved road that intersects with a paved road
- 9) When returning to the roadway after the car is parked in a lot or driveway

Did you know?

When accidents happen while one vehicle was merging, typically the merging driver is found liable.

Who has the right of way in a merge?

The driver of the vehicle in the lane that is ending is supposed to yield to the vehicles in the other lane, and should merge only when it is safe to do so. When merging, drivers should make sure they have enough space to move their vehicle over into the other lane.

The good news is most crashes can be avoided simply by following the rules of the road. When behind the wheel, stay alert at all times, and avoid distractions. Keep your focus on the task at hand ... Stay safe! 🚗





Think Twice

BY SSGT KRISTEN BOSWELL

As we go through life, some of the lessons we learn are easy, while others are very, very hard. This is the story of a lesson learned the hard way. It was mid-August of 2014, and I had just turned the legal drinking age – good ol’ 21. That meant I was an adult, and could think like one, right? I truly thought so. I soon would learn how wrong I could be.

My brother and I, along with some friends, had been enjoying some beers during a day at Alder Lake, in Eatonville, Washington. It was a typical, 80-degree, cloudless Saturday on the lake. Sounds like paradise, right? It definitely was ... until later. After spending all day on the lake, we were red from baking in the sun, and it was time to head home. Steven, a member of our group, invited us over to his place. He lived just down the road from the lake, and we all headed over to his house.

We arrived at Steven's house around 7:30 p.m., and immediately started talking about dinner. The only things we had had to eat or drink all day were cooler snacks and beer, and we were really hungry. Steven called the local pizza joint to get a few pizzas delivered to his place. My brother told him he would go pick up the pizzas instead. He wanted to make a quick run into town to grab more beer, and the store was right down the road from the pizza place. Steven offered to be his copilot, saying he also wanted to pick up something, but didn't want to drive. I watched as they both got in the vehicle and left. I didn't think to ask my brother if he was sober enough to drive, and that is where I think I truly messed up as a sister and a friend.

By 9:00 p.m., they weren't back yet, and I texted my brother. About fifteen minutes rolled by with no reply from him. I tried to phone Steven, but the call went straight to his voicemail. Were they okay? I went over to my best friend and told her I was worried. Terrible thoughts raced through my head. Less than two minutes later, someone ran inside, frantic. They said they had heard there had been a fatality about seven miles down the road. It appeared that a vehicle had swerved into a ditch and hit a stump. It was traveling so fast that it went about fifteen feet up a tree and flipped over. Both occupants had been killed. They identified the vehicle as my brother's. The sudden, hard feeling I got in my chest was indescribable, and still is to this day.

I hope no one ever has to experience the awful feeling of losing someone you love from drinking and driving. I ask one thing from you, the reader: Put yourself in my shoes, and try to imagine the anguish I felt when I heard the devastating news that my brother and his friend didn't make it.

I hope you take two things away from this story: First, don't let anyone drink and drive – **EVER**. Second, promise yourself that you will never operate any vehicle if you have had as little as a single beer.



According to the National Highway Traffic Safety Administration (NHTSA), it takes a blood-alcohol concentration (BAC) of only .02% to impair judgement, decrease alertness, and increase reaction time. That's the same level a person has on the morning after a night of drinking, and it's not even close to the legal limit of .08%. Don't become a statistic. I always remember Gear, Plan, and Skills (GPS) when preparing to do just about anything. Before planning a night that involves alcohol, consider these risk-management tips:

- **Gear.** This includes your phone, charger, and drinking water.
- **Plan.** Be sure to have a designated driver or other transportation, such as Uber, Lyft, or a taxi.
- **Skill.** Make sure to be well rested and ready for the night out, and know your limits when it comes to alcohol.

According to the NHTSA, about 30 people die every day from drunk driving in the United States, or 1.25 people every hour. In 2018, there were 10,511 fatalities caused by drunk driving (BAC of .08% or higher). The total number of traffic fatalities in which any amount of alcohol played any role (BAC of .01% or higher) was almost one third of all highway deaths. Don't be a statistic. Enjoy your night out, but plan accordingly, and always think twice before getting behind the wheel if you've been drinking. It's not worth a life – yours, or anyone else's.

buzzed
driving is
drunk
driving
designate a sober driver

Concerned about your alcohol use?

Speaking up and asking for help with alcohol use concerns is a sign of strength.



AVOID DAMAGING YOUR CAREER

Discuss alcohol use concerns before you get an alcohol-related incident or DUI charge.



KEEP YOUR RELATIONSHIPS STRONG

If alcohol is impacting you, speak up early.



MAINTAIN READINESS

The DoD and your Service branch have resources to keep you on-duty and mission ready.

Learn more about responsible drinking and how to get help.

ownyourlimits.org/get-help

OWN YOUR LIMITS

SERVE HONORABLY. **DRINK RESPONSIBLY.**
Contact Us: dha.ncr.comm.mbx.drink-responsibly@mail.mil



Complacency Can Kill

The Tale of One Lucky Couple

BY SSGT JAMES R. CARR

Can you remember the first time you drove a car by yourself? I can, and if you're like me, you remember it as a time not only of excitement, but also of hyper-vigilance. You make sure to keep both hands on the wheel, to signal, and to check your blind spots when changing lanes. In a way, you acknowledge your inexperience regarding the dangers of the road; however, one day, you get comfortable (some people sooner than others!). One hand slips off the wheel, the driver's seat becomes a lounge chair, and the music level increases by a few decibels. Complacency sets in, and can bring tragic results. It almost did for me, anyway.

According to the National Highway Traffic Safety Administration (NHTSA), 36,096 people died in motor vehicle crashes in 2019. I almost became one of those statistics after a weekend getaway to Dollywood, in Pigeon Forge, TN. My wife is a huge fan, and we had a great time at the famous hotel. Driving up there was fun, too. We sang songs, laughed (a lot), and genuinely enjoyed each other's company. I also made that eight-hour drive in record time, because, of course, the speed limit just wasn't fast enough. I'd been driving for at least a decade at that point, and a little speeding can't hurt anybody, right? Wrong.

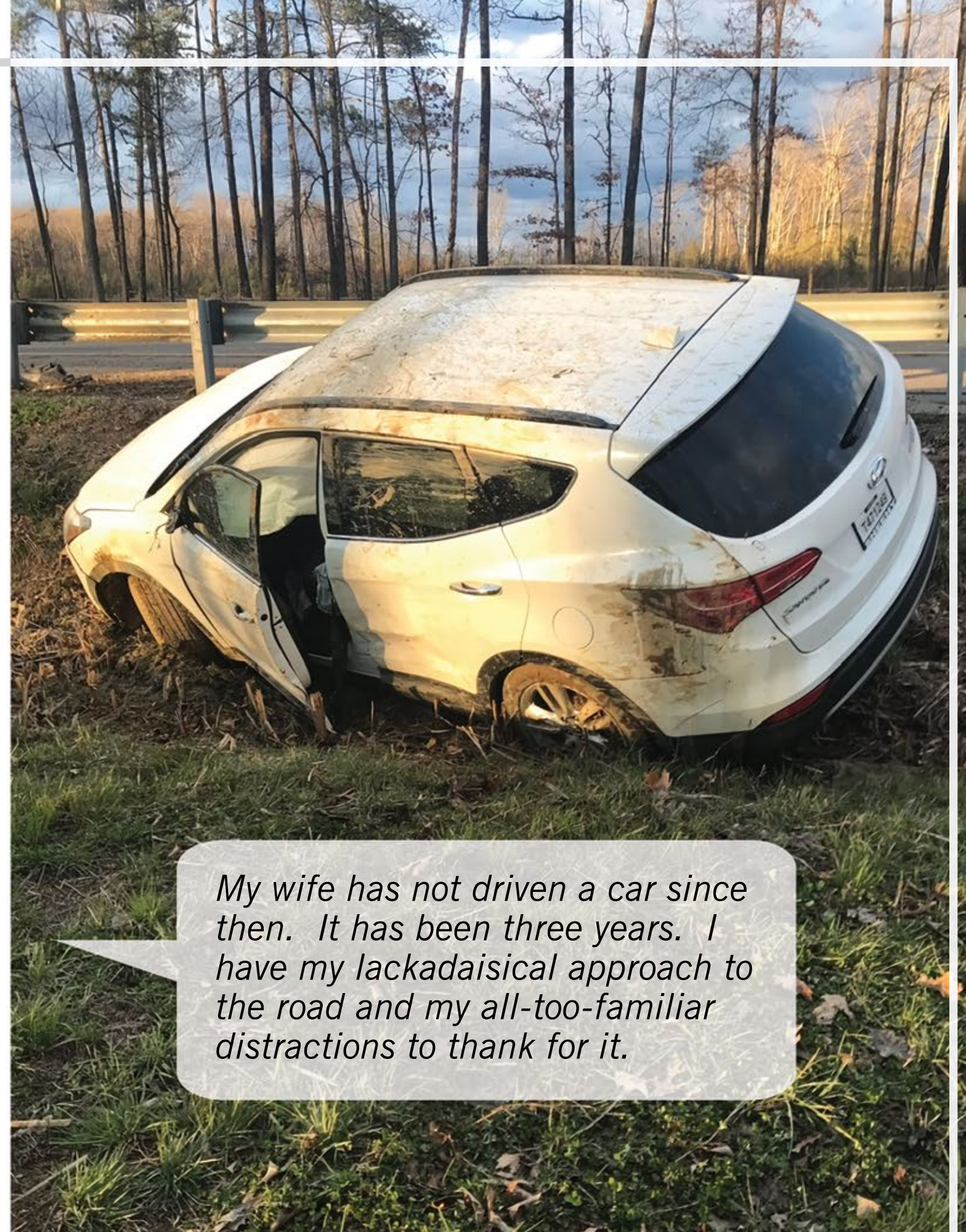
When the trip was over, and it was time to make the drive back, I just wanted to be home. I pushed the needle on the odometer a little further, blasted the music a little more, and changed lanes more frequently. I snacked a little more in order to stay awake, and wasn't shy about grabbing my phone

to change songs now and then. Fast forward a few hours: Now I'm about two hours from home, and it's time to exit onto another highway. That's when all the distractions and complacent behavior almost led to a tragic end.

A driver to my right was merging onto the highway as I was set to exit in a mile or so. I attempted to move over to the next lane on the left, to avoid a crash. I didn't do what I know to do. I didn't signal. I didn't check my blind spot. I was complacent. I also was trying not to spill my third *Monster*™ of the day. I hit another vehicle when I tried to merge, and the impact spun my car around, throwing it into the median on the opposite side of the highway. As I tried to keep control of my car (to no avail), I saw the terror in wife's eyes - right before the top of my car slammed into the guardrail. Miraculously, neither of us was seriously injured, but I knew that was just a stroke of luck.

My wife has not driven a car since then. It has been three years. I have my lackadaisical approach to the road and my all-too-familiar distractions to thank for it.

Now, I am a Safety Professional, and I share this story in order to remind everyone that it's OK to follow the speed limit. It's OK to take that extra glance at your blind spot. It's totally fine to ignore that call, or not to check that text-message until you stop driving. As I stated at the beginning, we know the right things to do. We just get comfortable. We become complacent. We stop respecting the road. That's when mishaps occur (sometimes life-altering ones). Put what you know into practice, learn what you don't know, and, most of all: BE SAFE! 🚗



My wife has not driven a car since then. It has been three years. I have my lackadaisical approach to the road and my all-too-familiar distractions to thank for it.



BURNED

Into My Mind

BY SSGT KELSEY JOHNSON

Growing up, I took my title as “Daddy’s Little Princess” very seriously. He was my king, my fearless knight in shining armor. He couldn’t be touched, was capable of anything, and could do no wrong! He was invincible, right?

One hot and sweaty Texas Saturday, my family and I were outside doing our Saturday usual: Yard work. Yuck! My dad would have me and my siblings pick up sticks in the yard before he mowed the grass. We’d get the little wagon and pull it around in agony, gathering one twig at a time. Then, we would haul our load over to the fire pit.

Later that afternoon, Dad stuffed the pit full of the day’s collection, and grabbed the lighter fluid

to start the fire. The whole family gathered around to watch our favorite part. Well, it *used* to be our favorite part. Dad doused the sticks in fluid and within a matter of seconds, the entire pit exploded in front of us. We didn’t know it, but there were glowing embers from a previous fire. As Dad jumped back, the fluid he was holding splashed onto his arm. Flames engulfed his body. He immediately ran to the gravel and tried to smother the flames with the classic, “Stop, Drop, and Roll.” My mother and I ran to get the water hose, but, thankfully, the flames were out when we got back. I quickly gathered my siblings into the house and watched as my parents drove off to the ER. We were very lucky that day, and Dad walked away with third degree burns covering only his right arm.

I tell this story for two reasons. First, it quite literally is “burned into my mind.” I’ll never forget it. The second reason is to bring awareness to others, and remind them that one never can be too careful. Why is it that the ordinary tasks and activities of our lives are often the cause of the most mishaps? It’s not that we don’t care, or that we deliberately disregard good safety practices. Rather, we become comfortable with these activities, and perform them in a lackadaisical manner. My father didn’t set himself on fire on purpose. He just quickly looked at the ashes, and didn’t take time to make sure there were no embers still glowing from a previous fire.

Although it was a terrible moment, there is much that we can learn from it. When starting a fire, it is important to remember a few key safety practices:

- Never build a fire without an extinguishing method nearby. Whether it’s a shovel and dirt, a portable fire extinguisher, or water, all are acceptable means of maintaining a controlled fire.
- Dangerous materials such as aerosol cans, pressurized containers, and even glass should never be burned. They have the potential to explode, shatter, or create hazardous fumes.
- Never leave a fire without fully extinguishing it. You should drown the embers by pouring water on them, or use a shovel to bury the fire. Always make sure that there are no embers still smoldering before you depart.

**If it’s too hot to touch,
it’s too hot to leave! 🔥**



Photo by Bruce Stanfield/Shutterstock.com

It's not only the sun that can burn you this summer.



First aid for burns:

- Place the burn in cool water for three to five minutes.
- Cover the burn with a clean, dry cloth.
- See your doctor if the burn is larger than your palm.

For more information and free fire-safety resources, visit
www.usfa.fema.gov

Fireworks Injuries

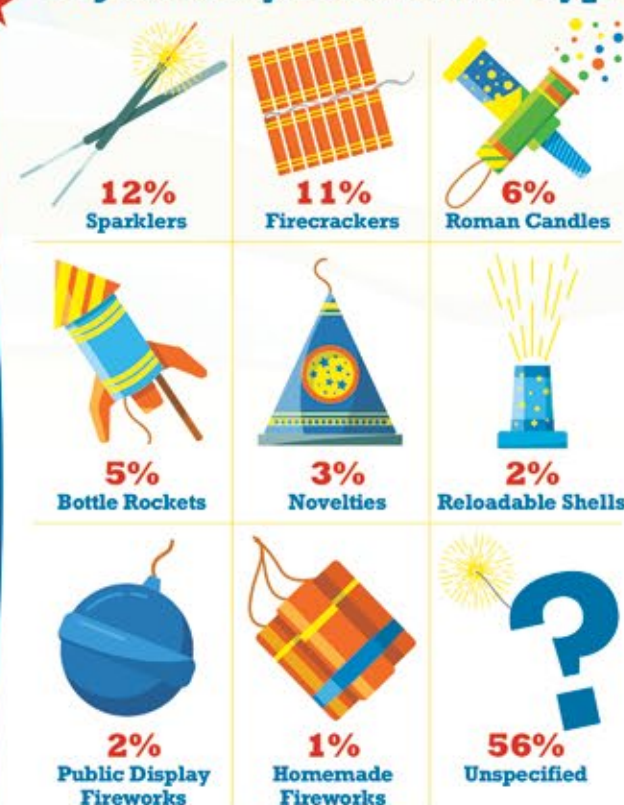
243 people on average go to the emergency room every day with fireworks-related injuries in the month around the July 4th holiday.



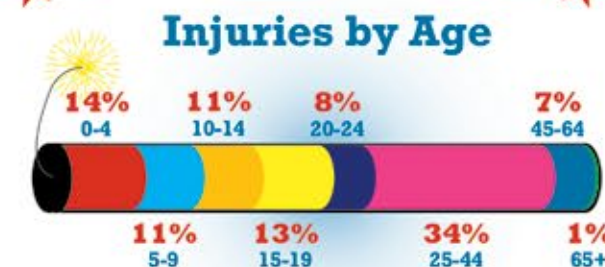
Fireworks Safety Tips

- ★ Never allow **children** to play with or ignite fireworks.
- ★ Make sure fireworks are **legal** in your area before buying or using them.
- ★ Keep a **bucket of water** or a **garden hose** handy in case of fire or other mishap.
- ★ Light fireworks **one at a time**, then **move back** quickly.
- ★ **Never** try to **re-light** or **pick up** fireworks that have not ignited fully.
- ★ More Fireworks Safety Tips – www.cpsc.gov/fireworks

Injuries by Fireworks Type*



Injuries by Age



Source: U.S. Consumer Product Safety Commission 2019 Fireworks Annual Report
*ED treated injuries during the Special Study period June 21 - July 21, 2019

