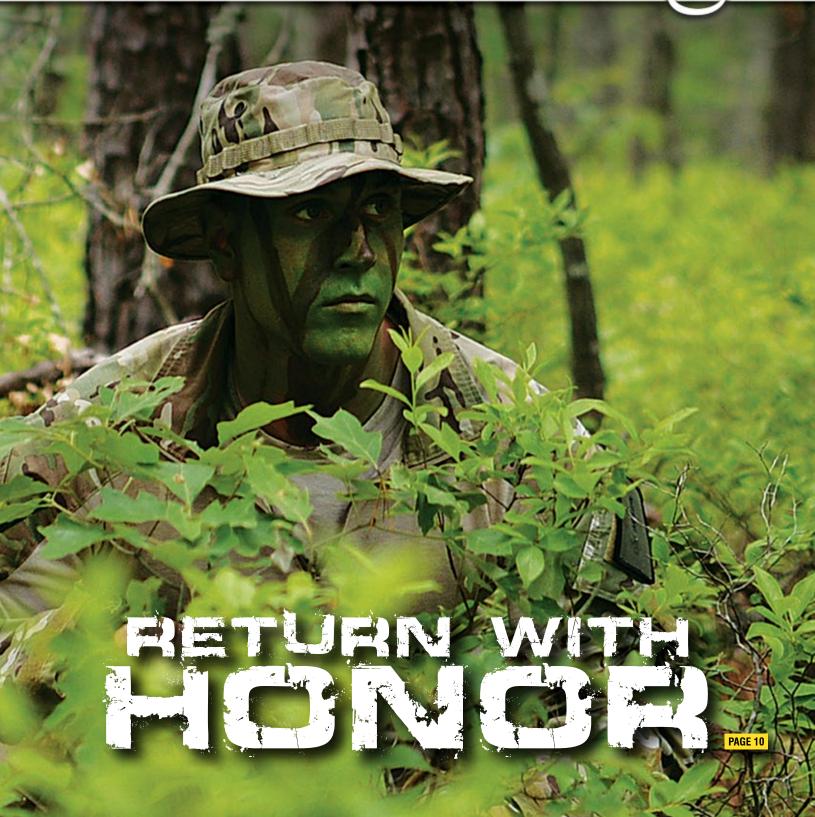
Fall Edition 2016 One Safaty Magazine

ACC's Full-Spectrum Safety Magazine



Congratulations

The Combat Edge was recognized with the following Hermes Creative Awards:

Platinum Award for Check 3

Design / Marketing Materials
— Spring Edition 2016

Gold Award for Cover Design

Publication Design Category
— Spring Edition 2016

Gold Award for Design

Publication Overall Category

— Spring Edition 2016



The Hermes Creative Awards is an international competition for creative professionals involved in the concept, writing and design of marketing and communication programs and print, visual and audio materials. Entries come from corporate marketing and communication departments, advertising agencies, PR firms, graphic design shops, and digital creators and freelancers.



Combat Edge

ACC Safety bids Col. Nixon a fond farewell and wishes him success in his next assignment.

- 4 | THE EVOLUTION OF UNMANNED FLIGHT
- 6 Not So Alone, Mostly Unafraid by Major Jack Nelson 9 RW, Osan AB, South Korea
- 10 RETURN WITH HONOR
 by Master Sgt. Iain Stewart,
 HQ ACC/A3JT, JB Langley-Eustis, Va.
- 16 WHEN SERE TRAINING BECOMES CRITICAL
- 18 | ASAP

- 9 | FUNDAMENTALS FOCUS
- 20 | Maintenance Minute
- 21 | WEAPONS WORDS
- 22 Monthly Awards
- 23 | Quarterly Awards
- 24 | CHECK THREE
- **25** | **S**TATS

GENERAL HERBERT J. CARLISLE
COMMANDER

COLONEL LAWRENCE A. NIXON
DIRECTOR OF SAFETY

Mrs. Barbara J. Taylor Editor

MR. KURT REILLY
ART DIRECTOR

Volume 25 Issue 2, 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.

CONTRIBUTIONS:

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

ACC.THECOMBATEDGE@US.AF.MIL TELEPHONE: (757) 225-7941
DSN: 575-7941
FAX: (757) 764-8975

THE EDITORS RESERVE THE RIGHT TO EDIT ALL MANUSCRIPTS FOR READABILITY AND GOOD TASTE.

DISCLAIMER: THIS MAGAZINE IS AN AUTHORIZED PUBLICATION FOR MEMBERS OF THE DOD. CONTENTS OF THE COMBAT EDGE ARE NOT NECESSARILY THE OFFICIAL VIEWS OF, OR ENDORSED BY, THE UNITED STATES GOVERNMENT, THE DOD, OR THE UNITED STATES AIR FORCE. INFORMATION CONTAINED IN ANY ARTICLE MAY NOT BE CONSTRUED AS INCRIMINATING UNDER ARTICLE 31 LICMI

COVER PHOTO: STAFF SGT. CHRISTOPHER S. MUNCY

THE COMBAT EDGE WILL RETURN THIS WINTER



Keep it Simple

You've probably heard the term "keep it simple" quite a few times for different activities and decisions, especially when you're looking at solutions to problems or issues (maybe with an extra word added to the end of the phrase). This saying is time-tested because keeping anything at the simplest level possible often ensures success since it is easier to implement and act on with less "moving pieces" and variables compared to more intricate and complex actions.



Col. Lawrence A. Nixon Director of Safety

This aspect of simplicity can be very beneficial as you use real-time (active) risk management in your activities. While obviously each situation varies, don't fall into the trap of thinking countering hazards in your activities, especially when you're not at work, requires time-intensive analysis that you don't need or have time for. Effective risk management can be done quickly and effectively—for instance, a quick Check 3 of your gear, plan, and skills can cover the bases and should highlight good mitigation opportunities when needed. After your initial Check 3, don't forget to continually monitor your activity in real-time to adjust your gear, plan, or skills as necessary to mitigate any new hazards you discover. As you see them, adjust an area to mitigate hazards—and remember to always look at adjustments in your plan as a quick way to effectively mitigate (stop doing your activity, end early, change your route, etc.).

It may sound simple—and it should be—but this is effective risk management in action. The fact remains the loss and serious injury of many of our ACC teammates often revolves around a key bad decision or action as the primary cause—not getting enough sleep, drinking excessively and swimming, or even disregarding rules and laws.

Simple solutions would have stopped many of these from occurring, whether implemented at the start or during the activity. Are you planning to drive on a cross-country road trip with only 2 hours of sleep?—simply delay the trip until you are better rested or find a well-rested driver. Alcohol appears at a lake get-together?—ensure no one drinking excessively gets in the water. Simple mitigation solutions such as these examples can prevent the worse of all outcomes, the loss of one of our team to their family and unit. Keep it simple (and safe) and Check 3!

THE EVOLUTION OF UNMANNED FLIGHT

MQ-1 Predator

In 1995, the USAF established its very first UAV squadron, the 11th Reconnaissance Squadron at Indian Springs Auxiliary Airfield in Nevada, later renamed as Creech Air Force Base in 2005. Besides reconnaissance functions, MQ-1s also started firing Hellfire missiles soon after 9/11, increasing the versatility of this Remotely Piloted Aircraft.

B-17

Operation Aphrodite was one of the most ambitious drone projects in the Second World War. The plan was to strike concealed German laboratories with American B-17 "Flying Fortresses" and B-24 bombers that were stripped down and crammed with explosives. A manned crew would pilot these planes before parachuting out once they crossed the English Channel. At this moment, a nearby "mother ship" would take control, receiving live feed from an on-board television camera. Although extensively developed, these platforms never realized any operational success.



U.S. AIR FORCE

RQ-4 Global Hawk

Global Hawk began as an Advanced Concept Technology Demonstration in 1995. The system was determined to have military utility and provide warfighters with an evolutionary high-altitude, long-endurance ISR capability. The Global Hawk has been deployed operationally to support overseas contingency operations since November 2001.



Lightning Bug

In May of 1964, the U.S. began to consider sending autonomous unmanned vehicles for reconnaissance missions into denied areas. Lightning Bugs flown by Air Force's Strategic Air Command (SAC) were used for surveillance across an increasingly widening Cold War battle space including Cuba, North Korea, and the People's Republic of China. Also, between 1964 and 1975, Lightning Bugs flew over 3,500 combat sorties in Vietnam.

MQ-9 Reaper

Initially called the "Predator-B," this RPA started development in 2001 and reaching initial operating capability in 2007, the MQ-9 allowed increased RPA reconnaissance and attack capabilities, and will continue to be an important part of the Air Force inventory into the future.



4 http://www.acc.af.mil/AboutUs/ACCSafety.aspx





So, there I was, way high on an operational U-2 sortie, and life was good. The aircraft and sensors were all "in the green," I had solid comm with my Distributed Common Ground System (DCGS) team, and I was just about to crack open a tube of key lime pie. But you are reading this tale in the Combat Edge; the tranquility did not last.

My initial problem on this mission was a complete loss of my three multi-function displays, or in non-pilot speak, the primary screens that we use to monitor important information like pitch, heading, airspeed, engine data, and much more. The loss of these displays was accompanied by a disengagement of the autopilot. which necessitated hand-flying the aircraft in a tight flight envelope known as the "coffin corner." In this environment, a 10-knot acceleration over-speeds the U-2, while a 10-knot deceleration results in a stall. Game on.

Employing the concept of aviate-navigate-communicate, I ensured that the aircraft maintained straight and level flight before turning away from a sensitive geopolitical area. Once pointed back to safety, I reset the display system and reconnected the autopilot. While the systems were resetting. I reached out to an instructor pilot in another airborne U-2 for clarification on the malfunction and assistance in running the applicable checklists. This pilot was able to quickly relay my indications to our local maintainers and Lockheed folks. They confirmed my assessment of a relatively minor hiccup of a majorly important system. While troubleshooting, though, I discovered a popped circuit breaker on the unrelated but also important ECS. Since the Lockheed team was still on the line, we troubleshot the automatic temperature control system and verified that the system could not adjust the cabin temperature. It would, however, maintain the current temperature, and the manual system worked fine. At least it did at that time.

For several hours, things maintained their idyllic state. Then, when I was as far away as possible from a friendly landing field, (the obvious time for a major problem), the jet got a little cooler than I preferred. I adjusted the manual temperature controller to warm the cockpit and immediately noticed a definite reduction in cockpit noise ... one of the more unnerving things one can notice in a single engine jet. Fortunately, the engine indications were rock solid and everything else seemed normal. That said, it didn't take long to notice that the cabin altitude was increasing while the cockpit temperature was decreasing. My pressure suit started to inflate, which was comforting given that I was above Armstrong's Line (if the cabin pressure continued its ascent to ambient altitude and the pressure suit didn't inflate, my blood would literally boil).

Using the principle of, "If you do a thing and something bad happens, consider undoing that thing you just did," I put the ECS back in automatic mode. No dice. Bummer. As I opened up the checklist that most closely matched my current problem, I noted that the pressure and temperature stabilized at undesirable but non-life threatening levels. Count that as a win. Nevertheless, the jet didn't like the lack of pressurized cooling air, and I didn't like the -10 degree Fahrenheit cockpit. The pressure suit keeps you pretty toasty, but it was only a matter of time before the cold crept in. Time to head

Ultimately, there isn't much to tell for this part. I bee-lined it back home, got steadily colder, and landed without incident. Thanks to adrenaline, I didn't realize how cold my body was until I came to a complete stop on the runway. After enjoying a good shiver, I took a minute to assess my wax-tipped ice-block feet, but they worked the rudder and brakes well enough. Taxi back was relatively uneventful, though most of the squadron was on the flight line, waiting to warmly welcome me back! That was pretty cool.

Now, back to the "wider applicability" part of this article (remember the point I made at the end of paragraph 1? Here it is.). As I headed back, I was utterly impressed with how much concern was given to me and my situation. The Air Force sent me a long way from home, but when things went wrong, everyone lined up to help. My fellow airborne U-2 driver—the one from earlier—reminded me about several techniques to keep myself warm, like maximizing sunlight, keeping my feet off the frigid metal floor, and holding on to hot tube food.

The guys on the ground were working overtime to try and find a solution to my problem, and despite the fact that nothing could be done, it was nice to know that they were searching for a fix. My DCGS crew continually checked in to make sure I was alright. and as I got colder and colder, it was nice to have some conversation. Overall, people cared and were committed to me getting back safely. In that regard, I am happy to say that this was not an isolated incident.

In the U-2, we fly missions "alone and unafraid." Nevertheless, it is comforting to know that we can rely on talented folks who wholeheartedly want to assist when needed. When I have seen missions go bad, be it the pilot with a broke jet, the Airman working convoy duty, or firefighters and security forces troops responding to dangerous situations, Air Force teams had their backs 100 percent. If your mission goes wrong, I'd wager that you can expect the same. Now go do something awesome. — SAM!





SERE Specialists, in some form, have been part of the Air Force since the beginning. Survival schools in the new Air Force began in 1949 with the establishment of the 3904th Training Squadron at Camp Carson, Colorado. Within a few years, demand for survival training outgrew Camp Carson and the school moved to Stead AFB, Nevada in 1951. Continuing to grow, the USAF SERE School moved to its present location at Fairchild AFB in 1966. In

the early days, instructors at these schools were called Rescue and Survival Specialists and were heavily recruited from military personnel with real world escape and evasion experience as well as those with teaching experience and an outdoor survival background. Today, the Air Force is the only service with a full-time specialty dedicated to ensuring it's members are prepared if the worst happens. SERE Specialists are highly trained members of the

Guardian Angel Weapons System and Personnel Recovery community enduring some of the most mentally and physically demanding training the USAF has to offer.

SERE Specialist skills and advice are not based off of reading books or sitting through Power Point briefings. They gain their knowledge and skills by living it through handson experience. Training begins with the SERE Specialist Screening Course designed to evaluate trainees'

physical fitness, speaking ability, dedication, followership, and leadership potential. Only the best are selected to continue on. SERE Specialist trainees then complete the USAF SERE School, water survival training, and underwater egress training before starting the SERE **Specialist Training** Course. This five and a half month intensive training course is not for the weak and requires a level of dedication many people simply do not have. SERE Specialist trainees endure all major



Photo by: Tech. Sgt. Aaron Oelrich

climactic and weather conditions in all major environments, often in remote and rugged locations. Over the course of training, SERE Specialist trainees are educated in survival and evasion skills, wilderness first aid, land navigation, signaling and communication, rough land evacuation, and hand-to-hand combat, all the while learning to teach others. Completion of SERE Specialist Training is only the start. SERE Specialists must also attend

arctic survival training, the US Army Basic Airborne parachutist course and complete a six month on the job training period to become mission ready, capable of providing global training and operational support. Overall, training lasts approximately a year and a half. Once complete, **SERE Specialists** join a team, barely more than 500 strong, and are assigned to the 22nd Training Squadron, Fairchild AFB WA, teaching survival and evasion training at the USAF SERE School.

All aircrew and Battlefield Airmen are required to attend the 19 day SERE School held at Fairchild AFB and in the mountains along the Canadian border north of Spokane Washington. Teaching this course is what SERE specialists are bred to do and where they hone skills learned over the past year of training. Once certified to teach alone, a young Airman is tasked with not only teaching SERE skills, but also keeping his or her students safe in

the rugged wilderness. Training is conducted year round and is often one of the hardest things their students have ever been through. Imagine being hungry, cold, tired, and sore, carrying your gear up and down rugged terrain on snow shoes and being taught skills almost lost to society these days. Many students are totally out of their element. This is basic training for potential isolated personnel. In total, the USAF conducts 11 separate formal SERE







Photo by: Staff Sgt. Alexandra M. Boutte

courses worldwide, all of which are designed to instill confidence and provide all the skills necessary for our Air Force members to return home, but this is not the end of the line for SERE training. The Air Force recognizes the need to keep these important and perishable skills intact over the careers of the personnel who may need them by providing follow on training and operational support at numerous Air Force bases around the world. Every active duty combat coded

wing and a few Air National Guard and Air Force Reserve Command wings have at least two SERE Specialist manning positions. This is where the rubber meets the road. with aircrew and Battlefield Airmen constantly training, flying, and deploying. If there was ever a place for SERE refresher training, this is it. After all, SERE school is a onetime event, and the Air Force has

learned, through experience, that the best way to ensure our Airmen are prepared for isolating events is through repeated and consistent hands-on practice. Those who need SERE skills will most likely not use them on their first combat mission. or even their hundredth. This kind of thing has a way of sneaking up on you, happening when you are least prepared and least expect it. This is why SERE Specialist are spread across the Air Force. Their job is to make sure potential isolated personnel are ready through a combination of SERE refresher training and operational mission support. SERE Specialists are the isolated person's advocate ensuring everyone categorized as "high risk" are taken care of. This means providing mission or airframe specific Combat Survival, Water Survival, Code of Conduct and Emergency Parachute refresher training as well

as theater specific pre-deployment briefings. SERE Specialist work closely with Aircrew Flight Equipment and unit Intelligence personnel to ensure our nation's Airmen are provided everything they need in case of a bad day. But SERE Specialists don't stop there, they also deploy around the world to ensure the job gets done.

SERE Specialists do not generally deploy with their home units like most of the Air Force. They are normally sent to operational areas alone, or in a small team, assigned to a Joint Personnel Recovery Center, Personnel Recovery Coordination Cell, rescue squadron operations center, special operations element or similar deployed location often supporting joint and interagency forces. As part of the Guardian Angel weapons system, SERE Specialists are responsible for supporting four of the five Personnel Recovery execution tasks (1. Report, 2.Locate, 3. Support and 5. Reintegrate) and assist in planning the fourth execution task, Recover. Downrange,

SERE Specialists again act as the isolated person's advocate performing tasks such as advising commanders, aiding in personnel recovery mission planning, conducting personnel recovery capability assessments and planning for and conducting reintegration operations, helping bring home previously isolated personnel who have been recovered.

SERE Specialist are a different breed than most that join the Air Force. Not many people enlist in the Air Force because they want to carry heavy packs in the field or spend long periods in remote locations teaching others how to survive. Those who become SERE Specialists do not endure the strenuous training. long hours on the trail, and being away from loved ones while in the field or deployed, for their own gain. They do it for the potential isolated person. They do it because history has taught our nation how important SERE skills are, and the consequences of not preparing our Airmen for this situation. They do it so others may return with honor.



Photo by: Staff Sgt. Jake Barreiro



Photo by: Staff Sgt. Stacy Pearsall

Photo by: Airman 1st Class William Johnson

 $14\,$ http://www.acc.af.mil/AboutUs/ACCSafety.aspx

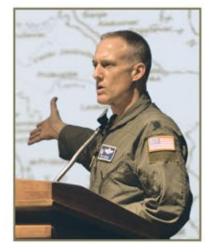
When SERE Training

Becomes Critical

Every member of an aircrew must be able to survive on their own in any environment under any condition should their aircraft go down. Survival, Evasion, Resistance and Escape training helped ensure these Airmen returned home with honor.



On May 2, 1999, then Lt. Col. David Goldfein (now Air Force Chief of Staff General Goldfein) piloted his F-16CJ fighter iet over Serbia as the United States and its NATO allies conducted an air war against Serbian forces. On a night combat mission, a surface-to-air missile exploded near the belly of his aircraft in an operation near the city of Belgrade, forcing him to eiect. Once on the ground, Goldfein maneuvered about two miles until he found a spot suitable to be picked up by an Air Force Pave Hawk helicopter.



On the night of March 27, 1999, Lt. Col. Dale Zelko was flying an F-117 stealth fighter toward a target in Belgrade as part of Operation Allied Force, a NATO military operation. As he was leaving the target area, the enemy fired two missiles at him, striking his aircraft and causing him to eiect. Once on the ground, he camouflaged himself and remained hidden from enemy search parties for seven hours. As his potential captors searched for him, an Air Force helicopter rescue team arrived and returned him to friendly control.



On June 2, 1995, Capt. Scott O'Grady was flying his F-16 over Bosnia, enforcing a no-fly zone when his aircraft was hit by an enemy Surface to Air Missile (SAM), forcing him to eject over hostile territory. After parachuting to the ground, he spent nearly a week successfully evading the enemy. He was eventually recovered by a Marine helicopter rescue force and returned to safety.





File an ASAP Today!

Taken from an actual ASAP submission.

This event did not result in a mishap, but provides valuable information worthy of sharing.

Recently, a flight of F-16s flew through an active TFR while on a VR. This resulted in the F-16s coming within 1/8-1/4 nm and 200' of firefighting aircraft in the TFR. As fire season ramps up, this is a friendly reminder to your airspace schedulers and aircrews to factor TFRs into their daily activities. A common thread in recent similar incidents is in each occurrence pre-flight planning did not include a review of NOTAMs and TFRs. Flight planning tools available:

- NOTAMs can be found via DINS (DOD required tool) or the FAA Website (TFRs are there also).
- TFRs are easily sortable by ARTCC at http://tfr.faa. gov/tfr2/list.html (DINS links you to this page).
- A tool that is not an official FAA/DOD product, but is very useful and links back to the FAA websites https:// skyvector.com/. To obtain a view that has TFRs overlaving a sectional which depicts MTRs, select "world VFR" (toward the top right of the screen); and select "layers" (top right of the screen) ensure TFR is checked. Look for the geographic area the flying will occur and you will see TFRs defined by red lines (normally circles, but not always). If you zoom in you will see the MTRs that run through the TFR. It is a very quick and easy review.

Do you have a lesson learned to share? http://safety-masap.com

ASAP—Aviation Safety Action Program ... It's confidential and quick



It is a gorgeous, hot summer day without a cloud in the sky and you just finished briefing for a continuation training basic fighter maneuver (BFM) time you call, no response is sortie. You and your wingman takeoff and check into the airspace. Quickly knocking out the flight admin, to include an anti-G straining maneuver, you and your experienced wingman get ready for the first set of BFM. The first set is offensive BFM for your wingman. As you set the perfect aspect, you listen to hear the range counting down "1.7 ... 1.6 ... FIGHTS ON!" You aggressively execute a break turn and crosscheck your lift vector and airspeed and look for your wingman. Upon gaining tally, you see your wingman roll towards you as they set their lift vector and you can immediately tell they have an aggressive "G" onset. Everything looks normal for an on-time turn circle entry, but you notice your wingman's nose starting to drop and you start to see more of the top of his iet. Realizing your wingman is no longer maneuvering their aircraft in relation to your aircraft, you immediately call

"TERMINATE" on the radio, but you do not get a response. You make the "TERMINATE" call repeatedly. However, each received from your wingman. Finally, as your wingman's descent increases rapidly, you resort to emphatically directing, "Two, pull up!" The aircraft continues to hurdle towards the ground ... how does this story end?

Until recently, this scenario might have ended up in the loss of an aircraft, or, more importantly, the needless loss of a pilot and/or weapons system officer. Beginning in September of 2014, the USAF added a capability to Block 40 and Block 50 F-16s with digital flight controls called **Automatic Ground Collision** Avoidance System (AGCAS). Over the course of its history, 75 percent of all F-16 fatalities are due to controlled flight into terrain, spatial disorientation and G-induced loss of consciousness. At a cost of only \$125K per modified aircraft, the system has more than paid for itself with lives saved. As of May 2016, AGCAS has four confirmed

saves. AGCAS uses the digital terrain system and embedded INS/GPS to determine the exact location of the aircraft and provide inputs to safely recover the aircraft. Once the system determines the aircraft will impact the ground if an immediate input is not made, AGCAS automatically begins to roll the aircraft wings level and initiate a climbing recovery. When the aircraft is less than 90 degrees of bank, the system simultaneously rolls wings level while establishing 5-Gs climb. If the pilot regains either consciousness or situational awareness, they are able to increase the G to allow the aircraft to recover more quickly.

As mission sets become more complicated and workloads increase, it is imperative we keep focus on the basics of maintaining aircraft control in all situations—to include performing a proper G-strain when maneuvering the aircraft. However, having this back up system will help ensure the safety of our pilots and our weapon systems for years to come.



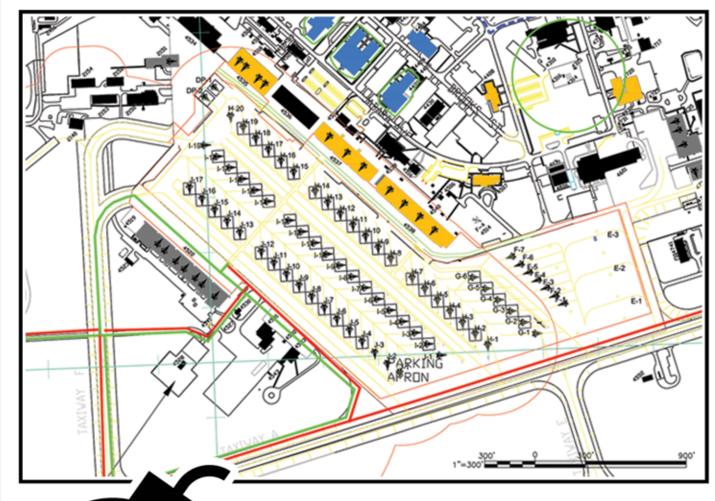
BY MASTER SGT. JEFFREY STULL

Aerospace Ground Equipment has many uses to include helping maintainers reach the top of the aircraft and lifting/hoisting heavy parts into place. This equipment must be utilized in accordance with published guidance to ensure safe handling of parts and equipment and provide personal safety. Any skipped or overlooked step in this guidance can have serious consequences that may result in injury or damage to aircraft and equipment.

Don't give me any slack!! A crew working the removal of an aircraft gun system detached all the required panels and prepped the system components for removal. As required, the maintenance team subsequently connected a hoist to remove the system container. Per the technical guidance, the maintenance members were required to eliminate slack from the hoist cable. While one of the crew members prepped the mount bolts for removal, the other crew member took one extra turn on the hoist crank even though the cable slack had already been taken out. This "extra crank" was accompanied by a popping sound that emanated from the system container. When the excess tension on the container was released, a second loud popping noise was heard. Visual inspection of the system container revealed a 10-inch crack. The T.O. guidance required only for the cable slack to be removed and for the maintenance team to refrain from working below the container assembly as the container could suddenly drop two-to-three inches. This deviation from the T.O. guidance resulted in \$80K in damage to the system container. Luckily, there were no injuries involved in this mishap.

Strapped?!?!? In the late hours of a fall evening, a maintenance crew was dispatched to replace an aircraft stabilator. The stabilator was uncrated and the aircraft was prepped to install the flight control surface. According to T.O. guidance, an aircraft maintenance stand and soft pad are mandatory to rest the stabilator during its fitment to the aircraft. The height necessary for the stand to install the stabilator was approximately six feet. Prior to raising the stand, the stabilator is required to be strapped to the stand utilizing a cargo strap. This requirement keeps the stabilator from falling off the stand and preventing accidental damage. However, the maintenance crew left the stabilator unstrapped and hoisted it manually to the aircraft to assess if the stabilator needed trimming to fit the aircraft structure contour. The trial fitment occurred several times with additional trimming required on three separate occasions. During stabilator trimming between each trial fitment, the team failed to strap the stabilator down on the maintenance stand. During the final trimming of the stabilator, one of the maintainers noticed the stabilator was beginning to tip off the stand. The maintainers were unable to arrest the stabilator's fall. The stabilator crashed to the ground between the aircraft and the maintenance stand. Failing to follow T.O guidance which directs the stabilator be strapped to the stand during fitment trial resulted in \$214K in damage to the stabilator.

How can these types of mishaps be prevented? These two mishaps have one obvious similarity—failure to adhere strictly to technical order guidance! This is a troubling, yet all too common pitfall for maintainers. Each maintainer must follow the technical order and must not cut corners. Even when performing tasks you have completed a hundred times, it only takes a split second and one missed step to result in a mishap, causing unnecessary damage and potential injury. Technical guidance is constantly being updated. Be vigilant, keep up-to-date, and keep your nose in the books.



Explosives Location Map (D8)

BY MASTER SGT. DAVID INGRAM

Each installation has a map that shows where explosives are stored or transported. Those maps can be seen at strategic locations like the fire department and wing safety office. However, everyone on base is potentially impacted by explosives storage and delivery locations. Here are a few things that everyone should be aware of when looking at the base explosives locations map.

Explosives clear zones—these zones are identified with red circles. Stay out of these areas unless required for your job.

*Explosives delivery routes—these routes are roads on base and are often identified with green or red markings. Stay clear of explosives-laden vehicles when traveling these routes.

*Electromagnetic Radiation Zones—these areas are often identified with green circles. Avoid transporting or handling explosives within those zones.

*Licensed Locations—these facilities are often identified with orange squares. Explosives are stored for day-to-day operations. You may see these fire symbols located outside:

WEAPONS

WORDS







^{*}Color coding may vary by base.

MONTHLY AWARDS

QUARTERLY AWARDS

Aircrew Safety Awards of Distinction



Majors John Costa and Staci A. Landers - 389 FS, 366 FW, Mt Home AFB ID (May 2016)

Capt Grant J. Saum, 1Lt Markus L. Delello - 333 FS, 4 FW, Seymour Johnson AFB NC (June 2016)

Capt Paul Stinson and Joshua Richmeier, 1Lt Dillon Curtis, Lt Col Dory Hasson, Maj David Shepherd and

SSgt Hee Lee – 12 ACCS, 461 ACW, Robins AFB GA (July 2016)

Crew Chief Safety Awards of Distinction



TSgt Chad T. Lancaster – 5 RS, 9 RW, Beale AFB CA (May 2016)

SrA Daniel W. Schaetzle - 923 AMXS, 23 WG, Davis-Monthan AFB AZ (June 2016)

SSgt Shane D. Dewyar – 366 AMXS, 366 FW, Mt Home AFB ID (July 2016)

Flight Line Safety Awards of Distinction



MSgt Raymond Frazee – 432 MXG, 432 WG, Creech AFB NV (May 2016)

TSgt Barry E. Boudreaux, Jr. - 23 CS, 23 WG, Moody AFB GA (June 2016)

A1C Austin H. Holmes - 823 MXS, 23 WG, Nellis AFB NV (July 2016)



TSgt Benny E. Shedd - 379 EMXS, 379 AEW, Al Udeid AB, Qatar (May 2016)

TSgt Thomas J. Northcutt – 480 ISRW, Joint Base Langley-Eustis VA (*June 2016*)

Pilot Safety Awards of Distinction



Flt Lt Benjamin S. Cable – 79 FS, 20 FW, Shaw AFB SC (May 2016)

Capt Kaitlin L. Meiser – 4 FS, 388 FW, Hill AFB UT (June 2016)

1Lt Stephen A. Crump – 355 TRS, 355 WG, Davis-Monthan AFB AZ (July 2016)

Unit Safety Awards of Distinction



325 MXG Weapons Standardization – 325 FW, Tyndall AFB FL (May 2016) Aerospace Propulsion Test Cell Flight – 388 FW, Hill AFB UT (July 2016)

Weapons Safety Awards of Distinction

SrA Zachary Craig - 49 MXS, 49 WG, Holloman AFB NM (May 2016)

A1C Michael R. Ferraro – 355 WG, Davis-Monthan AFB AZ (July 2016)

Flight Safety





Capt John D. Waters, 20 FW, Shaw AFB SC. Capt Waters revitalized the combined MACA community engagement efforts between Shaw AFB, Charleston AFB, and McEntire ANGB safety programs. He led the first military aircrew participation in over 10 years at the annual conference of the SC Aviation Association. Throughout the three-day event, he engaged over 350 aviation industry experts representing state government, FAA, business leaders, regional airport managers, and G.A. participants by providing a key-note presentation about USAF and 20 FW flight safety, regional military airspace usage, and F-16 flight operations, thereby advancing mishap prevention through pro-active educational outreach. Capt Waters tirelessly capitalized on this momentum by coordinating 20 FW, McEntire ANGB, and Charleston's 437 AW safety representation at the SCASC G.A. Fly-In at the Columbia Airport where they informed over 50 participants. He is also the PROJO for the wing's Flight Safety G.A. Fly-In programmed for 29 Apr 16--the first in recent history for ACC, and the first

USAF-wide since May 2015. Capt Waters also facilitated an ASAP initiative to report, investigate, and analyze recent occurrences in which the F-16CM REOS did not meet T.O. specifications, energizing the F-16 SPO to provide further analysis in order to assure the reliability of an essential F-16 life support system component, reduce the likelihood of physiological incidents, and re-instill confidence in the system. He seamlessly coordinated with HHQ in advance of a 20 FW-hosted NTSB visit; coordinated the on-time appointment of two 20 FW personnel to a Class A SIB as acting Chief of Safety; and oversaw the 20 FW Flight Safety Award program that resulted in six 9 AF monthly award winners, two ACC award winners, and a 20 FW Wing Staff Agencies SNCO of the quarter.



SSgt Joseph R. Thomson, 9 RW, Beale AFB CA. SSgt Thomson attended an OSHA Confined Space course, earned 3 CEUs, and then used his knowledge to lead the wing's Confined Space program for 10 squadrons across the installation. He scheduled and validated 1,369 spaces ensuring proper classification and 100 percent accountability. During a routine spot inspection, he identified a propane gas tank at the base gas station that was sinking and putting extreme stress on the metal supply lines. SSgt Thomson led the abatement actions, thereby averting an explosion and potential loss of life. He also led the revitalization of the Wing's motorcycle safety program by coordinating Advanced Riders Course training after a six-month gap in funding. His efforts ensured over 350 riders enhanced their skills and were in compliance with DoD and AF guidance. SSgt Thomson also led the expert assessment and mitigation of a RAC 3 hazard at the 9 LRS, eliminating a condition that caused tire blowouts on loaded fuel trucks that placed personnel and property at risk of injury and

damage. He led the overhaul of wing safety's Spot Inspection program by updating the local database, synchronizing 7 inspectors and 88 unit safety representatives, and slashing inspection and assessment findings closure timeline by 67 percent. During the 9 RW UEI, ACC inspectors characterized the effectiveness of the Spot Inspection program as "excellent" and "highly effective." He also streamlined the installation's Hazardous Energy Control program by improving clarity throughout the unit safety representatives and increasing safety awareness across eight organizations. SSgt Thomson's technical efficiency and critical thinking directly contributed to HQ ACC/IG recognizing 9 RW/SE as a Superior Performer Team.

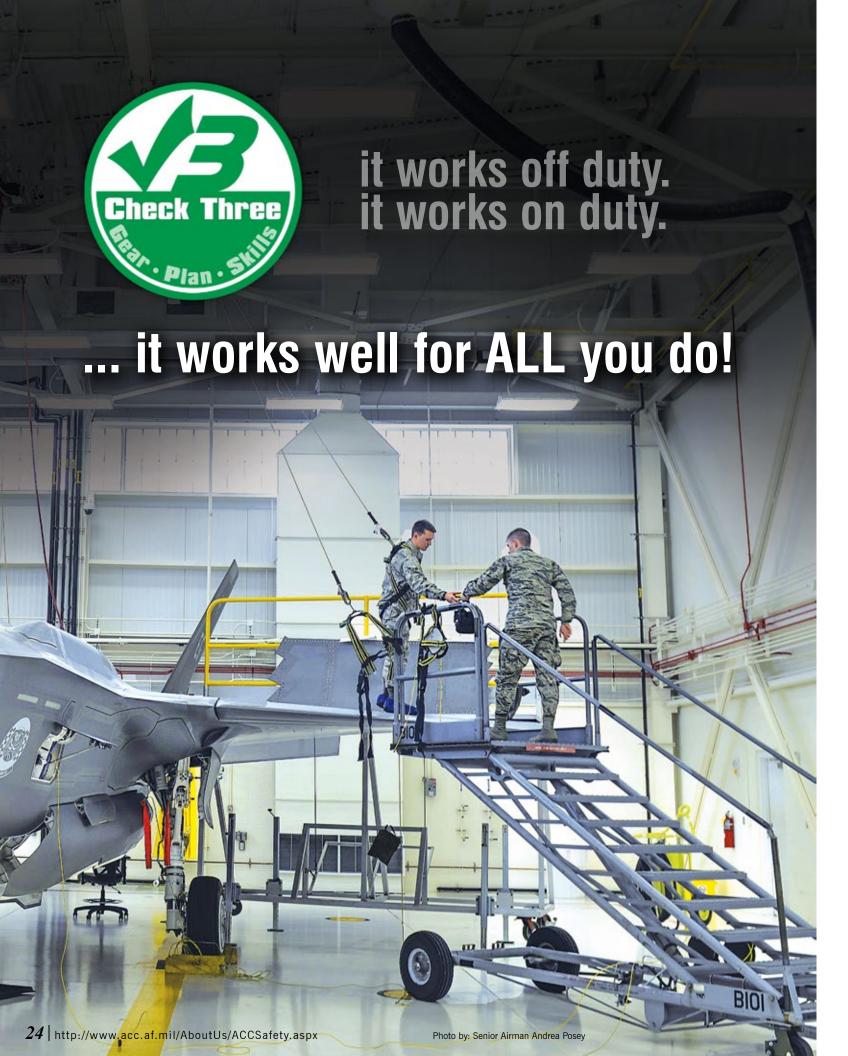
Weapons Safety



TSgt Albert A. McAfee, 9 RW, Beale AFB CA. TSgt McAfee served as the 9 RW/CC's subject matter expert regarding weapons safety and advised all Beale AFB unit commanders that handle explosives for their mission. He proactively managed 13 weapons safety programs, 14 explosive licensed facilities (renewed 6) and 25 ESPs on Beale AFB. He also ensured compliance with all established safety guidance and standards allowing the safety and security of a munitions stockpile of 1,100 line items worth \$31M as well as the continued readiness of a fleet of U-2 and RQ-4 aircraft valued at over \$2B. His audit of current weapons safety practices across the base, identified and revised outdated program management practices, and revitalized all BAFB Weapons Safety programs. He modernized the base weapons safety community by establishing a digital ADWSR program management book on the 9 RW Wing Safety SharePoint site, centralizing and standardizing weapons safety guidance and inspection records throughout the Wing. He conducted annual inspections on 3 GSUs, as well

as 3 home-station units, identifying 24 safety program deficiencies. He then advised the responsible commanders on how to correct these issues, and enabled them to bring their programs into compliance and avoid undue explosives risk to their Airmen, facilities, and equipment. He also carefully reviewed and cataloged all of the Beale AFB ESPs, and identified several deficiencies which had been overlooked for the past 13 years. He immediately advised the responsible commanders and facilitated compensatory measures to remove 12 Airmen from unnecessary risk preventing potential injury or death. TSgt McAfee investigated and identified the risk involved with the recreational use of a commercially available unclassified homemade explosive on the Beale AFB Rod and Gun Club.

22 http://www.acc.af.mil/AboutUs/ACCSafety.aspx THE COMBAT EDGE | SEPTEMBER - NOVEMBER 2016 | 23



As of 31 Jun 2016 **FY16 Flight** Class A Destroyed Aircraft Damage 1 AF 9 AF <u>+</u> ex ± 12 AF 25 AF USAFWO ANG ACC-gained **AFRC**

FY16 Occupational As of 31 Jun 2016			
	Fatal	Class A	Class B
9 AF	İİ	2	0
12 AF	•	1	0
USAFWC	•	1	0
25 AF	İ	1	0

FY16 Weapons As of 31 Jun 2016			
	Class A	Class B	
9 AF	0	0	
12 AF	0	0	
USAFWC	0	0	

Class A - Fatality; Permanent Total Disability; Property Damage \$2,000,000 or more Class B - Permanent Partial Disability; Property Damage between \$500,000 and \$2,000,000 Class C - Lost Workday: Property Damage between \$50,000 and \$500,000 (Class Description Effective October 1, 2009)

= Fatal due to misconduct

Flight Notes

The third quarter of FY16 was a challenging quarter for aviation safety. We suffered the complete loss of four combat assets, three F-16s, and an MQ-9. In addition, ACC had nine Class B mishaps in the last quarter, sidelining combat capability and costing millions in repairs. Unlike last guarter with mishaps during operational missions, these mishaps almost all occurred during home station missions or ground operations. We were very fortunate to not lose any Airmen. On all missions, remember to keep focus on the fundamentals. Be ready for the transition to fall weather and increased bird threats and, as always, fly safe!

Occupational Notes

As we approach the mid-point of the summer months, many of us will be doing our best to get in that last bit of fun with family and friends. ACC has suffered one fatality this summer, that tragic event involved swimming—although one life lost is too many, our numbers are much improved from the previous year. Last summer, the command had three fatalities; one involved swimming and the other two were motorcycle mishaps. No matter what the activity, risk management plays an important role in everything we do. Unfortunately, we are all in the threat zone from time-to-time. With that said, supervisors and peers must capitalize on candid discussions to reinforce measures to avert dangerous situations. Safety can never take a day off and requires an active role, 24/7/365 on our part as Airmen. We must find ways to help our family, friends, and co-workers across the finish line this summer. Our goal is zero preventable mishaps—together we can achieve it!

Weapons Notes

Greetings Weapons Safety Community! We've made some improvement this guarter from the previous guarter. We had one Class C mishap; an Aim-9X was dropped during an unloading operation. The cause of this mishap once again was complacency, which has been a common trend for explosive mishaps. That being said, operational challenges that you face daily do not go unnoticed; so continue seeking perfection. Our unrelenting goal should focus on making ACC a mishapfree command. Thank you all for the hard work, passion, and dedication you exhibit. You contribute to the successful achievements obtained by your unit!!!





Don't Wait— Check the Date! Replace Smoke Alarms Every 10 Years

Oct. 9-15, 2016

Fire Prevention Week | Age matters when it comes to your smoke alarms. Check the manufacture dates on your smoke alarms today!



A closed door may slow the spread of smoke, heat and fire.



Install smoke alarms in every sleeping room and outside each

separate sleeping area. For the best protection, make sure all

smoke alarms are interconnected. When one sounds, they

Test smoke alarms at least once a month by pushing the test button.



If the smoke alarm sounds, get outside and stay outside. Go to your outside meeting place.



Call the fire department from a cellphone or a neighbor's phone.

For more information about smoke alarms, visit usfa.fema.gov and firepreventionweek.org.

U.S. Fire Administration







Is It Just Me?

by Mr. Paul Gomez 49 WG/SE. Holloman AFB. N.M.

- 6 | Sports Concussions
- Making Safety Personal by Mr. Dan Surowitz ACC/SE, JB Langley-Eustis, Va.
- 10 | THANKSGIVING SAFETY
- 11 | CHECK THREE CHAMPION
- GOT GAME? **12** | by Staff Sgt. Blake Cottrill 388 OSS. Hill AFB. Utah
- THE DETAILS ARE A LITTLE FUZZY by Tech. Sgt. Derek L. Mitchell 4 FW/SE, Seymour Johnson AFB, N.C.



www.check3gps.com





Gear: Improvise, overcome, adapt, FALL!

Plan: There is one?

Skills: Good dexterity for sure, but recommend displaying good ladder skills next time.

Gear: The hard-to-find human ladder appears to be in good working order ... but use a wood/metal one next time (with the needed length), they don't seem to tire as easily ...

Plan: I think we need to start over ...

Skills: Can't argue with the skills of strength displayed ... but next time just get the right gear, it's much easier!



2 http://www.acc.af.mil/AboutUs/ACCSafety.aspx



Is It Just Me?

BY MR. PAUL GOMEZ

Me, me, me ... It's all about ME! Sounds like a selfish statement right? Well in this context it's not. When it comes to Safety and how we as individuals go about our day-to-day activities and manage to stay safe, it's perfectly natural to think about yourself. However, as evolved beings, we should also be considerate of the safety of those around us. You may be saying to yourself, "I can't control the actions of others." Ask yourself, "am I doing all I can to keep myself and those around me safe"?

Sometimes it just takes a moment to remind someone of the requirements, laws, or common sense approach to doing that activity. Examples of other questions you can ask yourself: Did I call "knock-it-off" when I saw that individual using a saw without eye protection? Did I take the keys from my co-worker knowing they had been consuming alcohol? Did I ensure my Airman was proficiently trained on that task requiring detailed work with those explosive items? Have I spoken to my buddy frankly about the use of a helmet when operating a motorcycle on-or off-duty? Obviously, these questions all should have been answered with a resounding YES; however, in the real world, they are often not.

Therefore, we in the Safety world, continue to see the mishap reports where some factors leading up to the accident include a lack of training, personal protective equipment (PPE), personal discipline, and sometimes even a lack of supervision. Of course, personal accountability needs to play a part in all of these scenarios as well. Be accountable to your co-workers, and use established guidance to ensure safe operations of all hazardous job tasks. Be accountable to your family and friends and use the designated driver offered to you ... even if you've just had a "few." Be accountable to yourself and use PPE every time it is required.

When you look at it this way it IS all about you! You consciously make those choices to use or not use the safety tools provided to you. You make those decisions that can affect more than just yourself. Would you be OK if your decision cost a coworker their life? Would you be OK if your best friend died in an otherwise survivable

motorcycle accident, just because you failed to talk to him about not wearing a helmet? Would you be OK if your subordinate was mutilated because you did not give them the proper training when handling those explosive items? Would you be OK if you put your loved ones in a hardship situation because you felt that it was your "right" to not wear a seatbelt and were seriously injured in a car crash? The answer to these questions should have been a resounding NO!

Provide adequate training to your subordinates, be a strong supervisor, and lead by example. Use all the safety tools provided for your success and whatever you do ... don't become a statistic!

Is it just me? Damn right it is; make the right decisions and keep yourself and those around you safe!

Oh, and while you're at it, be sure to Check 3 GPS in all you do ... on- and off-duty!

"Put me

Head impacts and concussions caused by contact sports are a quickly growing epidemic among young athletes. When left undetected, concussions can result in longterm brain damage and may even prove fatal.

To preserve the young athlete's head health, mental cognition and ability to succeed, it is critical that coaches, players and parents are aware of the inherent dangers and how to properly perform a concussion evaluation.

CDC reports show that the amount of reported concussions has doubled in the last 10 years. The American Academy of Pediatrics has reported that emergency room visits for concussions in kids ages 8-to-13 years old has doubled, and concussions have risen 200 percent among teens ages 14to-19 in the last decade.

While the first hit can be problematic, the second or third head impact can cause permanent long-term brain damage. Cumulative sports concussions are shown to increase the likelihood of catastrophic head injury leading to permanent neurologic disability by 39 percent.







Sports Concussion Stats

33% of all sports concussions happen at practice

3.8 Million concussions reported in 2012 ... double what was reported in 2002

4-to-5 Million

47% occur during high school football

numbers among middle school athletes

annually with rising

33% of high school athletes who have a sports concussion report two or more in the same year

5.3 Million

Americans live with a traumatic brain injury-related disability (CDC estimate)

high school

athletes will sustain a sports concussion during the season

Concussion Rates per Sport:

The below numbers indicate the amount of sports concussions taking place per 100,000 athletic exposures. An athletic exposure is identified as one athlete participating in one organized athletic practice or competition, regardless of the amount of time played.

> • Football: 64 – 76.8 Boys' Ice Hockey: 54 • Boys' Soccer: 19 – 19.2

• **Boys' Lacrosse:** 40 - 46.6 • Girls' Lacrosse: 31 – 35

• Boys' Wrestling: 22 – 23.9 • Girls' Basketball: 18.6 – 21 • Boys' Basketball: 16 – 21.2

• Girls' Softball: 16 – 16.3 • Girls' Field Hockey: 22 – 24.9

• Cheerleading: 11.5 to 14 Girls' Volleyball: 6 – 8.6
Boys' Baseball: 4.6 – 5
Girls' Gymnastics: 7

90% of most diagnosed concussions do not involve a loss of consciousness

Diagnosed concussions rose by nearly 32 percent in the NFL this season, according to data released by the league. The 2015 total was 271, a figure that includes all preseason and regular-season games as well as all practices since the start of training camp. The league had previously boasted of a decrease in reported concussions in both 2014 (206) and 2013 (229), a drop the league attributed to an enhanced concussion protocol it implemented after the 2012 season. There had been 261 concussions in 2012. The NFL says reported concussions in regular-season games rose 58 percent from 2014 to 2015—the highest number (182) in any of the past four years. Of the 271 concussions in 2015, 234 occurred in games and 37 in practice. The report, conducted by Quintiles Injury Surveillance and Analytics, listed the following as the most common causes during regular-season games:

CONCUSSIONS BY IMPACT SOURCE

Concussions in the NFL are overwhelmingly the result of an impact from another helmet, but significant increases in concussions caused by shoulders and playing surface have



OVER THE EDGE | SEPTEMBER - NOVEMBER 2016 | 7 6 http://www.acc.af.mil/AboutUs/ACCSafety.aspx



Making Safety Personal

BY MR. DAN SUROWITZ

afety professionals and parents have a lot in common. Parents want to keep their children safe and teach them to avoid danger. Safety professionals want to deliver the same message to their co-workers or students. Most exchanges begin with either a personal experience or an example from a mishap report. We try to teach a lesson by sharing a story about the consequences for failing to follow rules or use good judgment. We can get pretty passionate about delivering our message, particularly if we personally observed the event or completed the investigation. We know how important it is to wear seat belts, use proper PPE, and even not to run with scissors, but we don't know if our audience feels the same way.

Parents face the same challenges when trying to teach their children new skills, like driving. I had plenty of stories to share with my children about safe driving. We covered all the basics about vehicle maintenance and the dangers of excessive speed and distracted driving. We took special road trips to practice driving in the rain and snow. I passed on all the wisdom I gleaned from insurance industry reports, and spent all those hours in the passenger seat trying to remain as silent as possible. Eventually, my children finished their training, received their licenses from the county judge, and ventured out onto the roadways with all those other drivers. They were qualified, but inexperienced. Their list of personal near misses and narrow escapes was a blank page.









Fast forward 10 years to 2016. My son is a "Traffic Tracker"—the man behind the camera shooting video for a television station in Georgia. It's not a safety job per se, but it puts him at the scene for some of the most significant and tragic traffic accidents in the local area. Reporting on a serious traffic accident can be a combination of proximity and timing. If one is not close to the scene when the accident happens, one may never get there due to the traffic congestion. Being close to the scene also means experiencing the sights, sounds, and smells that often result from the event—and that is what makes safety personal.

I got to ride along with my "Traffic
Tracker" son one day, and was amazed at the impact those personal experiences had made on his driving. He wasn't only observing, he was predicting. He pointed out locations prone to accidents due to construction,

lighting, or traffic flow. He noted the introduction of factors that contributed to accidents, like pedestrians, debris, or malfunctioning lights. He anticipated the opportunities for other drivers to make errors. He wasn't just pointing out poor drivers—he was anticipating mishap conditions, monitoring them as they appeared, and describing an avoidance plan. It was impressive to watch this happening live.

The point of telling this story is that something had made a difference—his list of personal experience had grown. We don't always have to be the person who had the accident or suffered the injury. We can learn from the experience of others. Observing, investigating, and reporting mishaps can be a difficult task, but there is value in sharing our stories. They make a difference, and we need to keep telling them.

8 http://www.acc.af.mil/AboutUs/ACCSafety.aspx



-))) Stay in the kitchen when you are cooking on the stovetop so you can keep an eye on the food.
-))) Stay in the home when cooking your turkey and check on it frequently.
-))) Keep children away from the stove. The stove will be hot and kids should stay 3 feet away.
-))) Make sure kids stay away from hot food and liquids. The steam or splash from vegetables, gravy or coffee could cause serious burns.
-))) Keep the floor clear so you don't trip over kids, toys, pocketbooks or bags.
-))) Keep knives out of the reach of children.
-))) Be sure electric cords from an electric knife, coffee maker, plate warmer or mixer are not dangling off the counter within easy reach of a child.
-))) Keep matches and utility lighters out of the reach of children — up high in a locked cabinet.
-))) Never leave children alone in room with a lit candle.
-))) Make sure your smoke alarms are working. Test them by pushing the test button.



Your Source for SAFETY Information NFPA NFPA Public Education Division • 1 Batterymarch Park, Quincy, MA 02169



Have activities that keep kids out of the kitchen during this busy time. Games, puzzles or books can keep them busy. Kids can get involved in Thanksgiving preparations with recipes that can be done outside

www.nfpa.org/education

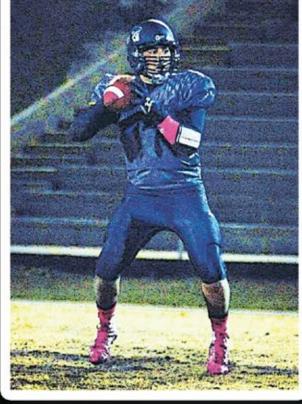
the kitchen.

Know of a Check Three Champion you'd like to highlight? Send us a photo and synopsis of their activity and how they Check 3 GPS in their day-to-day activities.

CHAMPIONS

SSgt Greenhill, Eglin AFB FL

Dropping back to pass, standing tall in the pocket in New Orleans, Louisiana, Quarterback Allen "AG" Greenhill delivers a bullet pass to his receiver in the end zone as the NWF Nightmare advance to the Conference Championship round of the Amateur to Professional Developmental Football League. SSgt Greenhill, a member of the 16th Electronic Warfare Squadron's Combat Shield unit, which is the Air Force's sole source of electronic warfare evaluations across all Guard, Reserve, and Active duty platforms to include F16s, F-15s, A-10s and C-130s. While AG travels the globe for the mission, he spends his Saturdays playing semi-professional football. Greenhill has continued to play the game he grew up loving, continuing his legacy as a football player, while leading his teammates in and out of the Air Force uniform. When participating in all extracurricular activities, remember the Check 3 GPS.







Firearms Are No Game 10 Rules To Help Keep You Safe

- 1. Always Keep the Muzzle Pointed In a Safe Direction. This is the most basic safety rule. If everyone handled a firearm so carefully that the muzzle never pointed at something they didn't intend to shoot, there would be virtually no firearms accidents.
- 2. Firearms Should Be Unloaded When Not Actually In Use. Firegrms should be loaded only when you are in the field or on the target range or shooting area, ready to shoot. When not in use, firearms and ammunition should be secured in a safe place, separate from each other.
- 3. Don't Rely On Your Gun's "Safety." Treat every gun as though it can fire at any time. The "safety" on any gun is a mechanical device which, like any such device, can become inoperable at the worst possible time.
- Be Sure Of Your Target and What's Beyond It. No one can call a shot back. Once a gun fires, you have given up all control over where the shot will go or what it will strike. Don't shoot unless you know exactly what your shot is going to strike.
- **Use Correct Ammunition.** You must assume the serious responsibility of using only the correct ammunition for your firearm. Read and heed all warnings, including those that appear in the gun's instruction manual and on the ammunition boxes.
- If Your Gun Fails To Fire When The Trigger Is Pulled, Handle With Care! Occasionally, a cartridge may not fire when the trigger is pulled. If this occurs, keep the muzzle pointed in a safe direction. Keep your face away from the breech. Then, carefully open the action, unload the firearm and dispose of the cartridge in
- Always Wear Eye and Ear Protection When Shooting. All shooters should wear protective shooting glasses and some form of hearing protectors while shooting. Exposure to shooting noise can damage hearing, and adequate vision protection is essential. Shooting glasses guard against twigs, falling shot, clay target chips and the rare ruptured case or firearm malfunction.
- Be Sure the Barrel Is Clear Of Obstructions before Shooting. Before you load your firearm, open the action and be certain that no ammunition is in the chamber or magazine. Be sure the barrel is clear of any obstruction. Even a small bit of mud, snow, excess lubricating oil or grease in the bore can cause dangerously increased pressures, causing the barrel to bulge or even burst on firing, which can cause injury to the shooter and bystanders.
- Don't Alter or Modify Your Gun, and Have Guns Serviced Regularly. Firearms are complicated mechanisms that are designed by experts to function properly in their original condition. Any alteration or change made to a firearm after manufacture can make the gun dangerous and will usually void any factory warranties.
- 10. Learn the Mechanical and Handling Characteristics of the Firearm You Are Using. Not all firearms are the same. The method of carrying and handling firearms varies in accordance with the mechanical characteristics of each gun. Since guns can be so different, never handle any firearm without first having thoroughly familiarized yourself with the particular type of firearm you are using, the safe gun handling rules for loading, unloading, carrying and handling that firearm, and the rules of safe gun handling in general.

For more information on firearm safety, check out: http://www.nssf.org/safety/basics.

the details are a little

BY TECH. SGT. DEREK L. MITCHELL

fter years and years of training and experience ... it can still happen! But, it was the training and experience that helped me to survive my most recent motorcycle accident. I have 28 years of consistent motorcycle riding experience. Everyone on my father's side of the family rides motorcycles with an occasional track race and, to be honest, if I quit riding today they would probably disown me.

I ride everything from standard style motorcycles to sport bikes to touring motorcycles. Having experience with racing (race tracks and drag strips) as well as being a Motorcycle Safety Foundation (MSF) Instructor, I know the importance of training and seat time. The more training you get, the more you will polish up your skills, and more seat time will give you time to apply those skills. I have taken numerous courses with MSF, law enforcement, and at the racetracks to enhance my skills and knowledge.

As an MSF Instructor, I am certified in coaching the Basic Riders Course (BRC), Basic Riders Course 2 (formally known as the ERC or Experience Riders Course), Advance Riders Course (ARC), Military Sport Bike Riders Course (MSRC), as well as a Rider Coach Trainer (to train new instructors). A few of the things I stress during all my classes include riding gear, motorcycle maintenance/up keep and SEAT TIME, SEAT TIME, SEAT TIME! I log, on average, about 30,000 miles every year. As a Rider Coach Trainer for the U.S. Air Force, I am also tasked with going TDY to other bases to train their instructors.

On May 5, 2016, I was en route to instruct at another installation when I had an unfortunate accident. Prior to the trip, I had completed a thorough and in-depth inspection of my motorcycle, as well as my riding gear (I was happy to have my new riding jacket!) My trip and route were

planned and I was rested. I had just stopped for fuel, a snack, and to stretch as I always do when I make long distance trips like this. As I exited 1-95 to 1-20, I looked over at the median, noticed the cable guide wire, and thought to myself, "Man those guide wires work well for cars, but would not be good if a motorcycle went into them." However, I did not mean for it to be me. As I continued down I-20 approaching Columbia, SC, I recall checking the time, it was 1029 and I thought how nice of a day it was for riding. I was feeling good. The next memory I have was coming to in the ambulance and looking out the rear doors seeing my motorcycle on its side. I was asking the medics what happened as I tried to get out the ambulance; after a short struggle, they got me to calm down and back in the ambulance. At that time, I lost consciousness again, and did not come back to until I was at the hospital getting a CAT scan. After talking to the SC Highway Patrolman and the witness, they both confirmed the accident happened sometime between 1033 and 1035.



All my riding gear worked as advertised. The helmet was banged up and destroyed, but served its purpose because my scans showed no signs of severe trauma to my head. My new jacket came out okay with little rash, but did its job

protecting my upper body and extremities. I had a bruised, sore shoulder and neck but was protected from not breaking anything. My jeans, boots and gloves were slightly damaged, but all kept me from any broken bones or road rash. The doctor said that I may remember what happened in a few days, weeks, months, or years ... or maybe never. Some say I may not want to remember what happened, but as an avid motorcyclist, I would like to know for peace of mind. Until then, all I can go on is what the SC Highway Patrolman's investigation and the witness told me. Not only am I blessed to see another day, but also to be able to fly down to Texas six days after the accident to buy a new bike and ride it back to North Carolina safely.

Keeping my faith in God and having the skills and knowledge from the training, I am here today to tell you the quote that has kept me here today: All the Gear, All the Time (ATGATT). Hey, and by the way, don't forget to always Check 3 GPS: Gear, Plan, Skills. Let's do all we can to keep the shiny side up!

