Did You Know? If you stay awake for 17 hours straight your skills performance is the same as having a Blood Alcohol Content of .05%.

When in crewrest... make sure you’re actually getting enough rest!

I’m sure everyone reading this is aware of the “safety chain” concept we often use to describe the sequence of actions and decisions which lead to a mishap. The ability to break this chain with one decision or action is often clearly evident when reviewing an accident after the fact. Unfortunately, how to break the chain may not be as clear when decisions and actions are actually being performed since the relationships and outcomes of decisions may not be realized immediately. However, there are ways to ensure you always have a high chance of keeping a permanent break in the chain for all your activities.

In the last issue, Gen Carlisle discussed the importance of always following the rules (and ensuring those around you do as well) and using active risk management. These two areas are critical with respect to the safety chain. Many rules were created (and adjusted over time) to keep individuals safe. Whether the rules are speed limits, mandatory rest times, or tech order limits, they were set to keep individuals and systems from hurting themselves or others, and were likely originally created due to lessons learned from mishaps. When you follow the rules, you’ve greatly mitigated many factors which could lead to an unfortunate outcome without even having to fully understand them—you’re leveraging the knowledge and benefit of lessons learned from others who may have paid an unfortunate price to implement the rule. Similarly, active risk mitigation can help identify and prevent issues from resulting in an accident, both at work and at home. As we enter the “Critical Days” of Summer, active risk mitigation can help identify and prevent issues from resulting in an accident, both at work and at home.
I have heard the argument that the Air Force tells its' pilots what they can do, while the Navy tells its' aviators what they cannot do, thereby providing naval aviators more freedom of action. While there may be some truth behind this inter-service rivalry banter, perceptions are not always reality. Though flight operations within the Air Force are rather formal and entail a higher level of oversight, naval aviation at times demands more thorough, albeit less formal, safety practices because it's All About That Boat (aircraft carrier operations).
Years ago, on a deployment to the island nation of Guam, I was, leading a two-ship of mighty F-15E Strike Eagles in lane defense (Defensive Counter Air) for a Carrier Strike Group over the Pacific Ocean. It was night, low illumination, and only the lights from the other numerous Air Force and Navy aircraft were visible. Communications with our naval controller were good, though we did have to overcome some differences in terminology. The main safety issue that night was the inability to communicate kills to the red air (F/A-18s). Several times, the red forces had the appearance of live bandits but in actuality were returning to the carrier we were defending without terminating or knocking it off, though in their assigned blocks. Additionally, the red air were on their recovery frequency and not squawking dead man (non-player). Low on fuel, the F/A-18s were purely focused on getting back to the carrier. Needless to say, we slayed our adversaries that night, but a reliance on safe execution through mutual support, radar and visual search, and block adherence were paramount for mission safety.

This above experience occurred during Exercise Valiant Shield, and it was my first experience working with the Navy. From this exercise, I perceived an ad hoc “make it happen” flying environment, which I had been relatively unfamiliar with to that point. As an Air Force pilot, I was more accustomed to the formality of the Air Force mass brief and coordination practices. While in our flight literally fighting what we saw, while attempting to integrate with naval assets in real-time. While the exercise was a great learning experience, it left me wondering about the differences in safety practices between the F-15E and F/A-18, and whether naval aviation was as much of a pickup game as it appeared. Eight years later, I would find out firsthand.

Following three assignments and over 1,800 hours in the F-15E Strike Eagle, I was fortunate to receive an assignment to fly F/A-18 Hornets and Super Hornets with VFA-106, the Fleet Replacement Squadron (FRS) at NAS Oceana, Virginia. There I would spend 11 months in a transition and instructor upgrade course. This training was followed by another year of instructing incoming Pilots and Weapons Systems Officers (WSOs) on the foundations of flying the F/A-18 administratively and tactically. It was during this assignment that my preconceived notions of naval aviation safety practices were reoriented. It became evident that while they may seem informal, the F/A-18 safety practices are similar and at times more stringent than what I experienced in the F-15E.

Mission briefings are strikingly similar in safety focus as the F/A-18 community also incorporates Emergency Procedure discussions as part of each flight brief. These EODs are annotated on the daily schedule to aid in focusing the flight briefs, though they are by no means restrictive in nature. A common instructional technique is to incorporate mission-specific related emergency procedure discussions instead of the EOD in briefs. Additionally, flight briefs and debriefs comparably focus on TRs to help shape and enforce flight safety.

[Photo by: Photographer’s Mate Airman Benjamin Dennis]
Many of the F/A-18 TRs were very similar in nature to the F-15E, thus enabling common safety practices for integrated flight operations. Finally, RM is also utilized to help flight leads mitigate mission risks, though with less oversight from leadership. Instead of a squadron supervisor (TOP 3) managing the RM matrix for each mission, the F/A-18 community leaves RM to each flight lead. It is incumbent upon each flight lead to assess the weather (with the authority to individually choose an applicable alternate/divert or weather cancel), mission risk, experience levels, and individual aircrew RM. This is accomplished prior to and during the brief. Though this process has less oversight, the face-to-face questioning of each flight member’s personal RM encourages frank and honest discussion of risk factors. In my experience, flight members in these settings are very forthcoming with issues that affect personal risk such as stress, lack of sleep, illness, etc. Armed with this knowledge, the flight lead mitigates risk by altering the mission profile, pace of events, or cancelling the flight altogether. The delegated authority and autonomy of each instructor is crucial in ensuring safe and effective training, while managing a 90+ hour daily flying schedule. Through similar, yet less formal, processes and lower-level decision-making, the intent of RM within the F/A-18 community is the same as in the Air Force—mission safety.

Conversely, there are two safety focuses within the F/A-18 community that differ from my experiences in the F-15E: boldface and fuel awareness. The following differences changed my perception regarding the formality of our respective communities. First, the F/A-18 has 22 boldface procedures for those who fly F/A-18 A-F models as I did. Though I am familiar with boldface from UPT, the F-15E does not have boldface, only critical action items. The F/A-18 boldface procedures are tested on a monthly basis in written form, and nearly daily through the EOD process. Likewise, during Low Altitude Tactical Training (LATT), F/A-18 aircrew are required to memorize six LATT rules and repeat them from memory with 100 percent accuracy in mission briefs. While similar low altitude rules are utilized, F-15E aircrew are expected to know and understand the rules but not required to memorize them verbatim. Additionally, during Carrier Qualification training, F/A-18 crews again focus on flight deck specific boldface and strict carrier operations. This focus ensures each aircrew can operate safely before going to and while on the carrier.

The second difference is a systematic safety focus on fuel awareness. Though the F/A-18 is equipped with a selectable fuel warning system, it is expected that aircrew demonstrate such an awareness of fuel that the warning tone never goes off airborne. The expectation is a constant and acute awareness of aircraft fuel state. The F-15E community also requires fuel awareness, though the consequences of running low on fuel are normally far less dire, as there are usually several divert options. The F/A-18 community focuses on fuel awareness to such a degree because of blue water operations, where diverting is either not feasible due to distance or not desirable due to geopolitical considerations. It’s All About That Boat, Bout That Boat, No Terminal. Poor fuel management could also lead to severely disrupting cyclic flight operations in which a carrier is conducting periodic launches and recoveries at defined intervals involving many aircraft—or worse, ditching a perfectly good $50M aircraft. Experience with these more stringent F/A-18 safety emphases on boldface and administrative operations changed my perception regarding the assumed informality of naval aviation.

My exchange assignment with the Navy was a once in a lifetime opportunity. It was eye opening to see the similarities and differences between Air Force and Navy fighters and the inherent safety processes therein. As a flight lead, I appreciated the autonomy with which they operate and the continual push for decision-making at lower levels. My prior assumptions were correct; there is indeed more formality to the structure and safety emphasis of naval aviation than I thought. With only a couple of attempts at putting a $5OM jet on a 700 foot landing area with no diverts around, it is clear why strict admin and safety processes drive a mentality that is

All About That Boat

Bout That Boat, No Terminal.
Our EC-130 was flying a night proficiency sortie out at March Air Force Base. As the co-pilot, I was sitting in the right seat and flying multiple touch-and-goes with a traffic pattern at 1,500 feet. At some point during our flight, a C-17 with “heavy” in its call sign joined us. As the sortie progressed, my Instructor Pilot offered to take the aircraft to demonstrate a 100 percent flap touch-and-go and practice instruction. The C-17 was ahead of us and our spacing was fairly tight. I remember seeing the C-17 touch down approximately 3,000 feet down the runway from the right seat on a left base to final turn. We continued through the turn as normal and the crew discussed and agreed that even though we were a little steep on the approach that it was ok because of our spacing behind the C-17. As we continued on final and transitioned into the round out, the aircraft was jerked into a right roll to what felt like 45 degrees. The IP recovered the aircraft to wings level and I didn’t waste any time at this point to state “Go Around.” The sortie from that point continued normally and we landed back at Davis-Monthan AFB, Ariz., safely.
There were a few things going on in my head during this event. The call sign “heavy” set off an immediate alarm in my head to be cautious about wake turbulence. It appeared to me, although we did not speak to it directly in the cockpit, that my IP and Aircraft Commander were aware of the situation. I started to be concerned however, when we did not begin timing after we saw the C-17 touch down. I continued to question myself as whether or not to chime in during a critical phase of flight for something that I may be incorrect about. I was on a delay ride and had not flown in two-and-a-half-weeks and earned approximately 12 hours in this aircraft, only six of which were in the seat. The two IPs onboard were both experienced Lieutenant Colonels. I remembered two minutes behind large Aircraft and three for heavy aircraft, but was unsure whether it applied for touch and go or just take offs. Even though we briefed crew resource management prior to takeoff, I was surprised how easy it can be to not speak up, or feel too comfortable with experienced crew members. The most important lesson I learned, or perhaps reinforced that day, was that it doesn’t matter if you are a veteran of the airframe or the most inexperienced Airman: Never hesitate to speak up if you see safety violations. I let the situation get to the point of danger before initiating a go around. If I had just spoken up a few moments earlier, the situation may have been avoided all together.

The combination of the C-17 landing long and our lack of an accurate time hack caused the crew to attempt to land in wake turbulence which resulted in a high bank angle indication and a low right wing at around 50 feet above the ground.

Detailed guidance on wake turbulence can be found in Chapter two of AFI 11-217v3, but here are a few important points to remember:

- Trailing aircraft should fly at, or above, the leading aircraft’s flight path, altering course as necessary to avoid the area behind and below the generating aircraft. As a general rule, vertical separation of 1,000 feet is considered safe.
- A light quartering tailwind requires maximum caution regarding the effects of wake turbulence.
- When departing behind a larger aircraft, note the other aircraft’s rotation point, and if able, rotate your aircraft prior to that point. If unable, consider waiting two minutes to allow the wake induced vortices to dissipate. If landing, land past the preceding aircraft’s touchdown point.
- After a larger aircraft has executed a low approach, missed approach or a touch-and-go landing, it is highly recommended that you wait at least two minutes before takeoff or landing and three for heavy aircraft.
- ATC is responsible for traffic separation until the pilot calls the preceding aircraft visual.
- “Heavy” at the end of a call sign should alarm pilots to be concerned about wake turbulence.
We took off at 2050 on March 26th for a night “non-demanding” sortie. In the A-10, that’s a basic surface attack sortie used to regain primary skills and flight currencies. What I did not yet know was that this planned non-demanding mission would be the most demanding sortie I’ve ever flown! My flight lead had briefed our four-ship of A-10C Warthogs that we would take things slowly and methodically on range that night, since I hadn’t flown a night mission in over 4 months due to a PCS and Squadron Officer School. It was a fairly calm night with clear weather. The winds were light out of the southwest, the illumination was medium to high due to the cultural lighting of Moody AFB, and the waning crescent moon hung in the clear sky. We were scheduled for an hour and a half of range time, during which I needed to practice my night weapons delivery. Our planned events were dive bombs, followed by strafe, and ending with dry Maverick missile attacks.

BY CAPT. ANDREW GLOWA
After checking in with the range officer and performing a clearing pass, we began rolling in for our first dive bomb events. After several passes of conventional bomb deliveries, I began to feel more comfortable diving towards the ground and validating my night sight picture using my night vision goggles. After several bombing passes, dropping practice BDU-33 bombs, it was now time to switch to diving strafe deliveries. I called up my guns mode and fixed my targeting pod onto the high angle strafe target. This allowed me to use the forward sight picture using my night vision goggles. After several bombing passes, I began to feel more comfortable diving towards the ground and validating my night sight picture using my night vision goggles. When it was my turn to beam visible under my night vision pointer at the target to fire a laser circle. I could then fire my infrared truck in the middle of a plowed-out target, which was an old shot-up targeting pod crosshairs over my looking infrared picture to fix the This allowed me to use the forward sight picture using my night vision goggles.  When it was my turn to beam visible under my night vision pointer at the target to fire a laser circle. I could then fire my infrared truck in the middle of a plowed-out target, which was an old shot-up targeting pod crosshairs over my looking infrared picture to fix the This allowed me to use the forward sight picture using my night vision goggles. After several bombing passes, I began to feel more comfortable diving towards the ground and validating my night sight picture using my night vision goggles. When it was my turn to beam visible under my night vision pointer at the target to fire a laser circle. I could then fire my infrared truck in the middle of a plowed-out target, which was an old shot-up targeting pod crosshairs over my looking infrared picture to fix the

Flight Lead maneuvered his jet to visually inspect the suspected damage to my airplane. I adjusted my lighting, turning the nose illumination lights on and my strobes off so that lead could assess the damage. As soon as lead was in position to visually inspect my aircraft, I will never forget his radio call, “Oh man, I got bad news for you. It looks like your gun has turned sideways!” I felt my heart sink because I knew there was a high probability of damage to the nose gear, which is positioned next to the gun’s firing mechanism. The gun’s firing mechanism had experienced a massive failure, causing an explosion that blew some gun parts out the bottom of the fuselage. The checklist for a gun malfunction directed me to perform a structural damage check. Even with structural damage to the fuselage of the aircraft, the A-10 was able to fly just fine.

It was now time to check the landing gear extension. I slowed below our gear extension speed and pulled down the landing gear extension handle. It felt like hours went by as I waited for the three green lights to illuminate indicating all of my landing gear extended safely. Unfortunately, it was like a bad dream come true. Only my two main gears came down and locked. Flight Lead confirmed my nose gear did not extend. After multiple attempts to get the nose gear to extend, we began discussing the possibility of landing gear up. We talked about how only a few people had done it before and those were all during daytime. We also discussed the possibility of ejecting instead of risking a poor landing attitude or sink-rate that could likely cause the aircraft to flip over or start a fire.

I made the decision to execute the checklist for landing gear up while also reviewing both the ejection and emergency ground egress procedures. We calculated that I wanted to land with less than 1,200 pounds of fuel to reduce landing speed and minimize the chance of an explosion if the airplane caught fire. I had another problem, though. The A-10 landing gear light was positioned on the nose gear, meaning, I would have difficulty seeing the runway threshold. This concerned me because lack of runway illumination could also lead to an approach with a high sink rate.
To counter this, I requested that number three in the formation land early, taxi back to the approach end of the runway, and shine his landing light 45 degrees offset from the north flow runway.

Next, I set myself up to accomplish a practice approach, allowing me to get a feel for the landing sight picture and overall runway environment. Even with number three’s landing light and the tower turning the airfield lights all the way up, it was a dark abyss beyond the runway threshold. The landing-gear-up checklist recommends a slow, shallow, two-to-three degree glide path. As I went around from my practice approach, I said some prayers, and looked over my ejection and emergency ground egress checklists one more time. I even copied my emergency ground egress and emergency ground egress to see number three’s landing light and the tower number 3’s landing light and the tower, multiple forward panels were destroyed, and damage to left and right vertical stabilizers/rudders and tail cone just to name a few. All told, the cost of the damage sustained was over $1.5 mil.

On a final note, every sortie we plan and fly has the potential to become infinitely more complex than ever expected, requiring us to prepare for the worst and the best we can, not knowing what lies beyond the next corner. I will forever never forget this experience and am thankful that I lived to fly another day.

File an ASAP Today!

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

“I was flying as the wingman in a night, MQT-CAS sortie, my sixth sortie in the area. This was my second NVG sortie in the past month but I had recently returned to the F-16 after several years flying another (non-NVG) airplane. The IP briefed that I would accomplish all the check-ins en route to the airspace, coordinating with three different agencies in about a 10 minute flight to our assigned MOA. After takeoff, while in radar trail I was cleared to begin the check-ins and quickly discovered that it was challenging to hear/understand the host-nation agencies, this started my task saturation. Additionally, in the midst of talking to the third agency I was cleared to “google” and call visual. I did so, and was cleared to rejoin wedge as my IP began a left-hand turn. I saw him begin to turn left and so I elected to pull hard left assuming he was turning towards the next waypoint, because he was still talking to the ATC agency on a different frequency. I then went back to finish up the coordination with the host-nation agency. The next time I looked up I noticed that I had quite a bit of closure due to his continued left-hand turn (causing me to pull lead rather than moving off to a comfortable position on the left side) and a large airspeed differential (I had sped up about 30 knots and he had unintentionally slowed about 50 knots). I immediately began an aggressive right turn away from his aircraft, ending up passing about 400’ aft before I was able to get my closure under control. Ultimately, both aircraft were unharmed and we were able to continue our mission. However, I passed much closer than I had assessed and had created a potential midair collision due to task saturation, mis-prioritizing communication over maintaining my formation position, and recent inexperience with NVGs.”

Do you have a lesson learned to share?

http://safety-masap.com

• ASAP—Aviation Safety Action Program
• It’s confidential and quick
TCTO ... NO!!!

An F-22 aircraft was towed to a maintenance hangar for the completion of a Time Compliance Technical Order (TCTO). The purpose of the TCTO is to prevent premature wear on the right rudder actuator rod end bearing. The Low Observable (LO) coating must be removed from all the fasteners that secure the panels to the aircraft structures to complete the TCTO. For the TCTO, three panels overlay each other and must be removed in sequence to gain access to the right rudder actuator rod end bearing. The LO coating is removed by the Low Observable Composite Repair shop, while the aircraft owning organization has their own maintainers physically remove doors, covers, and access panels from the aircraft. The LO shop responded to the aircraft with technical data and removed the coating on the overlapping panels that were exposed, with the intention of completing the LO removal on the areas that were overlapped once the appropriate panels were removed. The LO technician signed off the coating removal task for all panels associated with the TCTO in the aircraft forms, as a time saving measure while waiting to be called back to remove LO from the last four fasteners. The aircraft owning organization sent its maintainers out the aircraft to finish the TCTO. The maintainers thought that the LO technician was completed based on the status of the task in the aircraft forms. As the maintainer removed what was thought to be all the fasteners, he began to pull the panels off of the rudder. When he removed the last panel from the rudder, a pop was heard when the panel broke free from the rudder. Upon inspection of the panel, the maintainer noted that there were two fasteners still threaded into a tang that had previously been attached to the rudder, but was now broken off. Simple lack of communication led to a mishap totaling $420,399.

Have you ever played the Telephone Game?

Late one evening, an F-16 was towed into the paint shop in preparation for maintenance the following morning. The aircraft canopy was left in the open position; however, the canopy was required to be closed before repairs could begin. After multiple failed attempts to close the canopy the following morning, two maintainers decided to “phone a friend.” To get instructions on how to close the canopy over the phone. Worker one received information from Worker three over the phone and verbally passed it to Worker two. Worker two misinterpreted the information passed to him and misidentified the canopy lock/unlock handle as the canopy lock/unlock handle. You can probably guess what happened next. Lack of communication and training resulted in over $200K in damage. Luckily, no one was injured.

What Can We Do About It?

Communication, or lack thereof, is the common theme in these two mishaps. Missed or failed communication may seem innocuous, but it cannot be tolerated. A misinterpreted word can have an unintended result. Absent or unclear communication can have consequences. During fiscal year 2014 in the USAF, 42 mishaps resulted from or involved failed communication. If something doesn’t seem right or feel right, stop the job and ask the question. Communication can mean the difference between a costly mishap and a job well done.
QUARTERLY AWARDS

Aircrew Safety Awards of Distinction
CAPTS MATTHEW C. DEFOORE, JOSHUA D. SMITH – 336 FS, 380 AEW, Al Dhafra AB, UAE (Feb. 2015)
CAPT. CHRISTOPHER SALTARES, STAFF SGT. MATTHEW VITAGLIANO – 18 RS, Creech AFB NV (Mar. 2015)
CREW OF WHISTLER 93 – 908 EARS, 380 AEW, Al Dhafra AB, UAE (Apr. 2015)

Crew Chief Safety Awards of Distinction
TECH. SGT. JACK P. WILLIAMS – 386 EAMXS, 386 AEW, Al Dhafra AB, UAE (Feb. 2015)
SRA JOSEPH A. ROBERTS – 23 AMXS, 23 WG, Moody AFB GA (Apr. 2015)

Flight Line Safety Awards of Distinction
STAFF SGT. LYLE W. DORSEY – 380 EAMXS, 380 AEW, Al Dhafra AB, UAE (Feb. 2015)
MAJ. JOHN P. COTMAN – 358 FS, 355 FW, Davis-Monthan AFB AZ (Apr. 2015)

Ground Safety Awards of Distinction
STAFF SGT. ALEXANDER P. AGUILERA – 338 CTS, 55 WG, Offutt AFB NE (Mar. 2015)
TECH. SGT. ROBERT M. ELLENDER – 373 ISRG, 70 ISRW, Fort George Meade MD (Apr. 2015)

Pilot Safety Awards of Distinction
1ST LT. ANDREW T. GUTOWSKI – 27 FS, 1 FW, JB Langley-Eustis, VA (Feb. 2015)
MAJ. TIMOTHY M. STROUSE – 27 FS, 1 FW, JB Langley-Eustis VA (Mar. 2015)
CAPT. KRISTIN L. HOLLRITH – 77 EFS, 380 AEW, Muwaffaq Salti AB, Jordan (Apr. 2015)

Weapons Safety Awards of Distinction
STAFF SGT. JOSE G. LASANTA-FALCON – 380 EAMXS, 380 AEW, Al Dhafra AB, UAE (Feb. 2015)
STAFF SGT. RICHARD PETERSON – 380 EAMXS, 380 AEW, Al Dhafra AB, UAE (Mar. 2015)
STAFF SGT. TYLER A. TARANTINO – 9 MUNS, 9 RW, Beale AFB CA (Apr. 2015)

Unit Safety Awards of Distinction
455th EMXG QUALITY ASSURANCE – 455 AEW, Bagram AF, Afghanistan (Feb. 2015)
82nd EASOS – 380 AEW, Al Dhafra AB, UAE (Mar. 2015)
46th ERS – 386 AEW, Al Al Salem AB, Kuwait (Apr. 2015)

MONTHLY AWARDS

Flight Safety
CAPT. ANNALEE A. THURBER, 451 AEF, 451 AEW, Kandahar AF, Afghanistan. Capt. Thurber founded the Flight Safety Council and drove a 100 percent attendance increase as she chaired the Airfield Users Group. Through these efforts, the 31 distinct airfield users were kept informed of the constantly changing environment inherent to the KAF de-scope and withdrawal—the biggest movement being 28 x UH-60, AH-64, CH-47 onto the airfield. Capt. Thurber developed the taxi and departure procedures as well as the parking plan to mitigate the unique influence of PRR, L-1011, 747 and others. She also authored one of many new ESPs resulting from her discovery of one of more than 52 munitions storage principle violations at licensed locations on KAF. He then authored a new ESP allowing TF Black to store M67 Grenades in a locally approved container. This resulted in a spontaneous battery explosion. As KAF’s flight safety champion, she mitigated a taxi hazard by removing T-walls to improve ramp/taxiway visibility and served as a stake holder on the Infrastructure Planning Board, ensuring that de-scope associated movements did not impact flight operations.

Ground Safety
MASTER SGT. NOEL A. MARTINEZ, 70 ISRW, Fort George Meade, GA. With an office undermanned by 50 percent, Master Sgt. Martinez personally instructed over 400 personnel in five different safety courses; accumulating 150 training hours, reducing hazardous exposures to wing personnel and bolstering safety to new heights. Sgt. Martinez collaborated with the MPS to incorporate a motorcycle risk entry onto the wing’s virtual MPT out-processing checklist. This measure has dramatically increased accuracy and accountability in tracking motorcycle riders across the wing and in MUST. He also lent his expertise to two nearby AF bases and provided a comprehensive assessment of their motorcycle safety programs. He pinpointed 18 critical training and tracking errors and provided fixes, making them 100 percent compliant with AF standards. Sgt. Martinez worked with AMC safety to re-issue an FCIF highlighting an MRAP design flaw that resulted in MRAP fires on base. Capt. Thurber worked with AMC safety to re-issue an FCIF highlighting an MRAP design flaw that resulted in spontaneous battery explosions. As KAF’s flight safety champion, she mitigated a taxi hazard by removing T-walls to improve ramp/taxiway visibility and served as a stake holder on the Infrastructure Planning Board, ensuring that de-scope associated movements did not impact flight operations.

Weapons Safety
TECH. SGT. LUCAS C. LONG, 451 AEF, 455 AEW, Kandahar AF, Afghanistan. Tech. Sgt. Long’s diligence guaranteed the seamless integration of Task Force Corsair rotary wing aircraft into a congested ramp housing over 100 other aircraft, including seven RPA variants and four distinct fixed wing airframes. After identifying US Army, USAF and USFOR-A forward firing munitions and explosive arc safety requirements, Sgt. Long ensured they were accounted for during bed down planning. He also coordinated the comprehensive risk assessment and subsequent approval with USFOR-A, TF Consair and USAFCENT, ensuring the appropriate echelon of command understood and accepted the residual risk after his 26 distinct mitigations were in place. He repeated this feat for an emergent Special Operations requirement to operate with our Afghan partners. Sgt. Long also completed two explosive risk assessments allowing EOD to conduct training utilizing off-range tools and techniques. His successes contributed to the find of more than 52 munitions storage principle violations at licensed locations on KAF.
Flight Notes

After an inauspicious start to the fiscal year, the ACC Aviation Class A mishap rates have improved. We still lost two valuable Air Force combat assets during the second quarter of FY15, an MQ-9 and an MQ-1, which were performing operational missions in the AOR. As temperatures start to increase, heading into summer in the northern hemisphere, aircraft should review hot weather procedures and pay particular attention to worsening TOLD data. Stay vigilant!

Ground Notes

Fall Protection Awareness Focus ran 4-15 May 2015, in support of OSHA’s “National Safety Stand-Down.” The purpose was to raise awareness of fall protection for the entire Air Force: active duty, civilian, Guard, Reserve, contractors and family members. Whether it’s a fall from heights or a “slip, trip and fall,” at the same level, everyone benefits by spending some time discussing fall protection and prevention.

A recent mishap involved a worker who was assisting in loading computers onto a Chevy 3500 Stake Bed truck from a loading dock. The worker was standing on the leading edge of the loading dock attempting to latch the locks to the truck’s gates. The worker struggled to lock the gate, leaned forward to apply pressure to the latch when the latch unexpectedly released, causing the worker to lose her balance and fall off the loading dock. She landed squarely on her two feet and fell to the ground in severe pain. The worker was evaluated and treated for a fractured tibia and lost 40 days of work. The loading dock was four feet in height with no guard rails or other means of protection to prevent a fall.

Weapons Notes

ACC experienced one weapons safety mishap this quarter. The mishap was an AM-9 radome broken during a loading operation. Based on the mishap report, human factors was the cause of this mishap. Human factors are always in the conversation as being a leading cause of weapons safety mishaps. Situational awareness is paramount in mishap prevention! Continue to instill in your personnel the hazards of handling explosives. Pay close attention to the task at hand, follow technical directives, and we will prevent mishaps such as this in the future. Thank you for all you do for weapons safety.

Mishap Statistics Scoreboard

<table>
<thead>
<tr>
<th>FY15 Flight</th>
<th>As of March 31, 2015</th>
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<tbody>
<tr>
<td>Fatal</td>
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<td>12 AF</td>
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<tr>
<td>USAFWC</td>
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Legend

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 $20,000 and $500,000
(Class Description Effective October 1, 2009)

* Fatality  ** Non-rate Producing  *** Performing SOUTHCOM Mission

Symbols for Mishap Aircraft

A-10  B-1  F-16  C-130  E-8  F-22  T-38  E-3  C-130  E-9  E-8

MO-9  C-17  G-4  HH-60  A-15  RQ-4  MD-1/9

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Enjoy your summer ...
Remember to Check 3 in all you do.

Do You Have A Great “Check 3” Story?
email it to us at: acc.thecombatedge@us.af.mil

What is Check Three you ask?
Check 3 is a quick and easy method to assess any activity or event for possible hazards. The “Check 3” approach is assessing three areas referenced by the common acronym GPS. In this case, GPS is not referencing a navigation aid. Rather, GPS is: Gear - Plan - Skills.
This allows a quick review of your activity to highlight any issues or hazards. For instance, “G” (gear) may be your equipment, vehicle, or availability of drinking water. “P” (plan) may be the timeline, weather, sequence, and backup plans. “S” (skills) may be your rest level or overall experience level. If you see an issue or hazard in any of the areas, then adjust the plan to mitigate the hazard, especially the plan. Check 3 allows you to have a quick mental method to assess any activity.

Check Three

Gear: Car appears in good working order.
– Tire pressure looks great on the driver’s side

Plan: Taking a break during a road trip is a great idea ...
– But stop the car first!

Skills: Seat belt defying talent!
– But this is one skill they hopefully have not practiced a lot.

Gear: Truck seems to be in working order.
– But not sure if there are enough seatbelts

Plan: Kudos to the efficiency in the plan ... 
– But we recommend a bus next time!

Skills: Mad skills!
– Did you notice the precision used to secure the luggage?

Gear: Nice camera.
– Might be camera if he had a little more than 1x zoom though.

Plan: To become one with nature.
– Nice, however we do recommend you try to live to tell about it!

Skills: Appears to be well framed.
– Might have been better if he had turned around and taken a selfie though.
A Blistering Pace
on the Road to Compostela

BY HANNAH ROBINSON

Day-to-day, walking might not seem challenging, but when a walk around the block turns into walking 14 miles a day, it becomes very demanding on both body and mind. Along with my church youth group, my mom and I did just that in the summer of 2014, as we joined the pilgrimage and walked part of the Santiago de Compostela. I felt that I was prepared for this challenging walk, and the Spanish countryside was breathtaking and worry free. Starting from Sarria, Spain and ending in Santiago, Spain our journey would cover over 70 miles (113 km). Before the trip, I had to plan for the unexpected and pack things I thought I would never need; however, the things I packed became very useful along the trail. A travel agency and guide were a big help scheduling our journey. Preparing ahead for the weather, airports, and blisters to come really helped my trip go smoothly.

Excitement took over as we prepared for this adventure, and many of us shoved last minute things into our carry-on bags when we first arrived at the airport. Finally in the air, I went to grab my iPad to watch a movie, but I realized that everything was so disorganized that I had no clue where things were! Then for a moment, I couldn’t find my passport and boarding ticket for our connecting flight … which would have spelled disaster for me and the group I was traveling with. I finally got organized and found what I needed before we landed.

After a dreadfully long plane ride, we finally arrived in Spain, where my organization helped me go through the lines quicker, and get to the next terminal for our connecting flight to Madrid. Once off the plane in Madrid, our group met up by the exit of our terminal and as we walked towards customs, we came to realize what we had gotten ourselves into. Conversations, signs, directions, airport announcements and forms; everything was in Spanish. Although many locals could speak English, it was still hard to understand some words. I thought the trip might challenge my two years of High School Spanish class, but I quickly realized that I should have paid more attention. Luckily, we had a member of our group who spoke fluent Spanish, and after navigating and translating our way towards the exit of the airport, we found ourselves waiting for the bus to take us to Sarria. The bus ride was fast-paced, and as we twisted and turned through the mountain side roads, I began to feel sick, and was extremely happy when we finally arrived.

After traveling for most of the day, everyone was hungry and tired, but before we went to our rooms we had a nice meal and walked around the town as a group. It was getting dark as we walked back to our hotel and everyone was quietly reflecting upon what we’d been through to that point, and thinking about what the next couple of days had in store; we all seemed to share one thought—were we prepared?
Walking early to a beautiful sunrise brightened everyone's day as we gathered our backpacks filled with what we thought we would need for the day. Our guide advised us to pack lightly and take only the necessary items. About to start the long journey, we all decided that purchasing walking sticks might be smart; trust me that turned out to be the best idea of the trip! Walking over 14 miles (22.5 km) the first day had come and gone with no major problems ... just beautiful Spanish scenery. After a late dinner, we all headed up to our rooms thinking “that wasn’t so bad; we don't have sore legs or blisters.” The next day’s walk was going to be one of our longest to Palas do Rei which was around 15 miles (24.1 km). Falling asleep which was around 15 miles (22.5 km) the first day had come and gone with the cooler temperatures. Many of us learned from the previous day to be more prepared, and the importance of layering our clothing became apparent. We wore sock liners and brought extra socks so our sweaty feet wouldn’t cause blisters, and after lunch, we switched socks and took off layers of clothing as needed. This helped tremendously because it let our feet air out and dry a little bit. It helped prevent blisters, and allowed us to add or remove some of our upper garments to adjust to the changing temperatures. As the days and miles passed, we all began hoping this challenging journey would soon end, because our feet were only getting worse. By mid-journey, we had walked through rain, uphill, downhill, through open countryside, and towns. Not only were we tired, but blisters were now beginning to form.

By the time we woke for the final day’s walk, everyone’s feet were aching, and my mom’s feet were covered in sickening blisters. The funny thing was, my mom was walking everywhere in her new walking shoes before we went on the trip. Her plan was to break them in so she wouldn’t get blisters ... I on the other hand, didn’t walk much beforehand, and before we departed on this adventure I remember my mom telling me, “Don’t complain to me when you have blisters!”

Little did she know that she would be the one with the blisters and my feet would be just fine! Maybe I was lucky that my shoes fit well, but the better bet is that it was all the running and conditioning I’d done for field hockey was beginning to pay off ... who knew? This goes to show that it doesn’t matter how much you prepare other factors can play a part.

As we neared the end of the day, we could almost see the finish line (the Cathedral of Santiago de Compostela), just 12 short miles (19.2 km) away. By now, our walking sticks were well-utilized, and all of our emotions were coming out now—both excitement of reaching the end of our journey, and sadness over the realization that it was almost over. Arriving in the city of Santiago, and near the end of our journey, we collapsed in a big group hug, proud of what we had accomplished. Weeks after the trip we were all still recovering in some way, and now after almost nine months as I think back on my adventure, I wouldn’t have done anything different. My mom on the other hand, would have been a little bit more prepared. She lost two toenails and could barely walk afterward. Others were just sore all over. She learned that while having the proper footwear is important, it’s always smart to bring a kit for blisters, and changing your socks several times throughout the day will make your journey bearable. Other supplies we used included needles, alcohol swabs, various bandages, and newspaper which we placed in our shoes overnight to help draw out moisture and dry them out before the next day’s journey.

Going as a group provided safety, security, and helped encourage all of us to get through this challenging walk. Preparing ahead of time for this adventure by using a good travel agent, local guides, and working as a team made this an adventure of a lifetime. Our pilgrim’s journey ended with sore feet and blisters for some, but good preparation and conditioning left me resting my legs and laughing at all the great memories we made on our hike of the Santiago de Compostela ... Buen Camino!
Ways to Survive the CDoS

BY TECH. SGT. STEVEN L. FREEMAN

BBQ season is in full swing and we’re ready to show off our world famous ribs and wings, but there are some inherent risks everyone should consider during the Critical Days of Summer (CDoS - May 25th through September 7th).

1. For starters, never leave the grill unattended. Maintain a watchful eye on the fire and ensure flames, or flammable items such as wood, coal, lighter fluid or grease stay confined in the grill. Keep pets and children away from the grilling area, hot surfaces, igniters and combustibles.

2. Remember, charcoal and propane BBQ grills should only be used outdoors well away from the home, deck railings, and out from under eaves, overhanging branches and other structures.

3. Standing over a hot grill during the hot summer is bound to onset serious thirst. It’s all too easy to reach for our favorite ice cold beverage in the company of friends and family—ensure you make good choices.

4. Don’t neglect your water consumption. Sugary soft drinks and alcoholic beverages dehydrate the body; couple that with high heat and humidity—dehydration can rapidly occur.

5. Signs of dehydration are: increased thirst, dry mouth, weakness, dizziness, confusion, fainting and the inability to sweat. If any of these signs become evident, do not hesitate to seek medical attention.

6. Whether it’s making the decision to drive, or a fun summer social, the need to drink responsibly is paramount no matter the event.

7. Summer is the season designated for fun outdoor activities, and events. This is why water sports and activities are so popular; however, there are inherent risks involved... use sound Check 3 GPS!

8. Though largely used for leisure, boats are motor vehicles and should not be operated under the influence of alcohol or in a reckless manner.

9. While outdoors, summer is a great time to get fit, but we can’t lose focus on the need to continuously hydrate. As we workout, our internal temperature can rise in what already may be very hot conditions that might lead to rapid dehydration.

10. Lastly, leaving children or pets in unattended vehicles during the harsh summer heat can quickly become fatal, as temperatures in the vehicle can quickly surpass the external temperature—even with the windows cracked.

The Riding Season is here
what will YOU do to become a safer rider?

BY SENIOR MASTER SGT. DERRICK MITCHELL

Recently, we lost a mentor during a group ride. The mentor planned the route and did everything right with the group. Due to traffic, several members became separated. The mentor stopped at a dam to wait for the other riders to catch up. While waiting, he and a friend used a Go-Pro camera to film him riding down a long winding road. On the way back up to the starting point, he traveled at a high rate of speed, failed to negotiate a curve, and struck a sign. The mentor died of a fractured vertebra and blunt trauma. We must always follow the rules and ride within our ability.

So, before you set out for the open road: get trained, repair your motorcycle, catch up on scheduled maintenance, perform T-CLOCS and join a mentorship ride. Don’t forget to Check 3 and keep it shiny side up!
“Complacency Kills” is a phrase most often heard in the AOR or in regards to the awareness of terrorist activities. In actuality, this is a term that should be applied in everyday life. Mishaps can be prevented if we just take that extra second to think about the consequences of our actions. With the Critical Days of Summer fast approaching, the likelihood of mishaps is sure to take a spike. The insatiable yearning for that much needed vacation, the increase in outdoor activities, and kids out for summer break lends itself to an accident waiting to happen. We have to be safe and make sound decisions when planning our summer activities. The pool, lake, or ocean are all great ways to stay cool, but can also be very dangerous. If water activities are in your plan, make sure you “Check 3 GPS” and have the proper Gear, Plan, and Skills.

Typically, alcohol is a major contributing factor in water-related mishaps and fatalities. According to the Centers for Disease Control, “Alcohol use is involved in up to 70 percent of deaths associated with water recreation.” While enjoying the waters, be vigilant! Never drive or ride with any person that is under the influence while operating a vessel. If boating or swimming in oceans, be advised of the flag warning system and the current conditions. In most areas, you can sign up to receive text alerts to keep you abreast of changes to those conditions. Also, when basking in fun and the sun and alcohol consumption, be aware of the signs of dehydration, heat exhaustion, heat cramps, and heat stroke. Know the symptoms and be watchful of yourself and others.

If you have outdoor equipment like trampolines or swing sets, check the surfacing, springs, chains, and areas that could trap children. Doing a quick safety test for the availability and functionality of safety gear could save you a trip to the emergency room, or better yet, your child’s life. If it is last year’s gear, check for fit and make sure everything is still intact. The best thing we can do for our children is to be a good example for them to follow.

Planning a vacation? Ensure you have a solid plan. Again, “Check 3”! Avoid overexertion and include rest in your travel plans. Get a full night’s rest before traveling and don’t drive more than 10 hours during any 24-hour period. Take into account factors like weather, night driving, and the possibility of fatigue. The Critical Days of Summer should be a time where we enjoy the weather, family, and outdoor activities. Don’t get complacent! Remain vigilant of potential hazards and avoid the dangers that could lead to injuries or possibly fatalities. Have a fun and safe summer!

“Check 3 GPS” allows you to take a quick review of your activity and highlight any potential issues or hazards. “G” or gear may encompass personal protective equipment, your vehicle, or availability of drinking water. “P” or plan can include your timeline, the weather, emergency contact info, etc. “S” or skills may mean you are rested for the activity or your overall experience level. Check 3 GPS allows anyone, regardless of experience or knowledge to have a quick mental method to begin assessing their activities, adjusting where necessary to mitigate possible hazards.
For someone used to driving 45 minutes maximum to get anywhere in suburbia at speeds that rarely get up to 70 mph, an eight-hour drive at 68 mph is terrifying. Add in bouts of rain that reduce visibility to 10 feet and it’s my worst nightmare. For my dad, this is called “precipitation.”

It’s roughly 500 miles from my home in Virginia to my college in Georgia, and last September was the first time I ever made the drive. My mom was in the car with me while my dad was in his pickup truck, my stuff split between both vehicles. At first, I only worried about driving at interstate speeds. It wasn’t that bad with my parents nearby, but I won’t have them with me next time.
That fear channeled into my driving. I couldn’t maintain speed for long, always backing off the gas instead of passing anyone I got close to in the right lane. When I did pass, I accelerated just enough to get ahead before slowing down again. Many of them passed me within a few minutes. It’s a wonder no one rear-ended me.

My mom showed me how to use cruise control to stay at a consistent speed. The speed limit was 70, but I set my car to a solid 68. Even in suburbia, I drive a little under the speed limit. While it helped me cruise smoothly along the open stretches of road where no one was ahead of me, it made my anxiety worse whenever traffic inevitably congested around the exits and onramps near towns and cities. Speeds fluctuated around 60 and brake lights pulsed. Everyone would steadily speed up, I’d turn cruise control back on, and then we were going 55 again. Even though cruise control lets you maintain an exact speed no matter the shape of the road, it gives the car more control than the driver. I have faith in my car, but the safety of its occupants depends on me. With the car holding our speed constant and not the pressure of my foot on the pedal, my driving reflexes were thrown off. Normally I’d pivot my foot from the gas to the brake if someone cut in front of me, but my foot was flat on the floor with cruise control on. I’d raise it to the brake, double check I was actually touching the brake and not the gas, and drop out of cruise control. What could have been a half-second response to a potential hazard was now a multi-step process with more room for error. My experiments with cruise control ended with the first sign of rain. Colossal storm clouds lowered over the interstate a handful of miles ahead of me. Knowing this meant we could all drive a little slower didn’t comfort me much. It’s too easy to hydroplane and, at these speeds, flip into a ditch. I expected to come across one or two accidents. I hoped I would not be among them.

Visibility plummeted in the first few seconds. The rain was so loud, my mom and I were almost yelling at each other. If I let the white pickup in front of me drift further than one car-length ahead, his taillights turned to a soft pink glow on the other side of a wall of water. Some people surged ahead in the left lane, the gold reflections of their headlights appearing without warning. My dad was somewhere behind. The rest of us clung to each other in the right lane like kindergarteners crossing the street. I kept asking if I could pull over and wait for the rain to stop, even though I felt safer with the new group I found.

I imagined my dad’s voice reminding me to look around and be aware of my surroundings. It seemed like every time I did, I saw an accident. A red truck was upside down in a tree off to the right. A white SUV left trenches in the muddy grass where it had swerved onto the median. Three cars had smashed into each other and had just been cleared off the road. The flashing lights of emergency vehicles flew by.

Traffic sped back up when rain gave way to murky sunshine, but it didn’t last long before we scrunched up again. That white truck remained my guide when the lines disappeared and the guardrails looked like watery shadows. My mom encouraged me to bring my speed up to 55 while tapping her invisible brake every few seconds. When the truck took an exit after the second bout of rain, I wanted to follow him. As silly as it sounds, I’d grown attached to my guide over the first hour and a half of driving in and out of the deluge. For the next hour of rain, I followed five or six different cars that braved the left lane and left me to speed up and find the next set of taillights.

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