

Summer Edition 2017

# Combat Edge



ACC's Full-Spectrum Safety Magazine



DANGER  
EJECTION  
SEAT  
DANGER

RESCUE MANUAL CANOPY  
RELEASE HANDLE

**CAF**  
Flight Safety  
The Next Level  
(Part II)

PAGE 4

**SLEEP DEPRIVED IS NO WAY TO DRIVE**



1.2 MILLION COLLISIONS ARE CAUSED BY DROWSY DRIVING EACH YEAR

ADULTS AGED **18-29** ARE MOST AT RISK

00109

STOP EVERY 2 HOURS! SCHEDULE BREAKS EVERY 100 MILES TO STRETCH AND MOVE AROUND



VEHICLES WITH AT LEAST ONE PASSENGER ARE LESS LIKELY TO BE INVOLVED IN A CRASH

1 IN 3 DRIVERS ADMIT TO HAVING A HARD TIME KEEPING THEIR EYES OPEN WHILE DRIVING

**PAY ATTENTION TO THE WARNING SIGNS**

- TROUBLE KEEPING EYES OPEN
- TROUBLE KEEPING HEAD UP
- DAYDREAMING
- DRIFTING OUT OF YOUR LANE
- YAWNING FREQUENTLY
- MISSING SIGNS OR YOUR INTENDED TURN

TRICKS WON'T HELP



ROLLING DOWN THE WINDOW



TURNING UP THE RADIO

THEY AREN'T ENOUGH TO STAVE OFF DROWSINESS!



**Take a break. Drive awake.**

Drowsy driving is a dangerous behavior that can result in serious injury or death. But despite the risks, drowsy driving is far too prevalent. It is estimated to contribute to as many as **1.2 million** collisions, resulting in potentially **5,000 to 8,000 fatalities per year.**

# Combat Edge

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COVER PHOTO BY: STAFF SGT. MARCUS FICHTL

THE COMBAT EDGE WILL RETURN THIS FALL

# ACCent



## Time for Change

Despite the recent snow here in Virginia, I'm told that spring is officially upon us, a time known for transition, and we are indeed surrounded by change in ACC. Below I'll share a couple new things, and a few "firsts" taking place.

First, I'd like to welcome General Holmes back to Langley where he first flew the F-15 as a Lieutenant and later commanded the 27th Fighter Squadron. Now, as our new Commander, General Holmes is charting the course for ACC to meet CSAF's goals in revitalizing the heart of the Air Force—our Squadrons. In April we looked at ways to improve **readiness**, whether through people, processes, materials, TTPs or otherwise, to better prepare our people and equipment for combat operations. In May we shifted focus to **leadership**, both in current operations and in preparing for the future, and in June we will culminate with ways to bring the CAF "**future faster**." In July we can expect the product of these discussions to influence new ACC priorities, and in the world of safety, potential to eliminate and/or introduce new hazards. Be mindful of change—stay vigilant—and employ risk management in all things on and off duty.



Col. Robert B. Trsek  
Director of Safety

Next I'd like to thank our ACC and ANG RPA aircrew for helping to conduct our first **Line Operations Safety Audit (LOSA)** for the MQ-9, which is drawing to a close now. As introduced in the last issue, LOSA uses trained MDS observers to accompany aircrew during actual missions to observe operations "in the field" and record procedures, techniques, and errors. We look forward to the results!

I'd also like to thank our ACC units for participating in, and the Air Force Safety Center for administering, our first **Air Force Combined Mishap Reduction System (AFCMRS)** Survey during March. This survey will provide unit commanders with insight to their unit safety culture and ultimately help protect our Airmen and provide ready forces to combatant commanders. Nobody likes taking surveys, but your honest input will pay off—this survey got great reviews in other MAJCOMs and we're hopeful it will be equally insightful for our command.

More changes – if you've picked up AFSOC's most recent *Focus* safety journal you'll see the GPS Check-3 icon prominently displayed inside, as well as within AETC's current *Torch* magazine, and the National Safety Council's winter *Family Safety & Health* magazine. This ACC risk management tool has taken off around the Air Force due to its simple approach to having the right **Gear, Plan** and **Skills**—if you don't have these areas covered well, you'll want to re-assess your activity. Most often what we see across the board is the right gear, some skills, but a flawed or incomplete plan. As we say in the flying business, plans are nothing, planning is everything—think through potential issues and ensure you have off-ramps when the unexpected happens. We continue to see injuries and fatalities in recreational activities where people—or their wingmen—don't know when to knock it off.

One final change, and a sad one, is the upcoming retirement of our beloved Barbara Taylor, Executive Editor of this amazing **Combat Edge** magazine, after 37 years of dedicated service at Langley AFB. Take a moment to see Barb's farewell note and reflect on where this vital conduit to our Airmen has been, and what her team has achieved under her leadership.

Spring is here and change is upon us. It's the time of year for spring cleaning, getting back to sports, polishing up your car or boat, or hitting the road on your shiny motorcycle. Take it slow—we've got a lot going on in ACC, and we need you!

# CAF Flight Safety

## The Next Level (Part II)

BY COL. STEVEN G. OWEN

**H**ave you ever been hanging out with your squadron mates, off-duty on a Friday afternoon, and heard a story about flying or maintenance that began with the famous words *“So there I was ...”* Were you the one telling the story? What was the event that you heard about or decided to share? Was it a story about a Large Force Exercise where your 4-ship absolutely crushed the red air but almost had a mid-air due to a block violation? Was it a story about the guy who almost fell off the aircraft while conducting routine maintenance? Was it a story about how you had to notify ground control to call back an aircraft that left the arming area with a streamer still hanging from a bomb rack? There is an old adage that many of the best lessons learned in the Air Force were discussed during a social gathering and scribbled down on a bar napkin. The only problem with the old bar napkin is that it usually rips when you write on it, it's tough to share with the entire community (especially if you spill your beverage on it) and it usually gets thrown away at the end of the evening.

How about on-duty? Have you ever been flying a sortie or working the line and either noticed or personally experienced something that just wasn't right? During my time as a first-tour F-15C pilot, I remember the time when I was completing my first NVG upgrade sortie. My IP set us up for a simple 1 v 1 intercept and called "fight's on." About halfway through the 180 degree "hot-left" turn, I remembered thinking to myself



"why is my jet buffeting?" I made the mistake of relying too much on the NVGs for visual cues, subsequently became spatially disoriented, and ended up at the top of my block in a slow-speed, nose-high attitude. I quickly recovered on the instruments, pressed with the intercept and told my IP what had happened during debrief. As the Squadron Assigned Flight Safety Officer, I shared the story with the rest of the squadron during the Friday roll call.

A common denominator for many of these "lessons learned" is that they rarely reach outside of the squadron heritage room or the local squadron picnic. What if you had the ability to actually share those stories with your entire MDS community and the rest of the Air Force aviation community at large? What if your entire MDS community had a chance to share their lessons learned with you? In the Spring 2017 edition of The Combat Edge, we started a three part series titled "The Next Level." The first part of this series introduced multiple environmental factors described in

the 2015 ACC Strategy, "Securing the High Ground" that drive a significant requirement for our safety programs to adapt and evolve. Many of our potential adversaries are "developing or acquiring Anti-Access and Area Denial (A2/AD) capabilities to challenge our ability to assure freedom of maneuver." Additionally, "rapidly emerging technological breakthroughs could serve as game-changers for both friend and foe." In order to meet the threats posed by this future environment, our aircraft have become increasingly complex. We have slowly moved from substantial quantity with superior technology towards lower aircraft numbers with exquisite technology. On the domestic front, "the US national debt and associated fiscal repercussions, combined with two decades of sustained combat operations have imposed tremendous stress on our Airmen and equipment." If you combine these fiscal realities with reduced inventory and the limited ability to replace a single aircraft, it becomes readily apparent that each airframe within our inventory is truly a national asset. As such, the mission impact of losing a single aircraft outside of a combat environment requires all of us to elevate our aviation mishap prevention to the next level. Part I of this series introduced Military Flight Operations Quality Assurance (MFOQA) as one of three interrelated programs designed to drive mishap rates even lower than they are today. MFOQA utilizes data from aircraft flight data recording systems to track trends in aircraft and aircrew performance. MFOQA provides you, the tactical operator, with the ability to tailor and track specific performance factors or safety trends that matter the most to your MDS.

The focus for this article is the next element of proactive safety: the Airman Safety Action Program (ASAP). ASAP provides an additional method for proactively identifying hazards before a mishap occurs by enabling Airmen to submit lessons learned to the entire Air Force

community through a web-based application (<https://www.usaf-mfoqa.com/>). From a tactical aviator's perspective, think of ASAP as a "virtual bar napkin" (minus the spilled beverage) that allows Airmen to capture lessons learned across multiple MDS and MAJCOMs. For example, ACC flight safety recently received an ASAP submission from one of our F-35 pilots regarding night instrument crosscheck and spatial disorientation:

### *Taken from an actual ASAP submission.*

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

"I was on a 4-ship night OCA-AO sortie attempting to strike targets on an airfield. We had both red air and SAM threats to deal with during the VUL. It was a high illum night with an under cast layer about 15K MSL. Focusing on aircraft sensors while attempting to target a SAM led to extended time looking at my screens, 5-10 seconds. In that time I was in a right hand turn and somehow managed to roll the airplane from about 34 degrees of right bank, left about 135 degrees until I was completely inverted ... my crosscheck began to slow down as I channelized my attention on my sensors. I was looking down too long and did not assess the maneuver as it was happening. Key to preventing this from happening is to have an effective night crosscheck as well as using all available tools to indicate when an unusual attitude is developing."



*Taken from an actual ASAP submission.*

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

“The incident occurred on the final 3K of an IPUG-1 (OBFM). The fight progressed to the floor, and resulted in a stack. During the stack, the horn was momentarily entered and exited. With range opening between myself and the offender, I released G to place lift vector on the adversary to reduce the opening range. I pulled to the limiter once lift vector was set (at 80 degrees of bank), and began reducing range to the offender. Once LOS was again frozen, I attempted to reset lift vector to perpendicular to the horizon but did not properly unload the jet—assaulting multiple limiters at a slow airspeed (94 knots and 80 degrees of bank at 10,930 ft. MSL). The jet departed controlled flight as a result of the control input. I accomplished the first portion of the out-of-control CAPS (controls release + throttle IDLE), and the jet began to recover approximately 9 seconds later. The jet returned to a flyable condition (130 knots, 38 degrees nose low) at 9,680 MSL (approx. 7,200 AGL). A KIO was called during the out-of-control situation, and an RTB was initiated immediately following the event.”



We also received an ASAP submission from a highly experienced F-16 IP regarding high AOA maneuvering:

These are two excellent examples of highly trained and highly capable aviators providing a “bar-napkin” discussion regarding potential hazards during various phases of tactical execution. The difference between these two ASAP submissions and an actual bar napkin is that these lessons can now be shared with F-35 and F-16 squadrons across the CAF instead of only being shared internally within the squadrons. Additionally, these “bar napkins” won’t get thrown away at the end of the evening or end up as a wad of paper in your flight suit after you put it through the wash. Instead, they will remain within the ASAP system and provide additional data points that enable future trend analysis. By connecting the dots associated with each ASAP data point, it becomes possible over time to identify potential hazards that may not have been noticed by a single event. When the data from ASAP can be correlated with associated MFOQA data, the resulting trend analysis becomes even stronger. This enables safety professionals at every level to identify trends for not only a particular squadron, but also an entire base, an entire MDS or the CAF at large. For our MX professionals, keep in mind that ASAP doesn’t just apply to aviators. There are plenty of opportunities to identify threats out on the flight line (or in the back shop) and get the word out when things don’t look right.

I once had a DO who told me to “be a pipe, not a bucket.” By leveraging the technology of ASAP, we can keep safety information flowing throughout our respective communities and identify hazards before they develop into mishaps. Together, ASAP and MFOQA provide a proactive method for identifying WHAT hazards may exist in the air or on the flight line as we execute our mission to deliver combat power to the Joint Force. Part III of this series will look into how we can identify WHY those hazards exist through the Line Operations Safety Audit (LOSA) program.

Until next time ... Fly Safe! ✈

~Grit

# Hypoxia at Altitude

## Over Sub-Saharan Africa

### The Importance of Inter-Professional Communication

BY CAPT. MATTHEW WIMMER

So there I was ... On 19 September 2016, flying on a small civilian-contracted flight over sub-Saharan Africa. We were transiting between remote deployed locations on a medical knowledge exchange mission. The aircraft was a non-pressurizing small air cargo transport plane, a CASA 212 Aviocar, with three Americans on board, along with a crew of three. This is a typical airlift set-up used in the AFRICOM

AOR to transport medical assets and SOCAFRICA operators around Central and Western Africa, especially in locations where short take offs/landings are the norm rather than the exception. The initial trip to our forward deployed location was uneventful, but the return trip warranted scrutiny.

During the return trip, I was seated directly behind the cockpit with an unobscured view of the instruments. After reaching cruising altitude I noticed that we were flying at a

physiologically demanding altitude, unpressurized, without continuous supplemental oxygen. Our cruising altitude for the day was set between FL126 and FL130 and we were approximately 45 minutes into a 1.5 hr flight. It was a clear, sunny day and there were no weather hazards that would mandate climbing to maintain this altitude for any period of time. After a quick check around the cabin I noticed that most of us were quite fatigued and I had started to notice some tingling in my fingers.



Photo by: PH2 Bruce R. Trombecky

The CASA C-212 Aviocar is a turboprop-powered STOL medium transport aircraft designed and built by CASA in Spain for civil and military use.



Using my pulse oximetry equipment from my medical bag I found that the aircrew members (and everyone else in the cabin including the AEW/CV and AEW/DS) were all clinically hypoxic with a partial pressure of Oxygen (SpO2) of approximately 80-82%. The definition of clinical hypoxia is a SpO2 lower than 95%. Compounding the issue was the fact that the aircrew were heavy cigarette smokers which makes the potential clinical effects of hypoxia even more pronounced (carbon monoxide loading, in addition to the reduced partial pressure of ambient oxygen). The latter can also lead to artificially elevated SpO2 readings.

As many of us know, this is historically a set up for aircraft mishaps in the aviation environment. The flight rules governing this type of flight are clearly referenced in the USAF's AFIs. Air Force Instruction 11-202 Volume 3 recommends unpressurized flight no higher than FL100, with only mission essential unpressurized flight between FL100 and FL125 for as short of duration as possible. Of course, the FAA standards are even more restrictive—the upper cap in altitude being only FL120. During night or poor weather operations, this level of hypoxia could be especially debilitating as color vision is lost or degraded and the potential for spatial disorientation rises exponentially. The aircrew were notified of the issue mid-flight and they subsequently started using their on board oxygen, potentially reversing some of their hypoxia. They also descended to a more forgiving altitude. Upon landing I notified the ACC aerospace physiologist from Langley AFB, Major Joseph Teodoro, who discussed the case with the chief of human factors, another aerospace physiologist, at USAFE/AFRICOM. Both agreed that this was a set up for an aircraft mishap and should be addressed with the Air Expeditionary Wing's flight safety officer. A report was then filed and the issue was investigated.

In a strange turn of events, it was discovered that there was a culture of rule breaking within this civilian airlift company and there was likely a lack of physiologic knowledge in the aircrews employed by this company. It was found that there was no specific reason the aircrews were flying as high as they were, weather had not been an issue, and no concerns were voiced from the aircrew about the potential for an aircraft mishap with the level of hypoxia that was documented. As such, the Air Expeditionary Wing discontinued use of the company for USAF personnel movement, the pilots were demoted and returned to the continental United States, and the company was obligated to self-report the incident to the Federal Aviation Administration and Civil Aviation Review Board.

Fortunately, no loss of life or aircraft damage occurred during the timeframe this flight surgeon was deployed because of similar events. What was especially helpful in this case was the support from the USAF flight physiologist's community. They provided quick and insightful guidance on the steps required for the most efficient solution to this unique scenario. This incident certainly underlines the importance of maintaining excellent working relationships with our aerospace medicine brethren and reasserts the importance of trusting your physiologic training, no matter the location or airframe.✈

# RPPA

# LOST LINK



## What do we do NOW?

BY COL. HOUSTON CANTWELL and LT COL ALFRED ROSALES

*Col. Cantwell is currently the 49th Wing Commander at Holloman AFB, the world's largest RPA formal training wing. Lt Col Rosales is assigned to the 49th Wing as the Chief of Safety.*

**E**very remotely piloted aircraft (RPA) utilizes something unique from manned aircraft ... a datalink for basic aircraft control. Although

RPAs are able to fly safely and predictably absent a datalink, this link remains an integral part of the RPA system. No matter how many redundancies or mil-standard encryption techniques are built into

the system, the datalink, the sole communication pipeline to remotely-piloted aircraft, remains vulnerable to interruption. Unfortunately, datalink assurance has received insufficient attention. Improved

documentation and analysis of RPA lost-link events are a necessary next-step in the evolution of RPA operations. This would satisfy three important ends. First, it would reduce the numbers of events by

identifying the trends and capturing causal factors associated with the communication interruptions. Second, it would highlight potential technology deficiencies to shape our future datalink equipment

requirements. Finally, it would play an important role in educating the public and building confidence in RPA operations—highlighting the safe and predictable nature of lost-link events.



Photo by: Airman 1st Class Aaron Montoya

Before going on, a few words regarding what constitutes a lost-link event. Simply put, a lost-link event occurs when the command datalink from the ground control station (GCS) is severed from the aircraft. Typically, the aircraft will continue to fly according to the very last command received by the aircraft while continuing efforts to reacquire this important link. After a specific amount of time, the aircraft will officially declare itself “lost-link” and begin executing its “lost-link profile.” This profile resides in the aircraft’s memory and is continually updated by the pilot during normal

flight operations to ensure the aircraft has a good plan given the untimely loss of communications from the GCS. To mitigate risk, the pilot constantly updates the lost link mission to avoid dynamic weather patterns in the vicinity of the aircraft and restricted operating areas. The mission is useless if it commands the aircraft to fly directly into an emerging thunderstorm or unauthorized area. A typical lost-link mission might have the aircraft fly a circular orbit at medium altitude for 10-to-15 minutes before flying back to home station to be safely recovered by the Launch

and Recovery Element. But, three important questions arise during each lost-link event:

- 1) Was the event caused by human error?
- 2) Where in the datalink chain did the problem occur?
- 3) Did the aircraft correctly fly the lost link flight profile?

The complexities of the global communications networks coupled with the non-intuitive human-machine interfaces within many GCS layouts provide ample opportunities for human error to cause lost-link events. Although pilots may continually adjust the lost link

profile as a risk mitigation measure, the datalink infrastructure includes more than aircrew. Maintenance personnel, communication technicians, and satellite experts make RPA operations a reality, but the mission requires them to be geographically separated by thousands of miles. Due to the complexities of the infrastructure, some of the players are a part of the commercial enterprise and not directly part of the mission as well. Because there are so many hands in the process, it is very reasonable to envision inadvertent datalink interruptions

caused by periodic maintenance on commercial satellite networks or routers positioned at key locations. Within the RPA community, there are stories of construction projects unintentionally severing fiber optic lines that caused multiple RPAs to go lost link worldwide. There is even an unofficial story of a well-intentioned individual wandering into the bowels of a maintenance hangar directed to reset circuit breakers for what they thought powered HVAC equipment only to find out it was connected to satellite equipment resulting in numerous aircraft simultaneously going lost

link. Did any of these stories drive actionable fixes? Did the power of our Air Force Safety investigation system address these findings and match them to recommendations for future success? No it did not. If a mishap or a hazardous situation did not occur during a lost link episode of dozens of RPA in theater, it is unlikely a safety report would be generated. In fact, our Aviation Safety Investigations and Reports publication only requires Airmen to report incidents where the RPA does not execute the pilot’s lost link profile or the pilot permanently loses the ability to control the RPA.

From a span of October of 2006 to October of 2016 during the historic RPA surge, the Air Force Safety Automated System (AFSAS) archived 11 of 1,283 MQ-1 and MQ-9 investigations which identified datalink issues as an official finding resulting in significant aircraft damage or loss. More specifically, this means that less than 0.9 percent of all MQ-1 and MQ-9 mishaps involved an aircraft that did not execute the pilot's lost link plan and resulted in a Class A event. Although these numbers are small, they do not account for the many unreported lost link episodes causing significant disruption to our combat capabilities. Instead of focusing on executing the mission, the majority of the real time mishap prevention efforts during lost link events fall on the shoulders of the air traffic controllers and manned aircrew to execute de-confliction procedures to reduce the likelihood of mid-air collisions. Currently, we do not have a formal mechanism in place to allow our commanders

to address these problems. Our US Air Force safety investigation process has the tools necessary to clearly identify the issues and enable our leadership to define future RPA datalink infrastructure requirements, but intermittent datalink interruptions are currently accepted as a cost of doing business.

Weather has also been known to cause datalink interruptions. Thunderstorms in and around the satellite downlink site can cause aircraft to go lost-link. Large weather systems (i.e. thunderstorms, turbulent winds, etc.) also cause challenges to manned and unmanned medium altitude aircraft. Based on the same AFSAS data mentioned earlier in the article, 40 percent of the datalink related mishaps involved aircraft initiating the lost link profile while aircrew attempted to fly out of turbulent weather systems. In these cases, the crews were unable to maintain or regain command data link and the aircraft was not recoverable. This raises an important

question—is this an aircraft limitation while transiting through challenging weather conditions or a datalink assurance problem requiring more investigation? Since the current RPA community does not identify intermittent datalink interruptions as a reportable incident, it is logical to tie weather to the incident while potentially overlooking a materiel deficiency in the RPA Ku-band SATCOM system. In the future, an RPA cultural shift to improve the datalink infrastructure might lead future SIBs to explore whether or not the Ku-band receiver in the aircraft provided a solid command datalink to the aircraft allowing the RPA crew to maneuver out of the weather.

The United States Air Force stands as the preeminent leader in the development of medium to high-altitude remotely-piloted aircraft.

As momentum gathers towards the incorporation of these aircraft into the US national airspace system, the US Air Force should help lead the creation of US RPA operational



Photo by: Senior Airman Chase Cannon



Photo by: Airman 1st Class Aaron Montoya

policy. While executing millions of hours of medium to high-altitude RPA operations, USAF aviation safety experts have an opportunity to improve datalink reliability and play an important role in shaping the national-level discussion. Records pertaining to lost-link events are an important piece of the puzzle, with detailed documentation of lost-link events going a long way towards building public confidence in RPA operations. Our current picture is incomplete. As of October 2013, the USAF RPA community has exceeded over two million flight hours in support of our nation's defense averaging over 100,000 flights per year. Based on AFSAS data over a 10-year span (2006-2016), the mishap rate for MQ-1 and MQ-9 is less than 0.05 percent for datalink related issues. Since we are not currently reporting all lost link events through the safety channels, this percentage does not account for all

of the datalink issues that caused communications interruptions with the aircraft. Our leaders do not have all the data to continue paving the way to ensure public confidence in these systems.

Mature safety practices applied to manned flight operations have proven fruitful over the years with mishap rates trending lower. The relatively immature nature of remotely-piloted flight operations affords numerous opportunities to apply some of these proven safety practices. Given that RPA operations continue to expand and that informal lost-link analysis has already led to improved reliability, the next logical step is to institute formal procedures to further improve the safety and effectiveness of remotely-piloted aircraft. Detailed documentation of lost-link RPA events will improve reliability and create an irrefutable record of safe and predictable aircraft operations. ✈

**Note:** The Aviation/Airmen Safety Action Program (ASAP) provides an opportunity for all Airmen to identify and report negative trends or hazards that may lead to mishaps. ASAP is an anonymous self-reporting system that encourages voluntary reporting of unintentional errors, hazardous situations and high-risk activities. ASAP is available to report any identified hazard that may not be listed by the mandatory reporting requirements. Check out the website at: (<https://www.usaf-mfoqua.com/>). Also, a related recent example is Report ID #54: MQ-9-"Lost Link due to WOC changed assigned KU freq." ~ Ed.

# 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.*

ASAP #121 F-16C/D Instrument Failure in the Weather/Unusual Attitude Recovery.

**Description:** At the time of the occurrence I was number 4 on a RATR on ILS final for runway 23 at [Base #1]. MMC restarts occurred rapidly approximately 3 restarts in 5 seconds followed by an MMC failure with corresponding PFL. The restarts were accompanied by a corresponding PFL, HUD power loss, MFD power loss, Main ADI power loss with accompanying OFF flag, and eventual HSI power loss. Because I could no longer safely fly the approach in the wx I elected to perform a missed approach. Relying only on my standby ADI, I began a climb and confirmed a positive climb. I elected to not retract my gear, not in accordance with the TO in order to maintain separation from the aircraft in front of me who would also need to climb with me. During the climb as I began to break out of the wx but still not completely VMC I began to perform other tasks in the cockpit at the expense of my aircraft control. I relied on my (poor and inaccurate) visual cues from clear wx appearing above, and a false sense of a positive climb from my Main ADI (which had frozen) not my standby ADI which was still operating. I began discussing on the radio with the other flight members what indications I was receiving so we could devise a game plan for my next approach and recovery. Subsequently, the aircraft began a descent unrecognized by myself. As I was talking on the radio, completely unaware that I was descending, I noticed my altimeter needle spinning rapidly and this immediately alerted me to something being wrong. I crosschecked my standby ADI which showed my jet in greater than 90 degrees of bank and approximately 30+ degrees NL. I immediately performed an unusual attitude recovery, snapping the aircraft wings level, advancing the power, and beginning a climb above the weather. After reviewing the video from the incident the lowest the RALT displayed during the recovery was approximately 2,000' AGL. During the recovery the airspeed limitation on the landing gear was exceeded. After recovering above the wx, partial systems began to recover. The HSI regained power but remained frozen with no valid heading indications; however, TACAN bearing and range appeared to be working normally. After approximately another 10 minutes airborne the MMC, EGI, and ADI all began functioning properly. The EGI appeared to realign over that time period with pitch ladders returning to the HUD, and eventually the FPM returning to the HUD as well (indicating the EGI had realigned with no further pilot input). Additionally, the HUD, MFDS, and HSI returned to what appeared to be full capability. Above the wx, #3 in the formation rejoined with me after coordinating with ATC and was able to lead me back to final on a formation approach. I landed from a formation approach and single ship landing (once below the wx) with NSTR.

**Submitter Suggestions:** Emphasizing the need for pilots to write up aircraft for standby ADIs that are notoriously unreliable in the F-16 community. Also, for pilots to emphasize the need to recage standby ADIs on descent checks especially after a sortie involving aggressive maneuvering in which the ADI may not be aligned with actual aircraft attitude. Lastly, emphasizing the need for pilots to correctly transition to instruments on a missed approach in the weather, and the need to emphasize a proper crosscheck when something non standard such as near total instrument failure happens in the weather.

**Resolution:** Thank you for your great ASAP submission highlighting the risks and importance of executing proper procedures following critical malfunctions that you reiterated in this incident. This report will be closed and tracked for trend analysis. It is great you were able to fill out a safety report. Please encourage other pilots to use the ASAP reporting system in order for us to determine trends across the community.

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



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



## It's A Marathon ... NOT A SPRINT!

The latest operational inspection for your wing finally finished up last week. After an intense week of early morning takeoffs and late afternoon inspections you have been working around the house over the weekend to get caught up on a few chores. On Monday there will be two weeks of night flying with really late takeoffs because of the airspace limitations. Your transition from early morning flights to the night train will be almost nonexistent because you are working to finish all of the chores around the house you didn't get done last week. You wake up early on Monday after getting just enough sleep that you are not totally exhausted. Next you make the drive to the squadron and start mission planning for a flight later that night. You grab a cup of coffee to give you that extra burst of energy to finish mission planning. You have flown this route many times and you know it like the back of your hand. After gathering all of the mission

materials and getting the brief ready you realize you missed a critical piece of mission planning data for the low level route ... then the thought goes through your mind, "What else did I forget?"

In a time when Airmen are being asked to do more with less, it is imperative we continue to conduct operations safely. Sometimes this means that we may be trying to push the limits too far in a training scenario. If we are behind the jet before we even start the motors, then it is time to take a step back and honestly evaluate the situation. Training flights should be used to hone our skills as aviators and not simply go through the motions. There are many crew resource management tools available to help figure out what level of risk you are taking on a flight. Employing and training in combat aircraft is not a sprint, it's a marathon. Know when it is time to take a breather or better yet, know when to call Knock It Off!



# Don't Drop Your Focus

BY MASTER SGT. JEFFREY STULL

Generating aircraft to project air power is the mission of aircraft maintainers. Maintaining mission capable aircraft is a challenging task. Aircraft maintenance can sometimes require maintainers to conduct repetitive tasks. Repetitive tasks can wear on our ability to focus. Focus on each step of every task is crucial to getting the job done properly and avoiding a potentially catastrophic mishap. During an engine change on an aircraft, loss of focus led to a costly mishap.

On a fall evening, four maintainers were required to remove an engine from an aircraft. This is a task that the team members completed numerous times in the past without incident. The team affixed the engine removal kit and began to push the engine out of the aircraft. The maintenance team lost focus and did not notice that the safety pin that keeps the engine from being pushed off the rail that supports the engine was missing. The team pushed the engine and expected it to stop at the pin. The engine did eventually stop after falling from the trailer. This was a costly mistake. Luckily no one was hurt, but this loss of focus cost the Air Force nearly \$400,000.

Another repetitive maintenance task involves the reconfiguration of aircraft for the next flight. This can include the removal of external wing fuel tanks. If the next day's flying requires eight lines, reconfigurations could include 16 fuel tank removals. If the maintainers aren't focused, something can go horribly wrong. For example, a fuel tank removal crew was created to conduct reconfigurations for several aircraft for the next day. They had already completed several fuel tank removals and were moving swiftly through the aircraft on their list. They approached their next aircraft and put their tank dolly in place under the external fuel tank. Next, they secured the tank dolly straps to the tank and removed the rear nut that secured the aft portion of the tank to the aircraft pylon. The last step is to rotate the manual release handle on the pylon to "drop" the tank. It was at this step the team's loss of focus reared its ugly head. You see, they forgot to check to see if the tank was empty. It was not. So when they rotated the manual release handle, the weight of 600 gallons of fuel came to bear on the tank dolly. With the tank released from the aircraft, the tank dolly was crushed and the tank was damaged beyond repair. There were no injuries with this mishap; however, the Air Force incurred a \$65,000 loss.

Aircraft maintenance requires meticulous detail for each and every step. Do not lose focus even for a second. The consequences could be disastrous. Make sure your **Gear** is serviceable to do the job. Ensure you have a **Plan** to execute the task safely. And definitely do not attempt the task unless you have the **Skills** to complete the job correctly. These three tenets of safety will help you stay focused and contribute to the mission of generating combat air power.

Photo by: Senior Airman Kayla Newman



# WARNING SIGNS

BY MASTER SGT. DAVID INGRAM



Have you ever seen signs such as these pictured, on your installation? These signs serve two purposes: one is to ensure personnel are not unnecessarily exposed to the harmful effects of explosives in the event of an accident and the other is to ensure Department of Defense explosives safety criteria are met.

Only mission essential personnel are allowed to enter these areas (e.g. maintainers, emergency responders, and quality assurance). Those individuals have a duty or need to be present inside explosives clear zones. Non-essential personnel are prohibited from entering these areas. Most likely, you will encounter these postings along jogging trails or base perimeter roads that encroach explosive clear zones. Heed the warning if you come across these clearly posted areas. Contact your weapons safety staff if you have questions about specific criteria or signage on your installation.

## Aircrew Safety Awards of Distinction

**Crew of Peach 32** – 330 CTS, 461 ACW, Robins AFB GA (February 2017)  
**Lt Col Richard J. Wageman, Capt Kurtis C. Semanko** – 9 ATKS, 49 WG, Holloman AFB NM (March 2017)  
**Capt Matthew W. Jensen, SrA Colt S. Poe** – 26 WPS, 57 WG, Nellis AFB NV (April 2017)

## Crew Chief Safety Awards of Distinction

**A1C Cody M. Hildebrand** – 20 AMXS, 20 FW, Shaw AFB SC (February 2017)  
**SSgt Winston M. Edwards** – 723 AMXS, 23 WG, Moody AFB GA (March 2017)  
**TSgt Jared D. Thompson** – 386 EMXS, 386 AEW, Ali Al Salem AB, Kuwait (April 2017)

## Flight Line Safety Awards of Distinction

**TSgt Ian D. Regan, TSgt Chance C. Cole** – 49 AMXS, 49 WG, Holloman AFB NM (March 2017)  
**A1C Tyrone O. Brooks** – 4 EMS, 4 FW, Seymour Johnson AFB NC (April 2017)

## Occupational Safety Awards of Distinction

**TSgt Jesus S. Arias, Jr.** – 380 AEW, Al Dhafra AB, UAE (March 2017)  
**SrA Anthony D. Martin** – 355 AMXS, 355 FW, Davis-Monthan AFB AZ (April 2017)

## Pilot Safety Awards of Distinction

**Maj Tanner Gibson** – 16 WPS, 57 WG, Nellis AFB NV (February 2017)  
**Capt Leonard J. Spigiel** – 99 ERS, 380 AEW, Al Dhafra AB, UAE (March 2017)  
**Capt Dominic M. Collins** – 79 EFS, 455 AEW, Bagram AB, Afghanistan (April 2017)

## Unit Safety Awards of Distinction

**557 ERHS** – 332 AEW, Muwaffaq Salti AB, Jordan (February 2017)  
**Team AGE** – 386 EMXS, 386 AEW, Ali Al Salem AB, Kuwait (March 2017)  
**386 EOSS** – 386 AEW, Ali Al Salem AB, Kuwait (April 2017)

## Weapons Safety Awards of Distinction

**9 CES Standby Team** – 9 RW, Beale AFB CA (February 2017)  
**TSgt Lanny T. Jones** – 332 EMXS, 332 AEW, Diyarbakir AB, Turkey (March 2017)  
**SSgt Ronel Rivera-Santiago** – 355 AMXS, 355 FW, Davis-Monthan AFB AZ (April 2017)

## Flight Safety



**Maj Seth E. Paulsen, 438 AEW, Kabul, Afghanistan.** Maj Paulsen, as sole flight safety advisor to AAF Headquarters and 438 AEW, has continued to develop and enhance the safety programs for over 8,000 Afghan Airmen and 550 US and Coalition advisors. He provided essential assistance to Director, AAF Headquarters Safety, through building requirements for all Afghan safety organizations and validating over 10,200 items across 16 unit identification codes, acquiring over \$200,000 in key assets for current and future safety programs. While expanding advising duties to Kabul Wing Safety office, Maj Paulsen mentored the Kabul Wing Chief of Safety about critical issues regarding civilian passenger movement on aprons and aircraft parking plan layout, resulting in safe movement of personnel during active taxiway operations and resulting in increased taxiing clearances. His keen

judgment, personal expertise, and exhaustive efforts were invaluable to the AAF's Investigation Board's analysis during four separate MI-17 deliberations, and final results. His total dedication and high degree of knowledge assisted the AAF Board to analyze critical components resulting in AAF's findings and corrective actions to prevent future mishaps. Maj Paulsen additionally oversaw and directed the 438 AEW flight safety program, encompassing over 60 US and Coalition pilot advisors from five aircraft variants and five flying squadrons. His dedication and impressive resourcefulness was instrumental while executing more than 2,000 flight hours resulting in zero mishaps from Kabul Wing.

## Occupational Safety



**Mr. Brad Fisher, 9 MSG, 9 RW, Beale AFB CA.** Mr. Fisher performed the last 14 spot inspections at the many Support Division locations with zero discrepancies found. He briefed Support Division personnel about inclement weather risk which inspired vigilance for the CAF and all the holiday periods during the quarter. He has re-energized the High Risk activity program by briefing two Support Division personnel on ballooning and snow skiing risk which fostered physical and mental readiness. He has spot checked and enforced the seat belt program by randomly inspecting 45 motorists which insured 100 percent compliance with Beale Safety. Performed just in time ORM risk assessment and annotated a Transient Alert mishap and articulated details to the Director and also rectified the error.

Mr. Fisher is a well trained and certified Green Belt which he used to eliminate excess motion and cut a HAZMART issue process in half which enhanced mission and customer satisfaction. A key factor in collaborating with Wing Safety and the Federal Railroad Administration to inspect the 10-mile Beale Rail Road system and authored the ORM risk assessment to correct discrepancies. Conducts periodic housekeeping inspections to ensure work centers are hazard free. U-2 crash assets with eight flatbed trucks and salvaged assets for investigation with zero mishaps were recovered. With 110 personnel assigned, the Support Division only had one mishap report submitted, and only two for the year. Mr. Fisher has outstanding initiative. He trained eight new personnel on the Lock-Out/tag-Out program.

## Weapons Safety



**TSgt Robert Cash II, 332 AEW, Muwaffaq Salti AB, Jordan.** TSgt Cash conducted three inspections, reviewed five operating instructions, five explosive facility licenses, and identified 18 critical deficiencies. He worked with two Commanders to ensure they understood the guidance and assisted in providing protection equivalent to PTR distance from explosives locations for over 600 Airmen. He prevented 15 QD violations and presented the AEW Commander with different COA's outlining the severity of risk associated with each explosive operation and the appropriate approval level for risk acceptance. TSgt Cash was vital in the bed down of a new MDS. His creativity allowed him to complete 16 explosive site plans, increasing the NEW to 5,000 lbs. per aircraft. In preparation

of moving from expeditionary to enduring operations, TSgt Cash authored an additional site plan allowing the increase of the authorized explosive area for two ERS's. Additionally and vital to CENTCOMs mission, TSgt Cash forward deployed in order to compose a time sensitive and critical explosive risk assessment; while there he initiated a change to the installations primary explosive route which decreased munitions delivery time by seven minutes, his presence was crucial to upcoming operations and allowed for a seamless stand-up of the newly assigned aircraft, and his efforts enabled an Expeditionary Fighter Squadron to be FMC within 15 hours of arrival.

# Another Door Opens

I was probably focusing on the next 37 days or so when I first drove through Langley's main gate many years ago; not saying goodbye ... 37 years later. When I did focus on it, the word "bittersweet" kept coming to mind, so I Googled it.

It truly describes my career over the years as it's been my pleasure (most days) and privilege to work here at Langley all these years. I started my government career as a clerk/typist in the War Readiness Spares Kit Branch, and worked my way up to bring it to a close as the Executive Editor for Air Combat Command's premier safety magazine ... "The Combat Edge." Who would've thought? When I was promoted into this job, the magazine was a monthly, 32 page, 4-color magazine then known as "TAC Attack" which later went to bi-monthly, and is now a quarterly, 40-page, two-in-one magazine ... The Combat Edge that now features a flip side ... "Over the Edge." To me, that in itself is an amazing achievement, and I'm glad to have been a part of it!

As for my career and family, the time has come for a change in venue. I owe God, my family, the Air Force, and all of you a debt of gratitude for making my tenure here among the most personally and professionally rewarding experiences of my life. You've taught me a great deal, and I'm finding that it isn't easy to leave so many good people. From my first boss, Capt Jeffrey Rutch to my last two, Mr. Dan Surowitz

and Col Robert Trsek, I say thank you! Lest I forget those of you in between that made a major impact on my life/career: Lt Col Tony Komatz (former editor of The Combat Edge), Col (Dr.) Al Marshall and Col Lawrence Nixon (both former Directors of Safety). You all played a significant/momentous role in the success of my career, and for that, you will always have a place in my heart.

Whew! This is it, it has been an experience of a lifetime, but the time has come. Ian Fleming, author of the James Bond series of books once said, "Never say 'no' to adventures. Always say

'yes', otherwise you'll lead a very dull life." So I'm saying "Yes," and as I embark on the next phase of my life, I will without a doubt treasure the memories of this place--and each and every one of you I've had the distinct pleasure to work with and befriend.

For those of you I leave behind in the world of safety, always remember: stay safe, and while you're at it ... don't forget to Check 3 (most of you know what I mean)!

*Barbara Taylor*



## Mishap Statistics Scoreboard

FY17 Flight <span style="float: right;">As of 31 Mar 2017</span>			
	Fatal	Aircraft Destroyed	Class A Aircraft Damage
1 AF			
9 AF			
12 AF			
25 AF			
USAFWC			
ANG (ACC-gained)			
AFRC (ACC-gained)			

FY17 Occupational <span style="float: right;">As of 31 Mar 2017</span>			
	Class A Fatal	Class A Non-Fatal	Class B
AFCENT	0	0	1
12 AF		0	0
USAFWC	0	0	1
25 AF		0	1
9 AF		0	1

FY17 Weapons <span style="float: right;">As of 31 Mar 2017</span>		
	Class A	Class B
9 AF	0	0
12 AF	0	0
USAFWC	0	0

### 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 \$50,000 and \$500,000  
 (Class Description Effective October 1, 2009)

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

 = Fatal  = Fatal due to misconduct

## Flight Notes

At the midpoint of FY17, ACC is on track to have a solid year for aviation safety and perhaps even the best historic lows of FY14. In fact, for the first time in over four years, ACC had zero Class A aviation mishaps during a quarter. Your professionalism and discipline as aircrew and maintainers, along with keen risk management during your missions, delivered this result. More important than a record setting mishap rate, your hard work and safety-minded attitudes kept our Airmen safe and jets flying to deliver our combat capability. We have already suffered a loss in the early part of 3QFY17 but you are making FY17 a great year—proving mishap prevention and devastating combat capability are a perfect match. Fly safe!

## Occupational Notes

The second quarter of this fiscal year proved very challenging for ACC's Airmen. The command suffered its first on-duty fatality in seven years, bringing ACC's occupational safety fatalities to six for this fiscal year, which equals our total for all of 2016. Unfortunately, our Class B mishaps have increased as well; we had zero Class B's last year, compared to four already this fiscal year. In all fairness, two of these tragic mishaps resulted through no fault of the actions of our Airmen. Overall trends show that rushing to complete tasks, deviations from established policy, and complacency were major factors in these incidences. We urge commanders and supervisors to stress sound risk management principles, following established guidance, and to correct deviations to established policy. Let's do all we can to resist normalization of deviation in an effort to stop this upward trend and prevent any more tragedies.

## Weapons Notes

We experienced a total of seven classed events in the second quarter of FY17 with an increase over the same quarter in FY16 with five each and FY15 with two each. One Class C was an ALS jammed during 20MM processing (equipment). Three Class D's were: a TGM-65 radome cracked (unknown), a CATM-88 internal damage during reassembly (T.O. violation), a CBU-103 dropped during loading operation (T.O. violation). Lastly, there were three Class E property damage events; 16 each. M-156 WHD rockets exceeded drop distance (complacency), a BDU-33 dropped and discharged (complacency), and a DATM-120 dropped during safe training (complacency). Five of the seven incidents demonstrated inattention to detail and complacency, and four of them resulted in dropped munitions. Let us make more of an effort to reverse this negative trend.

### Symbols for Mishap Aircraft



OVER <sup>the</sup>  
**Edge**  
MAGAZINE



**The Call!**





SECRETARY OF DEFENSE  
1000 DEFENSE PENTAGON  
WASHINGTON, DC 20301-1000

APR 14 2017

SUBJECT: Preserving the Force

From Memorial Day through Labor Day, many of us will face increased exposure to hazards at home and on the job. Warm weather and longer days combine for greater opportunities to travel, play sports, and enjoy recreational activities of every kind. As leaders, we must prepare ourselves and engage our people to ensure we exercise sound judgment and focused leadership to lessen the vulnerability of our uniformed and civilian workforce to unique summertime hazards. One loss is too many. The preservation of our force is a national security imperative.

While the actions you took last year resulted in fewer losses than the year before, we still lost 59 noble warriors to a variety of fatal mishaps, primarily motor vehicle crashes and water-related activities. Therefore, I challenge you to build upon your excellent efforts from last year to continue this downward trend. To safely enjoy an active season this summer, each of us must learn and heed those lessons painfully gleaned from past mishaps. The personal use of known best practices such as proper diet and sleep hygiene, responsible use of alcohol, regular physical exercise, and driving without distraction will help ensure all are prepared to tackle the critical work of defending the Nation. Uniformed and civilian personnel alike must leverage every available tool to prevent injuries as well as the loss of valuable material and equipment.

The opportunity to lead this Department is humbling, and I am truly honored to serve the world's finest military, civilian personnel, and their families. Thank you for your selfless service to the Nation and enjoy a safe and healthy summer season!

*John Mattis*

### ✓3 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, adjust an area to mitigate the hazard, especially the plan. Check 3 allows you to have a quick mental method to assess any activity.

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OVER the  
**Edge**  
MAGAZINE

**Check Three**  
*in all you do.*

# Situational Awareness

BY CAPT. RAYMOND E. ROESSLER  
(Reprinted from TCE)

## It's Not Just for Aircrews

Situational Awareness (commonly referred to as "SA") is a term heard mainly in the realm of pilots or flight surgeons. The cockpit of an aircraft represents an aircrew's most important

SA environment. Loss of SA in the cockpit is a serious human factor issue and can be fatal. But what if you aren't a pilot and have never seen a cockpit? Many people may not know that loss of SA can affect everyone and all areas of safety (flight, ground, and weapons). Loss of SA can be equally as dangerous for non-aviators as it is for fliers. The consequences of losing SA are never pleasant and can happen to anyone—at any time. Let me explain.

Put quite simply, SA can best be defined as a cognitive comprehension of your environment. A loss of SA is disorientation of your points of reference. You may find yourself daydreaming or thinking about something else, when your mind and/or motor functions should be doing something totally different. Has the person behind you at a traffic light ever "reminded" you that the light just turned green by honking their horn? You just lost your SA for a moment,

and they politely helped you find it.

A momentary loss of SA is all you need for its wicked curse to begin wreaking havoc. Weaving off the paved surface of a curvy highway because you were thinking about yesterday's problems at work is not the answer! Your SA, or loss thereof, can affect others around you. For example, a person operating a forklift loaded with live munitions can quickly cause a disaster, unless the driver remains totally

focused on the task at hand. Now, further complicate the task by adding some environmental conditions such as snow and ice on the road surface, extreme heat, thunderstorms, etc. It soon becomes clear how your environment affects your SA. Ultimately, the primary responsibility for maintaining SA rests with the individual performing the task.

Unique taskings, such as mission transfers and base closures, will offer

Air Force members ample opportunities to excel; it is critical that each of us take the extra minute to do our jobs safely the first time. We work in a potentially dangerous environment of jet noise, explosives, and severe weather conditions; it's up to each one of us to make it a safer place for all of us. Think about situation awareness ... don't let distractions do your thinking for you. It could be the difference between a little time and a lifetime. ✈



# STRIKE TWO

BY COL. ROBERT B. TRSEK

**S**ir, aren't you a little old for that? It was a common question, and it usually came with an inquisitive look, as I hung my helmet on a mirror and stepped off my ZX-10R in front of the Base Exchange. I'd normally laugh and thank them for their compliments on the bike that always followed, but then I started to think about it—am I too old for this?





back and forth in front of me. I blinked and opened my eyes to find a bumper had replaced the sky. Odd, I thought, that shouldn't be there. Wow my head hurts. Wait a minute, where's my bike? I sat up and leaned on the bumper conveniently at my back, now looking through the intersection at my bike which was just then falling over, having shot out from under me, sailed through the gauntlet of traffic unscathed like a Wile E. Coyote and Roadrunner cartoon, propelled by the car that hit me from behind. Two cars back was a man still having a heart attack, who lost control of his vehicle due to his cardiovascular

distraction. He of course had rammed the car behind me, resulting in a tap-tap-rocket of my bike farther than I thought a bike could go without a rider. My DOT helmet was cracked, but my skull wasn't, and I lived to ride another day. **Strike 1.** Bikes don't like to sit in the garage, and any rider will tell you they occasionally *call you* to go out and play. Outside Columbus were some nice winding roads through woods, and the fall was a great time to enjoy the cool weather and autumn colors, so a few of us took our bikes out for a spin. Halfway through the trip we stopped to get a bite, and I remarked to my friend that his CBR600F2 was gorgeous, a piece of art sitting next to my Interceptor. "You want to ride it back?" he asked, innocently enough. "Todd ..." I said, "There is a fine line between trust and stupid," altering a line from *This is Spinal Tap*. He laughed and I said, "Sure, I'll give it a shot." As we wound back

through the woods I could feel the difference between this new bike and mine. It was very responsive, nimble, solid acceleration, and solid ... wait; here comes a curve. Back off the gas, lean in, nope not enough, light on the rear brake, lean more, nope, wow I came into this too fast, not going to make it. Stand it up, hard on both brakes. Holy cow these brakes are NEW. I locked up the bike just in time to depart the road anyway, into a downward sloping hill, thankfully grassy, unthankfully culminating in a barbwire fence. Flipping through the top-side mirror as I laid down the bike, I rolled a couple times and stood up like a gymnast finishing a routine, inches from the barbed wire, but there was no applause. The score was one CBR with grass in every orifice, a humbled but wiser motorcycle rider, some cracked fiberglass but no cracked ribs, and one unhappy former friend. **Strike 2.**

I remember during college when some active duty Captains came to our ROTC unit to talk to us about their careers. I remember thinking "Man, these guys are OLD." I also remember getting to my first flying unit and looking at the Lt Col SQ/CC and thinking—"Now THAT guy is old" and of course any Colonel you'd see might as well be a dinosaur, ancient, but they sure did have great parking spots. So as a young dinosaur, walking from my great parking spot to the BX, I thought about

my riding over the years and whether or not I should still be sitting on 1000 cc's of bike. I started riding at The Ohio State University, while getting my commercial pilot's license. Ohio State has their own airport about 10 miles from campus, and my 1985 VFR750 Interceptor was my way of getting back and forth, even during the winter ... in Ohio ... which is a great place to learn to ride a motorcycle unless your rear rotor is in the shop for turning but you still have flight lessons to get to. We

make interesting decisions as young adults, and getting to class seemed more important than having a rear brake at the time—but despite my bad decisions I survived several winters on my bike. Fast forward to an innocent trip to downtown Columbus, time for an annual visit to the DMV—yes there was a time before the internet and everything couldn't be done from your phone. I was sitting at a red light, four way intersection, staring up at the light waiting for it to turn green, as cars passed



Fort Walton Beach was a great place to own a motorcycle, with lots of summer weather and Destin to explore. Sunday mornings were my favorite, with the church schedules and Saturday night hangovers leaving the streets pretty empty. I had my own CBR by then, and was well past the “let’s see what this can do” phase that tempts young riders with new power at their fingertips. In the flying business we know this can actually be the most dangerous period for man and machine, where we’ve lost some healthy respect for power, maybe even feel like

we’ve mastered our steed—after all, I was experienced now, a safe mature rider. The roads in Fort Walton Beach disagreed with me. You see, the concrete in many of the streets there used crushed seashells in their mix, and while seashells look great in your Aunt’s bathroom, they are pretty slick under the few centimeters of rubber that actually have contact with the road on a motorcycle. On more than one occasion either sand or seashells conspired to let gravity make its mark on me and my bike, but I managed to elude **Strike 3** several times before selling the bike.

You can take a rider off a bike but you can’t take the bike out of the rider. It would be a long time before I bought another motorcycle, but it was a big one. There weren’t many bikes to be found in South Korea, but this ZX-10R had a beautiful custom paint job, low miles and rave reviews as the 2005 superbike of the year. Oh, and first gear would get you to almost 100 mph if you wanted, so that’s a good feature, or would be, if it didn’t have even more gears, or Osan Air Base didn’t have a posted speed limit of 35 kilometers per hour in most places. Just 264 kph less than the

ZX-10s you see on YouTube, where the speedometer and apparently your will to live both stop counting. I rode my bike for two frustrating years in Korea, frustrating for me and the bike, which almost never made it out of second gear, and it *wanted* to get out of second gear. I absolutely couldn’t wait to get my bike back to the US, with real roads, where it was legal to ride on the highway, and I could finally enjoy my ride. As luck would have it, I would be the next Director of Safety for ACC—no problem, it will be good to have a rider in my position, showing responsible behavior on an often abused, even scorned, mode of travel. Two years of frustrating riding before coming home to the US, but no **Strike 3**.

Now, sitting in my office, I have my bike up for sale. It’s not what I imagined or wanted, but every day I come to work I read about the mishaps across our command. I think about my father who was killed in a car accident by the *other guy*, leaving our family behind, and our Airmen being scraped off the road due to their own reckless behavior or an inattentive driver taking their life from them. You see, motorcycles are safe. Responsible motorcycle riders are extremely attentive, cautious, head-on-a-swivel paranoid even, because they have to be—they are vulnerable. The unsafe drivers are the ones in the steel cage, taking selfies, eating a Big Mac or texting their pookie, who aren’t worried about what rubbing up against a motorcycle will do to them, because they’ll be fine. They aren’t looking for motorcycles because they are looking

for cars—if they are looking at all. Reckless riders are a problem however, where willful non-compliance made up for 63 percent of all fatal motorcycle mishaps in the Air Force from 2009 to 2013. Of those fatalities, almost half of those were due to speed. If you have all the right gear, all the required training, and still want to kill yourself, you can, and you don’t have to get out of first gear to do it. For the rest of us, the responsible riders, the threat is the *other guy*. The guy that doesn’t see you, the guy that wants to teach you a lesson, the guy that sees you but thinks you can brake like a car—they’re everywhere. Cars pretty much all look the same, but take a moment to see the people that get out of those cars in the parking lot downtown. The old, the young, the terminally distracted texters, the cardiovascular-challenged. These are your peers on the road. You entrust your life to *them*, because you are vulnerable as a rider.

I live on Langley AFB now, and my drive to work is about 44 seconds on my bike. Sometimes I’m wondering if I’ll ever see second gear again, but most of the time I hear myself asking, “Who is trying to kill me now, who is trying to kill me now—what about *now*?” I’m not too old to ride, and I’ll always have that addiction in my head, even as a dinosaur. I’m sure to get some hate mail for painting such a grim picture, but you have to see the

whole picture before you can comment, and I have a much better view than I did sitting at that four-way intersection. You might have to have a few close calls yourself to make it real to you—and if so, I hope you survive those lessons intact. For me, when riding wasn’t fun anymore, and I wasn’t willing to trust the *other guy* to keep me alive, it was time to sell—before **Strike 3**, you’re out.

For a qualitative analysis of Air Force Motorcycle Fatalities, see “Why Riders Die” in our Spring 2014 edition of *The Combat Edge* at <http://www.acc.af.mil/Portals/92/Docs/AFD-140228-017.pdf>



For a great, short book full of personal lessons on motorcycle safety, try *Live to Ride* by Jean Bartlow; our shared experiences tell me what I’ve seen on the street is pretty common.✦

# The Call!

BY MR. RODNEY ROBINSON

*Now, before you get too far into this story, I want you to realize that Halle Berry is not in this one.*

I remember the day like it was yesterday; the day a father does not want to have. It was a Thursday afternoon and I had just returned from lunch and was working a project for my boss when the phone rang! I remember this as clear as day, "Dad I'm OK, Dad I'm OK" my throat got tight and I said, "Hannah, Hannah what happened?" My mind started to run wild ... what happened, is the house on fire, did something happen at the school, or was it worse? Of course I think we all know what happened next; she started to cry and told me again, "Dad I'm OK."

Now I'm no brain surgeon; however, I could tell she was very upset so I asked her to take a deep breath and tell me what happen, and this time she was able to get a few words out explaining what really happened—an accident. My first concern was whether or not she was OK, and if anyone else was in the accident, they too were OK. Fortunately, it turned out to be a single car accident, with no injuries, and little property damage. Keep in mind, a little property damage is relative, but in this case, it involved three mailboxes and a tree—the tree was not damaged. Unfortunately, the car sustained major damage. But the best news was that my daughter was not injured at all! One good thing Hannah has picked up from both her mother and I was the use of seatbelts. I have always spoken to all of my kids about the use of seatbelts, and in this case it provided the much needed protection.

Now for the rest of the story ... As you can guess, my daughter told me she was not on her phone and that she was paying attention. I guess she wanted me to believe that the car had a mind of its own. To paint a better picture, my daughter was driving on a two-lane, undivided, back road and was in the process of entering a slight left hand curve. Unfortunately, she did not turn left as the road did and ended up driving off the road and into a three-foot ditch. She was able to steer the car back onto the road for a second before the car pulled her back into the ditch a little further up the road. She went through the ditch and across a gravel driveway before she struck a tree head on.

The front of the car was pushed in so it now looked like a V in the front. Hood pushed up, window broke where the mailbox hit it, front fenders crumpled, and the front passenger tire was pushed back. When I arrived at the scene, the police were already on site. Since no one was injured, there was not as much commotion at the accident scene. I asked the police if I could drive the vehicle home since I only live a mile away and they said that was OK if I could get it started. I did have to change a tire first, but I was able to drive the car home.

As I look back at this accident, I reflect on a few things.

- Seatbelts DO save lives and CAN reduce injuries,
- Don't take your eyes off the road ... not even for a second, and
- Things can be replaced, but lives cannot! 🚗



As I take a look back, I can see how GPS (Gear, Plan, Skills) fits into this mishap:

**Gear:** The car was operational with no mechanical problems; tires were new, and the front window did not have cracks in it.

**Plan:** She had a plan of driving from home to a local elementary school where she attends a mentoring class.

**Skills:** This is where she fell short. She had been driving for a little over a year and more than likely overestimated her ability.

*Anything can happen, at any time, and to anyone. It's up to us to Check 3 in everything we do and be ready!*



Technology allows us to make phone calls, dictate texts or emails and update social media while driving—all actions that are proven to increase crash risk. The National Safety Council observes April as Distracted Driving Awareness Month to draw attention to this epidemic. NSC wants to empower you to put safety first and Just Drive (at all times.)

Many distractions exist while driving, but cell phones are a top distraction because so many drivers use them for long periods of time each day. Almost everyone has seen a driver distracted by a cell phone, but when you are the one distracted, you often don't realize that driver is you.

New technology in vehicles is causing us to become more distracted behind the wheel than ever before. Fifty-three percent of drivers believe if manufacturers put "infotainment" dashboards and hands-free technology in vehicles, they must be safe. And, with some state laws focusing on handheld bans, many drivers honestly believe they are making the safe choice by using a hands-free device. But in fact, these technologies distract our brains even long after you've used them.

**Multitasking is a myth.** Driving and cell phone conversations both require a great deal of thought. When doing them at the same time, your brain is unable to do either well. For example, it's nearly impossible to read a book and have a phone conversation. While driving, this often results in crashes due to delayed braking times and not seeing traffic signals.

**Cell phone crashes are under-reported.** We know cell phone-related car crashes are a problem. We just don't know how big the problem is. Unfortunately, no breathalyzer-like test exists for cell phone use behind the wheel and drivers in crashes are often reluctant to admit use. This creates a huge gap in the data.

**No Safe Way to Use a Cell Phone and Drive.** Even when talking hands-free, drivers can miss seeing up to half of what's around them because they are engaged in a cell phone conversation. For the first time in nearly a decade, preliminary data from the National Safety Council estimates that as many as 40,000 people died in motor vehicle crashes in 2016. That marks a 6% increase over 2015 and a 14% increase over 2014—the most dramatic two-year escalation in 53 years.

An estimated 4.6 million roadway users were injured

seriously enough to require medical attention, a 7% increase over 2015. This means 2016 may have been the deadliest year on the roads since 2007. Estimated cost to society was \$432 billion.

**NSC Survey Offers Insight into What Drivers are Doing.** An NSC survey released Feb. 15 provides a glimpse at the risky things drivers are doing. Although 83% of drivers surveyed believe driving is a safety concern, a startling number say they are comfortable speeding (64%); texting manually or through voice controls (47%); driving while impaired by marijuana (13%) or driving after they feel they've had too much alcohol (10%).

Motor vehicle fatality estimates are subject to slight increases and decreases as data mature. NSC uses data from the National Center for Health Statistics, an arm of the CDC, so deaths occurring within 100 days of the crash and on public and private roadways—such as parking lots and driveways—are included in the estimates.

"Our complacency is killing us. Americans believe there is nothing we can do to stop crashes from happening, but that isn't true," said NSC President and CEO Deborah A.P. Hersman. "The U.S. lags the rest of the developed world in addressing highway fatalities. We know what needs to be done; we just haven't done it."

**“It Was Just...”**

**It was just a quick call**

**It was just a short trip**

**It was just one drink**

**It was just a picture**

**It was just an email**

**It was just a glance**

**It was just a text**

**It was just a bite**

**‘Just’ is all it takes**

