



Combat Edge

Check 3 in all you do!

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COVER PHOTO BY: SENIOR AIRMAN JASON COUILLARD

THE COMBAT EDGE WILL RETURN THIS SUMMER

This family routine was not just for the children. I also provided my answers to the daily questions. One thing I can honestly say about my time in ACC Safety is that I never struggled to find material. Every day at work brought new information and enthusiastic debate on some safety topic. Instructions and standards have changed and evolved. Technology has influenced the materials we work with, the systems we use, and the way we operate. My kitchen table challenge was to translate what I learned into language that was relevant and interesting to the rest of the family. That's the same challenge we face when delivering safety information for a squadron briefing, a staff meeting, or a room full of safety professionals. The objective is to keep the information accurate, useful, and personal, which makes it worth remembering.

Now that my children have graduated and moved on, my routine dinner conversation has changed. I do, however, offer the same challenge to co-workers and safety professionals throughout the command. New information becomes available every day in the world of safety. Whether it comes from a change in the instructions, a different approach to training, or a recently released report-the key is to seek it out and share. You may be surprised when you ask, "What have you learned today?"



What Have You **Learned Today?**

We had several family traditions when my children were younger. One of my favorites took place at the kitchen table. Every evening during dinner we would ask our children what they learned that day. We focused on what they learned in school, but everything was fair game. There were lots of topics to choose from, and it usually led to an engaging family conversation. This activity was more than a simple discussion of classroom activities. By making that a family participation



Mr. Daniel Surowitz **Deputy Director of Safety**

event we were able to identify some challenges before they became problems. We also encouraged sharing lessons learned and passing the wisdom of an older sibling who experienced a common challenge. As our children progressed through school, we had to adapt in a number of ways. Sporting events and after-school activities impacted our ability to gather around the table at the same time. We also had to adapt as subjects became more complex in the higher grades. Even though math, science, and history remained constant, teaching techniques and curriculum advanced, requiring us to learn new material or get a refresher on the subjects where we thought we knew everything.

BY MAJ. ALEX TURNER THUNDERBIRD #6

he United States Air Force Air Demonstration Squadron has a proud history that stretches more than 60 years. Since the team's inception in 1953, more than 350 million people in all 50 states and more than 60 countries have witnessed the distinctive red, white and blue jets in thousands of aerial demonstrations.

Our history has reflected the development of American air power from the team's first aircraft, the Republic Aviation F-84F Thunderjet, to the F-84G Thunderstreak, F-100 Super Sabre, F-105 Thunderchief, F-100 Super Sabre, F-4 Phantom, T-38 Talon and finally to its current use of the Lockheed Martin F-16 Fighting Falcon. Although the names, faces and aircraft have changed over the years, the team's reason for being has remained constant: to plan and present air demonstrations exhibiting the capabilities of the Air Force combat aircraft while displaying the professional skill of those who fly and maintain those aircraft.

During our demonstrations, thousands of spectators experience a combination of precision capabilities of Air Force pilots through the four-ship Diamond maneuvers and the performance capabilities of the F-16 through the solo profile. Some may not realize how much pride, precision and professionalism is put into each demonstration for the air shows and ensuring the safety of all viewers.

4 http://www.acc.af.mil/library/accsafety.



USA

USAF

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Photo by: Senior Airman Tabatha Zarrella



We view our mission as a no-fail mission due to the close proximity we fly to each other and to hundreds of thousands of spectators. Any misstep or unaccounted for contingency could have catastrophic results. Hence, flight and ground safety is the Thunderbirds' number one priority in both the training and show seasons.

The team's unique mission is a simultaneous combination of the challenges that every flying squadron faces. Our aircrew fly at very low altitudes (as low as 150 feet above the ground), at very high speeds (up to 0.94 Mach or about 700 miles per hour), and on the very edge of the F-16's performance envelope at a distance apart best measured in inches. All of this topped with an extremely high operations tempo and a new show site layout every week makes for

a challenging environment that absolutely requires the prioritization of flight and crowd safety.

That being said, the application of the Air Force's safety principles is fundamentally the same. The process starts in the training season where new demonstration pilots are trained in a familiar building-block

approach wherein they decrease altitude and separation minimums as they demonstrate proficiency. New pilots always fly with the pilot they are replacing in the two-seat "D" model variant as new maneuvers are introduced and whenever additional detailed instruction is needed. Each new pilot flies initially in a twoship, then a three-ship, and then a four-ship as the "Diamond" comes together. The solos are eventually added to form the "Delta," offering increased complexity with regards to five- and six-ship maneuvering, rejoins, and timing. This building block approach provides a graduated degree of difficulty and complexity throughout the progression of the training season.

Through our 60-year history, the team has developed an extensive operations manual, directing how each maneuver will be flown. Every diamond and solo maneuver has required entry and exit parameters, minimum "on-top" altitudes and speeds, and abort criteria that are analyzed during every debrief. The

Photo by: Senior Airman Rachel Maxwell

team always has a range safety officer present to monitor the practice and ensure compliance with the minimum "on-top" parameters. All practices using a floor of less than 2,000' above ground level (AGL) require filming from a ground crew. Camera and heads up display footage for every practice are saved and reviewed by 57 WG and USAF Warfare Center leadership to provide an external perspective on the team's performance and oversight on altitude step-down approval. Once the show season begins, these practices continue and are the foundation upon which the new "road" challenges are tackled.

The constant out-and-back schedule to new show sites requires typical cross-country contingency planning and, more specific to the team, a detailed imagery study of

safe and successful show. These considerations are briefed both before departing Nellis Air Force Base (to prepare for the site survey) and before the practice show. When these risk mitigation measures can't prevent the inevitable bird strike or aircraft emergency. the team responds like every other Air Force squadron, but with the additional factor of crowd safety.





the show site and a live-fly site survey upon the team's arrival. Accurate plotting of towers, factories, buildings, terrain, no-fly areas, and crowd safety lines are critical to a

During training every emergency procedure is discussed not only from a checklist adherence perspective but from an aircraft de-confliction and crowd safety perspective. The aircrew will always strive to direct



the aircraft's energy away from the crowd during maneuvers and emergencies, and if landing with the emergency condition would pose a risk to the crowd, a preplanned divert base may be used.

All of the above is considered and weighed before every mission via a normal operational risk management (RM) process that is tailored to the team's unique considerations. Thunderbird missions are just as physically and mentally demanding as any Combat Air Force training sortie and require aircrew to be honest with themselves and each other about their capabilities on any given day. Electronic ORM worksheets are filled out before briefing, discussed in detail, and required for flight. The factors considered are very detailed and include show and maneuver currency, which part of the show season the team is currently in, urban versus rural versus overwater sites, density altitude for aircraft performance, and weather. Personal factors include fatigue, hydration and nutrition, stress at work or home, and even recent illness. As the risk factor increases, the Commander/Leader will emphasize the higher-risk areas of the show and discuss mitigation measures with the pilots to include modifying the profile or not flying certain maneuvers. At even higher levels or when faced with the worst weather conditions, the 57th Wing leadership must be involved in approving a reduction in our ceiling minimums.

At all times the safety of the pilots and spectators are paramount, and though the team strives for the perfect show it is always clear that an air show is just a demonstration. Even if a demo maneuver needs to be aborted or a show needs to be cancelled the Thunderbird team is always proud to demonstrate its reverence for the value of the lives in the cockpits and on the ground! 👅











Photo by: Senior Airman Rachel Maxwell





10 http://www.acc.af.mil/library/accsafety.asp

It Also Works At Work ... it works well for ALL you do!

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V Checklist Discipline

Earlier this year, during a MQ-1 takeoff roll, the GCS lost all downlink signals and went lost link. The aircraft continued down the runway, then veered to the side and exited the runway, eventually coming to a stop in the dirt. The aircraft was a total loss. The culprit? A failure to set the designated uplink frequency after power-up (from the default frequency) and a subsequent frequency conflict with another aircraft. Why? Poor checklist discipline resulting in a missed step.

Recently, poor checklist discipline has been an issue in several aircraft accidents. How do we mitigate this scourge? A few key techniques help ensure checklists are accomplished completely and in a timely manner.

Slow is Smooth; Smooth is Fast

Complete checklists in a methodical, effective manner every time, all the time.

Be Professional, Proficient

The more familiar you are with your duties and checklists, the more you will recognize when a checklist step is skipped, done out of order, or done incorrectly.

Be Paranoid

As aircrew, we should all have developed a healthy paranoia of missing something. Whenever you are interrupted in the midst of a checklist (answering a radio call. rushed on a compressed timeline, or seeing something in the tactical situation requiring closer scrutiny), recognize the

interruption. Go back to the last confirmed completed checklist item and start from that step.

Rely on Checklists

RPA launch and recovery operations are a classic example of complex, yet repetitive operations that often lead to complacency and missed steps in execution. To combat this threat, the Dash One spells out highly disciplined and scripted checklist execution procedures. Specifically, the Dash One states: "The SO is responsible for reading the checklist aloud, ensuring each step is performed before proceeding to the next step, and calling the checklist complete."

Acknowledge Limitations of MQ-1/9 Checklists

NASA recommends all critical steps of a checklist be checked at least once later in the checklist. Our checklists are not as thorough as this. Recognize these limitations and be extremely careful not to miss any checklist items.

V Debrief Missed Steps

Realizing you skipped a checklist step should scare you. Chances are it is not the only one missed and that an entire section was skipped. In fact, this crew missed several checklist items. Noticing any anomaly requires a full review of the checklist and your process! It comes down to discipline!

Checklist Discipline comes down to the second word: Discipline. Have it!

BY MAJ. STOLI

Aviation in itself is not inherently dangerous. But to an even greater degree than the sea, it is terribly unforgiving of carelessness, incapacity, or neglect. **J**

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Anonymous

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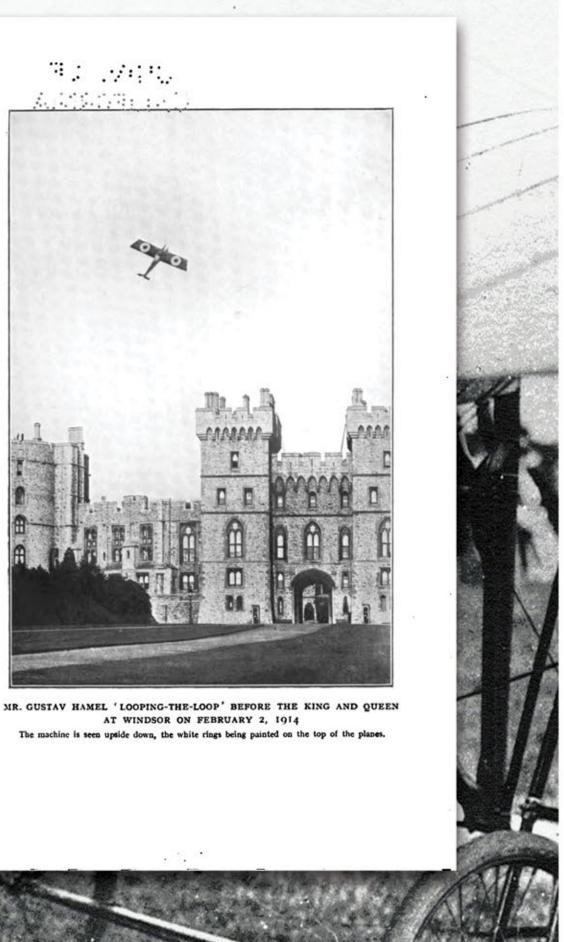
It was true then ... and it still is today. FLY SAFE!

on Flight Safety

BY COL. DONALD BORCHELT

fter three years leading the Flight Safety program here and at USAFE, I reflect back on the scores of aviation mishaps of all categories that have transpired; and, as I leave the full-time flight safety staff returning to fly airplanes for my seventh flying assignment, I wanted to attempt to roll up 20 years of my personal reflections on flight safety. While researching the subject, I came across a fascinating look at the topic written in 1914. That's right, NINETEEN FOURTEEN. I was floored at how such insightful observations, gained from a mere 11 years of powered flight, still resonate so clearly today. Since they were written in the seminal days of aviation, and still bear such relevance today, I don't think it's a stretch to call these *eternal truths* of flight safety. Now, to be clear, this book was written a century ago ... so believe it or not, they actually debated the merits of having seatbelts in airplanes. Still, it's so eloquently written, and so thoughtprovoking, that I thought I'd fold some of those very early observations into a few nuggets of completely unoriginal wisdom you hopefully find applicable today. With that in mind, let's take a look at what was said back in the early days of fabric wings and open cockpits.

Gustav Hamel preparing for take off at Trengwai





Nugget #1: There's no mistake you can't make. On my 3rd sortie in the Flight Screening Program (FSP) in the T-3, I was re-entering the traffic pattern, and had the instructor not taken the airplane, I would have flown right into another T-3 already established on downwind. I never would've thought in a million years how it is possible to look directly at another airplane but not see it. I later learned the phenomenon was caused precisely because of our collision course: there was no line-ofsight movement. The airplane was getting bigger, but was stationary on my canopy. In retrospect, it was a great lesson to learn very early on and has stuck with me to this day. Our mishap statistics support this nugget ... we have crews with all levels of experience which make what would be considered "basic" mistakes of failing to SEE AND AVOID. So, if I find myself reading mishap reports, and falling into the trap of thinking: 'that could never happen to me,' I think back to that day 22 years ago and it helps me guard against complacency and overconfidence. Mr. Hamel said: "It is the simplest thing in the world to fly an aero plane after a fashion—to fly well is guite another matter—and the chief difficulty is that of resisting every temptation to become momentarily careless." P. 3-4.

Nugget #2: Sweat the small stuff. Looking back at the recent mishaps in 2015, virtually all occurred in what should have been fairly benign, low threat, administrative phases of flight. One may expect the "varsity level" Large Force Exercises (LFEs) like Red Flag or Northern Edge to drive mishap stats, but it's simply not the case. Pilots need to take the time to review the admin performance, and that of their flight members, to ensure strict adherence to the admin standards set forth in their operational procedures. I know time is precious and you've got plenty "more important" tactical things to debrief. Don't overlook the mistakes on "small stuff"; share them with others. Said Hamel: "Every pilot could relate, out of his experience, a number of what might have been serious incidents caused by small and absurd oversights," P. 49

Nugget #3: You are ultimately accountable. No one knows how you feel except you. Make sure you're healthy. rested, and fit to fly; and take a knee if you're not. If your jet is not "full-up" based on your mission requirements, call the red-ball and get it fixed. Or, if it's still not happening, call the ground abort and step to the spare. Mr. Hamel said: "It requires moral courage to decline to fly in fulfilment of a promise, but flying being an occupation in which a trivial cause may have a serious effect, moral courage is one of the necessary parts of an aviator's character. Yet many a man, feeling slightly out of condition himself, or discovering that his motor is running weakly, attempts a flight in the hope that the

human or the mechanical engine, as the case may be, will recover after a few minutes in the air." P. 54

Nugget #4: **Study previous mishaps.** The first books I read when I got to pilot training were the "Road to Wings." In doing so, I learned the most common pitfalls encountered by others in their journey to earn the coveted Air Force wings of silver. Squadron flight safety officers should pull some mishaps out of the Safety database and teach the squadron on a recurring basis. Otherwise, after a couple years, the valuable lessons learned are relegated to the dustbin of history; and there is no greater disservice to the sacrifice of those upon whose shoulders we stand than to forget their final instruction to us. On this topic, Mr. Hamel has this to say: "By far the greater number of aero plane accidents are due to precisely the same circumstances that have caused previous accidents. A distressing feature of these accidents is the evidence they afford of the unwillingness, or the inability, of many pilots to profit from the experiences and mistakes of others," P. 48

Nugget #5: You're not a test pilot*. The average age of the Air Force fleet is 27 years ... so almost all of us are flying airplanes with known flight characteristics, fully developed technical orders and Dash-1s, and pages and pages of TTP. The entirety of these documents describes a thoroughly understood flight envelope, within which pilots enjoy significant safety margins to accomplish their assigned mission. Yet to this day, we receive reports of aircrew whose discipline breaks down and



Nugget #7: Keep a student's mentality. I'll never forget my first non-gradesheet sortie as a CMR wingman. There was a brief moment of awesomeness when I thought I'd finally "arrived." I very quickly received a welcome dose of reality. I didn't know squat. My learning was just getting started ... and in fact, our learning should never stop. A student is always curious, knows as much about his airplane and mission as he can: and most importantly, he's exquisitely conscious of the fact he doesn't know it all. Far from it. In fact, the more the true student learns, the more he realizes he needs to know. Nugget #6: **Fight like you train.** This is the 2nd Students are aware of their capacity to err, and are more willing to accept critical feedback. If you find yourself bristling in the debrief, check your attitude. Listen to what's being said and understand the point being made. Even if you are correct, you can still learn from what the other guy said. To my chagrin, I've sometimes lost sight of this important quality during my flying career. Thankfully I've had both students and bosses who've helped me refocus my priorities. According to Hamel, "Clearly the conquest of the air means the evolution of a type of soldier far more highly educated and finely organized than the world has yet seen ... scientific, cool, calculating, and self-sacrificing." P. 288. other with tall tales of intrepidity. As early as 1914, Hamel even engaged in deep Remember, if we bend an philosophic discourses as to the very nature of mishaps: "Theoretically, every flying accident is preventable, but, in airplane, we're doing the practice, it has been unavoidable in the nature of things enemy's job for him. If your Spidey senses are filling you that numerous accidents have occurred." However, he with doubt and you think clearly believed, as I do, that we all should strive for the you need to bend the day where all mishaps are prevented. Indeed, Hamel rules to accomplish your cites another aviation pioneer, Henry Farman, who said: mission, tell someone. "It will be so safe that we shall hear no more of the You're angst is probably need to carry parachutes or other safety devices, for the contingency of having to abandon the machine in the air well-placed, and you may be accepting will seem an absurdity to contemplate." Fly safe and I'll see you at the Ops desk. more risk than the man wants you to. In almost all scenarios * Test pilots are there are ways of authorized to take this getting the mission paragraph with a grain

they try something 'new' with their airplane or demand aircraft performance that very clearly lies well outside the envelope. When one displays lack of knowledge of their aircraft operating limits, or worse, breaks the rules, your only hope now is to get lucky. Don't be the guy to start a bar fight between your jet, Bernoulli, and Newton. Next time you consider trying something in your airplane simply because you can't find any rule prohibiting it. or are curious to see what may happen, remember this: "Of flying, far more even than golf or anything else, it may be said that the Golden Rule is 'Do Not Press The Game.' half of possibly the most famous cliché in the AF. It implies that in combat, you're only as effective as the applied sum of your preceding training. While true, there's a deeper meaning that speaks directly to safety in combat. Unfortunately, there have been several recent mishaps caused by aircrew accepting unnecessary risk during contingency ops. Mistakenly, ATO lines carry, for some, a misplaced connotation of "anything goes." Nothing could be further from the truth. It is for this very reason we take so much pride in striving for perfection during our training ... so that we can achieve perfection during combat, come home as heroes, and regale each

done another way. of salt.

Excerpts taken from "Flying" by Gustav Hamel and Charles Cyril Turner.

ACC Safety bids a fond farewell to Col. Borchelt, ACC Chief of Flight Safety ... as he goes on to fill the CV's chair at the 1st Fighter Wing. We thank him for his service, and wish him continued success!

When was the last time you submitted an ASAP or checked out the ASAP scoreboard at hhtp://safety-masap.com?

Actual ASAP Submission This event did not result in a mishan, but provides

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

Narrative: The crew had just landed and was in the process of conducting an Engine Running Crew Change with the parking brake set. Ground was standing outside on comm, and the back enders were transitioning in and out from the rotor disk swapping gear and loading ammo. Winds that day were extremely strong, gusting >40kts, and based on the parking orientation, this resulted in a pure right cross. The IP monitoring the controls suddenly noticed the aircraft lurch, in a spinning motion with the nose coming right and the tail going left. At this point he immediately applied full left pedal, but the aircraft did not respond. The aircraft began a slow spin again, with no response from the pedal input, the IP yelled to everyone to either get in the cabin or immediately exit the rotor disk. At this point, the crew did as he directed, and Ground immediately ran out of the rotor disk, inadvertently pulling chocks as he went, which only caused the spin to increase.

With personnel near the aircraft and a ground power cart just outside the rotor disk, the IP assessed his two options were to either pull into a hover or to execute an emergency shutdown. His immediate thought was that pulling it into a hover may exacerbate the situation ... additionally, training drives us to not turn a ground emergency into an air emergency. He conducted the Boldface for the Emergency Aircraft Shutdown, which effectively ceased aircraft movement.

It was assessed that the cause of the spin was due to the direct crosswind resulting in loss of tail rotor effectiveness, coupled with a faulty Tail Wheel lock indication. The Tail Wheel Pin was indicating locked, but in fact was not. Furthermore, the crew chief pulling chocks (assumed to be done on account of muscle memory), enabled the spin to increase. Ultimately no damage or injury occurred, and the AC came to rest about 45 degrees out of position on the parking pad.

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

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



The mishap flight was a 2-ship "Red Air" mission at night. There was a weather deck below at 5,000' MSL but the planned block 20,000' to 24,000' was clear. As the pilot started a 3 to 4 G turn, the nose dropped to 60 degrees low. The pilot shifted his scan to the HUD and outside the cockpit while reducing the dive and pulling the nose up to 30 degrees nose low. As the pilot searched for visual references, the aircraft started a slight roll. The aircraft was inverted and 45 degrees nose low when the pilot pulled back on the stick to arrest the descent. The aircraft barrel rolled twice as the pilot banked and g'd in attempts to level the aircraft. At less than 2,000' MSL and unable to stabilize the aircraft, the pilot ejected. The mishap aircraft was destroyed but the pilot was uninjured. Less than 45 seconds elapsed from the initial turn until the aircraft impacted the ground.

At the conclusion of the tactical portion of a 4-ship training sortie, the flight lead directed flight spacing with #2 to drag to 1.5NM trail. During this night sortie, the weather was mostly clear with some haze at medium altitudes and high winds aloft. To take spacing, the pilot initiated an aggressive climb to the left. Topping out above 23,000' MSL, the pilot recognized an unusual attitude and attempted a recovery. The initial 10-degree nose low dive to recover quickly increased to more than 45-degrees nose low and 160-degrees of bank. The pilot removed NVGs and initiated an instrument recovery to level off just below 10,000' MSL. The pilot rejoined the flight and recovered uneventfully.

Due to maintenance delay, the pilot rushed ground ops to stay with his flight and took off with incorrect settings for the planned radar assisted trail departure as #6 of the 6-ship. The pilot did not get the HUD indications that he expected to see to assist his rejoin and tried to visually acquire his element lead. Due to the black hole effect at night, the pilot mistook a ground light for his lead and began to fly the rejoin visually. Seconds later, the pilot recognized the radar information conflicted with his visual "target" and he recovered from the unusual attitude via instruments in max AB. The pilot and element lead rejoined, burned down gas and landed uneventfully.

In these three events, thankfully, the aircrew all safely recovered and only one combat asset was lost. Not all Airmen have been as fortunate to encounter and then overcome spatial disorientation at night. We have a tendency to be extra alert during bad weather days to the threat of spatial d. However, overconfidence or complacency can make night flying even more susceptible, during either tactical maneuvers or admin phases of flight. Be alert and respect the dark night!

THE DARRAS DARRA



Foreign Object Damage

BY MASTER SGT. JEFFREY STULL

Foreign objects have been a nuisance contributor to mishaps involving powered flight since Orville Wright hit a bird while flying circles over a field near Dayton, Ohio. Examples of foreign objects are wildlife, tools, loose hardware, or any item introduced to an aircraft that should not be there. AF maintainers conduct FOD walks daily on the flight line to reduce the possibility of foreign objects finding their way into an aircraft and causing a mishap. Furthermore, the maintenance discipline of accounting for all aircraft hardware, pins, and covers prior to engine start can go a long way to preventing these types of mishaps. The following two mishaps detail two scenarios where poor FOD control procedures caused \$2.3M worth of damage.

All aircraft utilize safety pins to secure aircraft covers and to safe areas of the aircraft before and after flight. During preparation for flight, a maintenance crew removed all required aircraft covers and pins except those that require removal by the aircrew. Once the aircrew arrived on the spot, the maintainer assisted the aircrew with the removal of the remainder of the pins and covers. Unbeknownst to the aircrew or maintainer, one of the pins from the cockpit had fallen in-between the fuselage and the aircraft intake. The aircraft was allowed to taxi without full accountability of all pins and covers. Shortly after takeoff roll, the aircrew heard a loud bang. There were no abnormal engine indications, but maintenance members observed sparks and debris being expelled from the exhaust of the aircraft. Total mishap cost associated with the foreign objects introduced to the engine area prior to taxi ... \$1.8M!! What is the lesson learned from this mishap? It could have been prevented with an aircraft accountability inspection. It is vitally important to maintain proper aircraft hardware and tool control. It can be a huge money and lifesaver.

Foreign objects aren't always introduced at the beginning of flight. Mishaps also occur post flight. Such was the case of an aircraft returning from a successful sortie. On an extremely windy day, a maintainer marshalled his aircraft into the parking spot and the B-man chocked the aircraft. The B-man then proceeded to retrieve the aircraft safing pins from a communications storage compartment. The B-man struggled to untangle the safing pins a mere 10 feet from the intake lip of the running engine. While trying to unwrap the pins, several of the pins fell to the ground. The B-man quickly picked up what he thought were all of the pins that he had dropped. It was only after the aircraft had shut down that maintainers discovered a pin was missing. The maintainers immediately initiated a search for the missing pin. After about an hour of searching, a qualified technician arrived to perform an intake and exhaust inspection. The maintainers conducting the search notified the technician of the missing pin. During the intake inspection of the left engine, the technician noted remnants of a Remove Before Flight streamer. Quality Assurance documented damage to the first and second stage inlet blades. Fragments of metal were also found in the left engine's exhaust as well as on the payement behind the aircraft. It was later discovered that dropping the pin combined with the high winds on the day of the mishap allowed the foreign object to be sucked up into the engine. The total cost of this mishap was \$500K. This mishap also could have been prevented. Maintaining control and accountability of the aircraft safing pins in a pin bag would have contributed to mitigating the hazard of the loose pins. Furthermore, untangling the pins in a location that is not at risk for entering an intake hazard area would have prevented the foreign object from entering the engine.





ooking back over fiscal year 15, ACC was responsible for \$750,664.00 in explosives safety mishap costs and 10 lost work days. Over 54 percent of the total mishap cost was related to missile mishaps; all other mishap categories accounted for the balance. Total costs has risen from the previous fiscal year, up \$40,135 from 2014. Of note, one aircraft gun replacement engulfed more than half of last years' total. Even though total mishaps in 2015 were reduced from 2014, the total cost was greater. To most of us, those are large sums of money. However, it likely goes unnoticed since we don't have to pay the tab. Continued waste of that magnitude cannot only seriously hinder resources, but also the warfighting mission.

Let's focus on 2015 for a moment; there were a total of 16 mishaps. Nine were missile mishaps (6ea Aim/ CATM-9s, 1ea AGM-65, and 2ea CATM-120s). The majority of these mishaps were related to Human Factors (complacency or not following technical orders). Over the past few years, Human Factors have led as causal in explosive mishaps. We understand the Air Force has faced a reduction in force which may contribute to increased workload, but we still have to maintain a high level of risk management and mishap prevention. One mistake can greatly impact our mission.



The Unintended Cost of Mishaps

BY MASTER SGT. DAVID INGRAM

Decreasing mishaps can save the Air Force money which will leave more money in the fiscal budget for areas that are critically underfunded. Based on my calculations, 2015 mishap costs could pay the basic salary of a fouryear Staff Sergeant, a three-year Senior Airman, and a two-year Airman First Class combined, for more than nine years! Can you imagine the cost to the mission if mishap costs were inversely tied to manning in this way? In some sense it is. It's all about having money to pay for resources. Manning is a resource.

Ask yourself, "What you can do to help mitigate risk?" My suggestion would be to ensure you operate in a safe environment. Take pride and have a vested interest in managing resources. Study your technical information before starting any explosive operation. Familiarize yourself with all associated risks in the area and in your surroundings. Ensure you have all tools, equipment and PPE before you start the operation. Provide a safety briefing to each and every individual related to the explosive operation. Most importantly, take your time. Most mishaps are caused when individuals are rushing and steps are not done properly or even missed.

I take my hat off to you all for doing such a wonderful job supporting our mission. Stay proficient and maintain high standards in your profession. We appreciate all that you do to keep us safe!

MONTHLY AWARDS

QUARTERLY AWARDS

Aircrew Safety Awards of Distinction

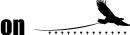


Capt Nicholas R. Tsougas and Capt Jonathan B. Toms – 336 FS, Seymour Johnson AFB, N.C. (November 2015) Capt Bryan J. Hladik and 1Lt Benjamin P. Bowman – 336 FS, 4 FW, Seymour Johnson AFB, N.C. (December 2015) Maj Maxwell F. Harrell, Lt Col Michael H. Morgan – 422 TES, 53 WG, Nellis AFB, Nev. (January 2016)

Crew Chief Safety Awards of Distinction

SSgt Daniel M. Kealy – 23 AMXS, 23 WG, Moody AFB, Ga. (December 2015) SSgt Alex M. Austin – 1 EAMXS, 332 AEW, Divarbakir AB, Turkey (January 2016)

Flight Line Safety Awards of Distinction



TSgt Eddie T. Flores – 9 MXG, 9 RW, Beale AFB, Calif. (November 2015) SSgt Kevin D. Holland – 34 WPS, 57 WG, Nellis AFB, Nev. (December 2015) Capt Rolland R. Holland, Jr. – 379 EOSS, 379 AEW, AI Udeid AB, Qatar (January 2016)

Ground Safety Awards of Distinction A.

Mr. Joe A. Joseph – NTTR, Nellis AFB, Nev. (November 2015) A1C Tucker J. Irish - 57 AMXS, 57 WG, Nellis AFB, Nev. (December 2015) MSgt Jeffery S. Harris – 552 OSS, 552 ACW, Tinker AFB, Okla. (January 2016)

Pilot Safety Awards of Distinction

Capt Gray A. Kaempf – 99 RS, 9 RW, Beale AFB, Calif. (November 2015) Maj Kevin Belcher – 57 WG, Nellis AFB, Nev. (December 2015) Capt Michael N. Napolitano – 55 EFS, 407 AEG, Muwaffaq Salti AB, Jordan (January 2016)

Unit Safety Awards of Distinction

99th Reconnaissance Squadron – 9 RW, Beale AFB, Calif. (November 2015) 9th Munitions Squadron – 9 RW, Beale AFB, Calif. (January 2016)

Weapons Safety Awards of Distinction

SSgt James L. Beasley – 355 CES, 355 FW, Davis-Monthan AFB, Ariz. (November 2015) SSgt Austin T. Dalrymple – 23 SFS, 23 WG, Moody AFB, Ga. (December 2015) TSgt Shaina M. Hernandez and SrA Colin P. Ziegler – 55 EHMU, 332 AEW, Diyarbakir AB, Turkey (January 2016)

Flight Safety





Capt Brian J. Farmer, 75 FS, 23 WG, Moody AFG, Ga. The squadron recently earned an OUTSTANDING rating in the annual safety inspection due to the above and beyond effort put forth by Capt Farmer. The rating was due to the oversight and thorough investigative techniques he applied to the three formal investigations, 12 potential hazards, and 38 spot inspections covering the full spectrum of flight operations from maintenance liquid oxygen servicing to Aircrew Flight Equipment and towing. His passion for safety led him to complete one inspection prior to attending Aircraft Mishap Investigation Course. These inspections led to him developing two safety briefs for the squadron and identifying three individuals he submitted for safety awards. Capt Farmer developed an innovative new 75 FS initiative to track the Risk Management of each flyer, have that information tracked by the Flight Commander, and subsequently relayed to the Top 3. This cradle-to-grave tracking of the risk is the proactive approach that ensures that Risk Management is actively discussed in the squadron instead of a pre-flight checklist item only. His motivation for safety also led him to author an A-10 In-Flight Guide for the 75 EFS due to a recent change in OIR tasking, ensuring that safety factors were considered and added to the essential deployment product. Finally, Capt Farmer was vital to the quick reaction to the safety notification regarding A-10C emergency oxygen bottle activation. This quick response highlighted a CAF-wide misconception, ensured just-in-time education of the pilots, and enabled a way forward to codify the lessons learned. This quick thinking and proactive approach are the benchmarks of a safety program that is intent on preventing future mishaps.

Ground Safety A.



TSgt Jake W. Vaughan, 86 FWS, 53 WG, Nellis AFB, Nev. TSgt Vaughan's outstanding leadership supported the largest ever COMACC Air-to-Ground Weapons System Evaluation Program. His dedication embedded ground safety into the foundation of the evaluation of 3 MAJCOMs, 6 deployed units, 7 airframes, 267 munitions. 200 sorties, 378 flight hours, the declaration of 125 pilots as combat ready, and benchmarked 72 first time shooters. During these evaluations, his swift actions enabled the safe response to four in-flight emergencies that consisted of two jammed F-16CJ 20mm guns, jammed F-15E 20mm gun, and a MQ-1B critical low fuel indication. Sergeant Vaughan's safety minded expertise ensured the safe recovery of these aircraft with no mission impact and no personnel injuries. He was commended by the Commander, 53d Weapons Evaluation Group and the Commander, 86th Fighter Weapons Squadron for his stellar ground safety management of the unit's mishap prevention program. Sergeant Vaughan's routine safety and local conditions brief of 730 aircrew and maintenance personnel resulted in zero alcohol-related incidents and reportable mishaps for deployed units. Additionally, his exceptional skill and ingenuity was pivotal to the creation of an aggressive spot inspection program which led to the identification of three emergency lighting hazards while ensuring all deficiencies were resolved within 30 days. Finally, as the Squadrons Motorcycle Safety Program Manager, Sergeant Vaughan sustained superior performance and achievement through mentorship of four new riders and has secured 52 consecutive months of mishap-free riding.

Weapons Safety



TSgt Derek M. L'Italien, 55 WG, Offutt AFB, Neb. TSgt L'Italien's keen attention to detail proved vital when revealing two NEWQD violations associated with the explosives cargo parking area that went undiscovered for over nine years. He orchestrated and submitted a new Expolsive Site Plan that eliminated the existing violations and protected critical LD/HD mission assets from possible destruction in the event of an explosives mishap. TSgt L'Italien showcased his dynamic aptitude during a Dull Sword investigation involving a Navy E-6 TACAMO (NC2) aircraft sitting alert at OAFB where he uncovered a problematic training shortfall as the determining factor of the incident. While coordinating with the responsible US Navy unit's PRP manager, he ensured the entry procedures were added into the unit's training plan and established a new pre-task briefing. His efforts were instrumental in ensuring the prevention of future violations while strengthening joint military ties. He developed and garnered approval of an Operational Waiver within 24 hours to the alternate Secure Holding Area at OAFB. This waiver enabled the 55th Wing to support temporary holding of a ground-contracted DoD shipment of 1.3 munitions, which were destined to be destroyed at Hawthorne Munitions Depot, Nev. TSgt L'Italien's exemplary work ethic and superior job knowledge were demonstrated during the 2015 Air Combat Command UEI. He also maintained the required programmatic, to include Nuclear Surety testing of 71 people and training multiple commanders, to include the 55th Wing Commander, in Nuclear Surety. He did all of this as a one-man shop at the only ACC base with both Nuclear Surety and explosives missions. His outstanding program management capabilities and extensive contributions to Weapons Safety were lauded by the ACC inspection team, propelling him to be recognized as a "Superior Performer."





ACC OUTSTANDING **AIRMANSHIP AWARD** Mai Jack Nelson 5 RS, 9 RW, Beale AFB CA

ACC SAFETY SPECIAL ACHIEVEMENT AWARD TSqt Jared K. Stonecipher 325 FW, Tyndall AFB FL

ACC SAFETY CAREER **PROFESSIONAL OF THE YEAR AWARD** MSot Bilma L. Romero 25 AF, JBSA-Lackland TX

ACC CHIEF OF SAFETY OUTSTANDING ACHIEVEMENT AWARD FOR WEAPONS SAFETY TSgt Lucas C. Long 366 FW. Mountain Home AFB ID

ACC CHIEF OF SAFETY **OUTSTANDING ACHIEVEMENT AWARD FOR GROUND SAFETY** 55 WG. Offutt AFB NE Det 5, 29 TSS, Whiteman AFB MO

ACC OUTSTANDING AIRCREW AWARD Lt Col Christopher Wachter, Capt Michael Riddick, 1Lt Patrick Walsh, Mai Andrew Lucchesi 28 BW, Ellsworth AFB SD

> ACC AVIATION MAINTENANCE SAFETY AWARD 9 MXS Accessories Flight 9 RW, Beale AFB CA

ACC CHIEF OF SAFETY CYBER SAFETY AWARD 9 CS. 9 RW. Beale AFB CA

COMMANDER'S AWARD FOR SAFETY 12th Air Force, Davis-Monthan AFB AZ

WING SAFETY PROGRAM OF THE YEAR 53 WG, Eglin AFB FL

WING CHIEF OF SAFETY OF THE YEAR Lt Col Jamey K. Frazier, 552 ACW, Tinker AFB OK

FLIGHT SAFETY OFFICER OF THE YEAR Maj Adam M. Bushore 432 WG, Creech AFB NV

FLIGHT SAFETY NCO OF THE YEAR TSgt Mark J. Bapp 355 FW, Davis-Monthan AFB AZ

CREW CHIEF OUTSTANDING ACHIEVEMENT AWARD SrA Mario W. Marchetti 552 AMXS, 552 ACW, Tinker AFB OK

FLIGHT LINE SAFETY **OUTSTANDING ACHIEVEMENT AWARD** SMSot Richard W. Fullen 9 MXS, 9 RW, Beale AFB CA

WEAPONS SAFETY **OUTSTANDING ACHIEVEMENT AWARD** TSgt Derek M. L'Italien 55 WG, Offutt AFB FL

LOGISTICS SAFETY **OUTSTANDING ACHIEVEMENT AWARD** MSot Stephen A. Braz 9 LRS, 9 RW, Beale AFB CA

GROUND SAFETY OUTSTANDING ACHIEVEMENT AWARD TSgt Curt E. Mitchell 23 WG, Moody AFB GA

GROUND SAFETY SPECIAL ACHIEVEMENT AWARD SSgt Jarrod M. Armes 23 WG, Moody AFB GA

FY16 Flight

	Fatal	Aircraft Destroyed	Class Aircraft Da
1 AF			
9 AF			
12 AF		- <u>+</u> x4	
25 AF			
USAFWC			
ANG ACC-gained)			
AFRC ACC-gained)			

FY16 Ground As of December 31,				
	Fatal	Class A	Class I	
9 AF		0	0	
12 AF	•	1	0	
USAFWC	t t	1	0	
25 AF		0	0	

FY1	As of December 31,	
	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)

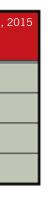
** Non-rate Producing *** Performing SOUTHCOM Mission * Fatality



24 http://www.acc.af.mil/library/accsafety.asp

As of December 31, 2015 Α amage

2015



Flight Notes

After a year which returned the aircraft mishap rate to a more historical average, the first guarter of FY2016 began a slightly improving trend. In the first three months of the fiscal year, the Air Force lost three MQ-1s and one MQ-9. Additionally, another MQ-9 mishap, currently under investigation, may reach the Class A threshold. Fortunately, ACC experienced no aircrew fatalities during the period. As you attend periodic safety meetings, read Combat Edge articles, and review recent mishaps, ensure they inspire you to maintain the constant focus required to perform the mission safely and effectively.

Ground Notes

Our first two fatalities of the year involved vehicles traveling at speeds above the posted speed limitwillful non-compliance. The Air Force goes through great lengths to drive home the point that speed. alcohol and driving or motorcycling is a deadly mix. Although our motorcycle training program is worldclass, and comprehensive safe driving initiatives have been implemented, we continue to suffer losses. These initiatives work well as long as good decisions are made both early and in the moment. No one is immune from bad decisions: however, we must practice good choice management as we combat vehicle and motorcycle fatalities. Let's rally against non-compliance and make sound decisions in all we do!

Weapons Notes

ACC's streak of zero Class A and B mishaps continues. December was another good month; however, we did experience one Class D and one Class E mishap. Luckily we avoided injury to personnel. Lack of attention to detail was causal. It's evident that your vigilance and oversight is paying dividends. Continue to emphasize attention to details in all aspects of your program and operations. ACC wants to thank you for your hard work and vital roles in promoting the mishap prevention program.

Symbols for Mishap Aircraft



THE COMBAT EDGE | MARCH - MAY 2016 25





10 10

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

RISKY BUSINESS 4 by Master Sgt. Mark D. Mourning AFTAC Safety Office

MAGAZINE

- Countdown to the Critical Days of Summer 8 by Mr. Rodney Robinson ACC/SEG, JB Langley-Eustis, Va.
- **COMPLACENCY IS A DANGEROUS THING** 10

by Mr. John Stocker III, Chief J101E Inspections and Education, Kirtland AFB, N.M.

- 12 | DRIVER'S DIALOG
- 13 | RIDER'S RAP
- 14 | Know Safety ... No Pain
- 15 | CHECK THREE CHAMPIONS

Enjoy the weather ... **Remember to Check 3 in all you do.**





check3gps.com

A History of **Risky Business**

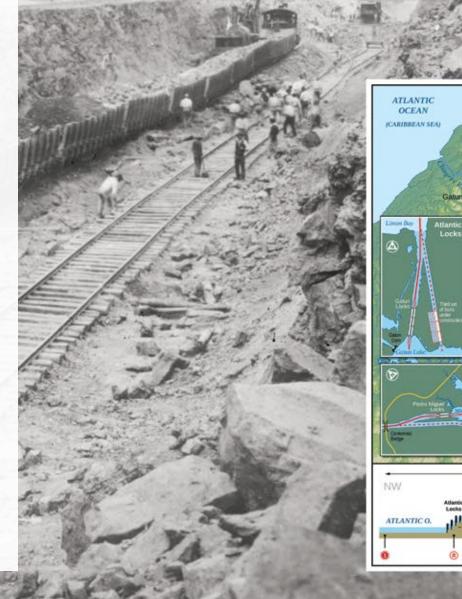
BY MASTER SGT. MARK D. MOURNING

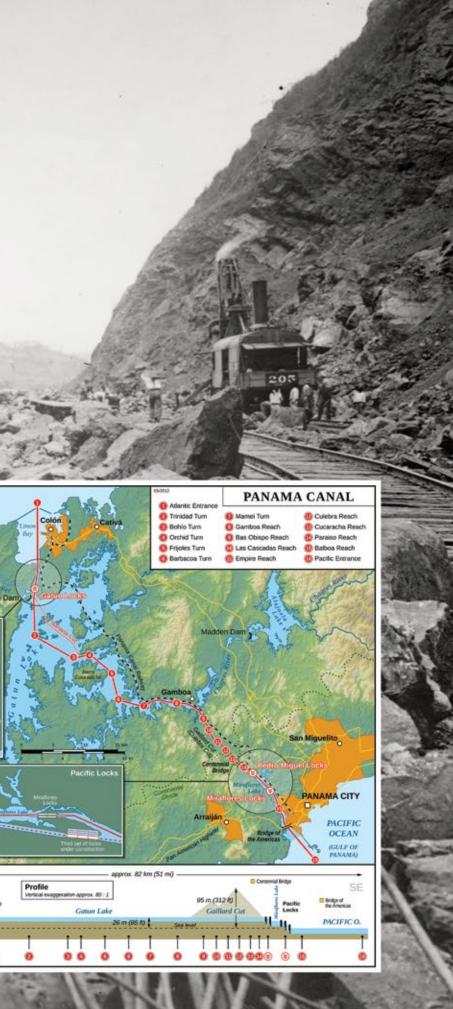
he Panama Canal has been heralded as one of the many wonders of the modern world. It took 10 years to build with a price tag of \$375 million, which in today's dollars would be nearly \$9 billion. Each year an estimated 12,000-15,000 ships cross the canal, shaving more than 7,800 extra miles traveled if the canal didn't exist. The savings created from such a huge shortcut benefits anyone who has ever purchased, well, anything. And while it is credited as pure American awesomeness, the canal has quite an interesting history.

Americans weren't the first to try to tame the mountains and jungles of Panama. Some might know that the French started digging in the late 1800s, but Scotland was one of the first to attempt the shortcut.

In the late 1600s, Scotland wanted to get into the empire business and Panama offered a great economic advantage. The narrow continental bridge would serve as a land crossing and provide access to a quick route between the Atlantic and Pacific Oceans. With very little forethought, nearly a quarter million Scotsmen packed up and shipped out across the Atlantic. The initial cost of the endeavor was 20 percent of Scotland's wealth. A risky venture to be sure, and almost immediately, the travelers discovered some problems with their plan.

Like the inquisition, Scotland didn't expect the Spanish to have already established a base of operations in the region. The sheep Scotland brought to Panama didn't fare well in the jungle and what wool they could produce wasn't exactly flying off of the shelves. To make matters worse, their dreams of easily crossing the minimal distance from one ocean to another proved impossible; the maps they used to plan the trip didn't say anything about impassable mountains and disease-riddled jungles. By the time Scotland called it quits, 200,000 people died from disease and the money was gone. Their lesson in empire failure culminated in the Act of Union in 1707, when they became a part of the United Kingdom.







80-A37. Opening of the Panama Canal. S.S. Ancon leaving west chamber, Gatun upper locks and entering Gatun Lake Aug. 15, 1914.

When it was someone else's turn to conquer the canal, the French were ready with a proven plan: they would do the same thing they built with the Suez Canal. Riding on the success of that canal project, the French assumed what they had done in the past would work just as well in Panama. The project manager, Ferdinand de Lesseps, was so confident that he only visited the work site a handful of times during the entire 13 years of work and he expected the work to proceed without any blueprints.

The workforce was effectively told to go across the world and start digging until they hit the ocean or died. And, unfortunately, many of them did perish. In 1884, 200 people per month died from disease and on-site accidents. Excavated soil was simply dumped right next to the canal only to slide back in, slowing down the process and causing many accidents. Many of these deaths could have been prevented from minimal sanitation and infrastructure. If only they had more funding.

Shortly after excavation began, the budget exploded and the project was forced to seek investors. By 1894, the project cost \$287 million and nearly 22,000 lives. For his ineptness and lack of forethought, Ferdinand was convicted of misappropriation of funds and sentenced to five years in prison. The failed canal would continue to be a reminder of poor planning until the U.S. stepped in and took over.

In 1904, planning on the new U.S.-driven canal began. Before the first shovel of dirt was removed, extensive research and surveying took place. A division of labor was established and sanitation was given high priority.

When the first ship made its way through the canal less than 10 years after the excavation began, U.S. workers had removed nearly six times more material than the French and did so with only about 5,600 lives lost to disease or mishap.

With a slightly higher cost (a 26 percent increase) than what the French paid, American hard work and ingenuity finally connected the two oceans. (It is usually at this point that people begin chanting, "U.S.A., U.S.A., U.S.A.!").

Did any of these groups talk about risk management? Maybe not using those words, but at some point, they all had to deal with the hazards and, more importantly, had to make decisions about how to proceed—safely.

As Airmen, we face hazards every day, and while most of them aren't as daunting as taming Panama, they each have a way of affecting our lives. The question is, do we ignore the hazards and allow them to shape us, or do we plan for those hazards and cut a path to victory?



View from Contractor's Hill, Panama, of ships sailing in the Panama Canal in May 2014. A set of locks at either end eases ships through the artificial Gatun Lake, built to reduce the amount of excavation needed for the canal. Photo by DeAgostini/Getty Images

Critical Days of Critical Days of

BY MR. RODNEY ROBINSON

ow, winter is just about over and I'm ready to get going! Well, maybe not quite ready yet, but I will work my way into shape. Let's see; I think I'll play a round of golf, play on the squadron softball team, run a few miles, work on my car, and drive to the beach. Not bad for a weekend ... right? How many of us out there can't wait for the weekend? I know I'm one of those people who try to pack as many activities as I can in a weekend (as if we won't have another one in seven days).

I remember one vacation that I took with my family to Lake Chautauqua NY. On this particular vacation, in one day I went fishing in the morning, traveled to Niagara Falls and went on the Maid of the Mist in the afternoon, visited the Space Needle in Canada, caught a Toronto Blue Jays game in the evening and drove back—all in one day. Whew!! That definitely made for one very long day!

As I think back over my decision, to put not only myself, but my family at risk, it was certainly not the right decision to make. So, I ask myself, what I could have done differently. First, I probably could have skipped fishing in the morning since I could do that any day we were at the lake. As for the other activities, I was trying to group things that were close together into one outing, and since driving doesn't make me sleepy, I really didn't think about the time on the road. This takes me to the second thing I could have done differently. I should have made sure that I had a backup driver that was capable of driving—so I could take a break. Lots of folks tell me they are ready to take over driving, and the next thing I know, they are snoring louder than the radio.

As the driver/leader of the trip, take it upon yourself to make good decisions ... not only for you, but for the others in the vehicle with you and on the road. The decisions you make are critical to not only making it home safely, but also making it through the activity you are participating in safely. Sometimes it's hard to look at all you have planned because you are so focused on doing the activities and you don't step back and look at what could cause problems.

We have all done things that we would probably do differently now. The key is how do you change that behavior? As summer approaches, let's be vigilant with our activities and Check 3 GPS! Gear: Ensure car/vehicle is in good working condition—check tires, oil, have emergency supplies on hand. Don't forget your PPE (depending on the activity). Always have a Plan: Preparation for any activity is a must! Have a timeline, check the weather, sequence of events, and even have a backup plan. Don't forget to let someone know where you are going/ will be in case of emergency. Skill: Get the proper rest! Make sure your skills/experience are commensurate with the activity.

Let's all have a great time this summer, but take the time to step back and give whatever you're doing a second look! Stay safe my friend!



GOLF IS NOT HAZARD FREE

The Air Force recently sustained a mishap when a member was playing golf at a local golf course. The member hit his tee shot and it landed just off the fairway. The member assessed his next shot, and since he needed to keep his ball low due to hanging limbs from a tree, he selected a 4 iron in order to keep it low. The member also noticed a tree root in front of him but thought he would clear the root with no problem.

Unfortunately, the ball did not clear the root, ricocheted off the tree root, and struck the member in the right eye.

PADDLE BOARDING

An Air Force member and a friend had decided to take their paddle boards out in a lake to view the moon. The two members paddled out and were lying on their boards. The two members failed to notice they had drifted out of the unmarked recreational area into an active boating water-way.

Unfortunately, a boat operator failed to notice the members on their paddle boards. The two members attempted to get off the paddleboards but one of the members was struck by the propeller resulting in a serious injury.

COMPLACENCY ... IS A DANGEROUS THING

BY MR. JOHN STOCKER III

Complacency describes the state of mind many people have with regard to safety. Unfortunately, we go about our lives giving little thought to our personal safety, or for that matter, the safety of others. Our superiors keep telling us that safety is important, but for many, it is discounted because of being overconfident or simply maintaining an attitude of "it isn't going to happen to me."

Too often, our Airmen become complacent with regards to drivers' safety. Statistics show that the majority of traffic accidents occur within 10 miles of the driver's home. Just when we feel the most comfortable in a routine or familiar situation—we let our guard down: that's when it happens.

We all have a tendency toward taking the easiest route. It is just human nature to want to take the path of least resistance, the shortest or quickest route, one we know of or think we can create. When we are in a hurry and come up to an intersection and the light has been yellow, our instincts are to "punch that gas pedal" ... it is a matter of impatience and not having to wait. We're also in a hurry to get something done that we take safety shortcuts without thinking about the consequences.

Another instance is taking shortcuts by not wearing safety glasses when using the weed eater in edging the grass around sidewalks and trees. Every time a safety shortcut is taken and no one gets hurt, it reinforces the unsafe behavior, which encourages us to continue using that shortcut and to create even others.

Most injuries and fatalities, acts. But, for whatever reason, we fail to eliminate unsafe behaviors until we get hurt ... or someone else we know gets injured. The more unsafe behaviors we use without injuries, the more complacent we become.

- Leaders—Please Get Committed! It takes more than just saying you are committed to safety—you have to put actions behind your words. Leaders can demonstrate their commitment to safety in a variety of ways. First and foremost, leaders must always lead by example and look to weed out complacency.
- Take time to walk around and talk to our Airmen and their families. Visit Airmen in their workplaces whether on the flight line, shop floor, at the work site or in their offices. Talk about your personal concern for safety and listen to their concerns. Take personal action to correct unsafe situations.
- Integrate safety into all aspects of planning. During crew changeover, maintenance dispatches, and security force guard mounts review reports and discuss potential safety hazards that might occur. Take care to ensure that your focus is a positive action rather than a punitive one.

Enable and encourage Airmen to get involved

in the safety process. Identify areas where Airmen can become actively involved in the safety process and encourage their participation by allowing them to share their own activities and near mishaps. Then recognize their involvement and efforts with positive reinforcement. Airmen whose ideas and involvement are valued will increase safety performance faster than our Airmen who simply follow the rules. Encourage creative ideas from our Airmen—we must create a culture in the Air Force where injuries are a thing of the past. We cannot let our guard down-our people and our mission are too important to the nation! Yes, complacency is a dangerous thing—it can indeed be a killer!

complacency kəm-'plā-s^ən(t)-sē

comes before

DICTIONARY

disaster di-'zas-tər

OVER THE EDGE | MARCH - MAY 2016 11



In The Driver's Seat

Courtesy of Advocates for Highway and Auto Safety, Washington, D.C.

Making Smart Decisions – Tips to help protect you, your family, and others on the highways:

Have a Clear Head. Ensure you always have a clear head before deciding to operate a motor vehicle. Alcohol and certain drugs, both illegal and legal, can severely impair your driving skills. Many prescription and over-the-counter

medications can cause dangerous drowsiness. Get a good night's rest, and don't drive for long stretches without a break. If you are tired, don't risk the safety of yourself and others on the highway by trying to drive.

Limit Driving Alone When Tired. Driving with someone else in the car can increase your overall alertness. It is well recognized that when driving alone, especially when sleep deprived, and at night, your chances of a crash are dramatically increased.

Plan Ahead. Allow yourself plenty of extra time to reach your destination, and allow for emergencies or traffic jams. In today's busy world, most of us are in a hurry to get where we are going. By allowing extra time, we can be more relaxed when operating our vehicles and thereby cut down on the incidences of road rage ... such as excessive speeding, tailgating, and weaving in and out between cars.

Research Safety Features. Safety should always be a top priority when shopping for a vehicle. Research the safety performance of any vehicle you are considering buying—including how the vehicle performs in crash tests. Both driver and passenger side air bags are mandatory in all new cars. Look for side impact bags in many new models as well. When buying a used vehicle, look for one with air bags. Research what type of safety systems are in the car, and choose the safest to protect you and your loved ones in the event of a collision.

Relax. Avoid aggressive driving by relaxing and having patience. By not being in such a rush to reach your destination, you'll be a calmer person and better able to resist the temptation of speeding or running through red lights. And don't forget ... a yellow light means to slow down, not speed up. Always stop at red lights.

Be Alert to Signs of Fatigue. If you start to feel tired when driving, pull over in a safe area and let someone else drive. If you are alone, pull into a safe location (such as a well lit rest stop), and take a short nap or get out of the car so you can walk around for a few minutes. Stop as often as necessary. When traveling on long trips, eat light. Large, heavy meals can make you drowsy.

Practice Common Sense Safety Rules. Always wear your seat belt and make sure all your passengers are buckled properly, even on short trips. If traveling with children, educate yourself on the many kinds of child safety seats and restraints. Choose which system is best for your child, and always follow the directions. Make sure children ages 12 and under are always buckled up in the back seat, the safest place to ride.

Keep Your Eyes on the Road. Avoid taking your eyes off the road by eliminating any possible distractions ahead of time. Before setting out on a drive, be sure that important items are within easy reach (i.e., directions and maps, sunglasses, etc.). Reduce any dangerous diversions of your attention from the task of safe driving—changing radio stations/CDs, texting, or cell phone use.





The time is here and the dusting off of the bikes has commenced! Be sure you take all the necessary precautions, use proper personal protective equipment, complete required training, and Check 3 GPS (gear, plan, skills).

Whether you're an everyday commuter or an adrenaline junky with a need for speed, know that motorcycles are more dangerous and require much more precaution than their four-wheeled counterparts. You've heard it all before, but some things are just worth repeating:

Don't forget TCLOCS

IRES & WHEELS Check the air

pressure, check for roundness, cracks, dents, broken or missing spokes.

CONTROLS Review the levers and pedals to make sure they're still lubricated, adjusted, and fitted properly. Inspect cables to make sure they are not frayed, kinked, or folded into sharp angles. Test that the throttle moves freely, does not stick, and snaps closed when released.

LIGHTS Check the battery terminals to ensure they are clean and tight, properly charged and secured. Look over the lenses for cracks, and secure mounts.

OIL / FLUIDS Check the levels and quality of the engine oil, shaft drive, hydraulic fluid, coolant, and fuel. Also check for leaks.

GHASSIS Check the frame condition; ensure front forks and rear shocks are properly adjusted; check belt or chain tension (lubricate the chain if needed and inspect the teeth of the sprockets). Replace broken or missing fasteners.

STANDS Both center and side stands should be checked for cracks, bends and make sure they spring into place and have the required tension to hold the bike in position.

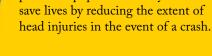
Let's get Ready to Ride...











Eye Protection: Since many motorcycles don't have windshields, riders must protect their eyes against insects, dirt, rocks or other airborne matter. Even the wind can cause eyes to tear and blur vision. Good vision is imperative when riding.

Helmets: The most important

piece of equipment. Safety helmets



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Gloves: Durable full-fingered are recommended. They should be non-slip to permit a firm grip on the controls.

Footwear: Proper footwear affords protection for the feet, ankles, and lower parts of the legs. Leather boots are best.

Clothing: Clothing worn when riding a motorcycle should provide some measure of protection from abrasion in the event of a spill. Jackets should have long sleeves. Trousers (not shorts) should not be baggy or flared at the bottom to prevent entanglement with the chain, kick-starter, foot pegs, or other protrusions on the sides of a motorcycle.

KNOW SAFETY NO PAIN

I am the enemy and I'm more powerful than the combined armies of the world.

I have destroyed more men than all the wars of all nations. I massacre thousands of people every year. I am more deadly than bullets and I have wrecked more homes than the mightiest of guns.

In the U.S. alone, I steal more than 500 million dollars every year. I spare no one and I find my victims among rich and poor alike, the young and old, and the strong and weak.

Widows know me to their everlasting sorrow.

I loom up in such proportions that I cast my shadow over every field of labor.

I lurk in unseen places and do most of my work silently. You are warned against me, yet you heed me not. I am relentless, merciless, and cruel.

I am everywhere — in the home, on the streets, in the factory, at railroad crossings, on land, in the air, and on the sea. I bring sickness, degradation and death; yet few seek me out to destroy me. I crush; I maim; I will give you nothing and rob you of all you have.

I am your worst enemy – I AM CARELESSNESS!

NO SAFETY KNOW PAIN

Author Unknown



A BODYBUILDER'S DREAM COME TRUE

Tech. Sgt. David, Creech AFB, Nev.

There he was, standing on the 2015 National Physique Committee National Bodybuilding Championships stage, in Miami. ... "And taking first place, your new (IFBB) International Federation of Bodybuilders and Fitness) pro card holder, David," the announcer bellowed into the microphone. "That moment meant everything to me ... the feeling was indescribable. It's something I had been chasing for so long and it's unexplainable ... it's been a life-long dream." Your dream may not be to become a bodybuilder or the president; maybe it's just getting your degree, but you have to have a dream, because when you finally achieve it, it will be a feeling that you will never forget." David, a 432nd Maintenance Group contract officer representative often says, "How do you want to be remembered when you leave this earth? Create your legacy ... leave your legacy." Don't forget: a good workout starts with Check 3 GPS.

SENSOR OPERATOR BY DAY ... RACE CAR DRIVER BY NIGHT

Tech. Sgt. Gabriel, Creech AFB, Nev. By day, he sits in a cushy, thick-seat in a ground control station flying another 8-hour sortie in the remotely piloted aircraft ... the MQ-9 Reaper. By night, he sits in a thin, lightweight racing seat, harnessed into a raw, stripped-out track monster. "There is nothing else that can bother you when you're on the track and have the throttle pinned. When the day for his first competition arrived, Gabriel was ready to attack the track. He exceeded his goal, claiming a podium spot in his first-ever competition. leaving him satisfied, yet eager for his next taste of completion. Until then, Gabriel will continue to fly the MQ-9 in support of global operations while working on his car when he can ... balancing himself to be a stronger leader, Airman, and driver. Be sure to "Check 3" first ... on and off the tracks!

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



