Let’s call it the “dirty little secret” of many mishaps. We live in a world in which we interact with complex machinery and systems every day both at work and in our personal time. With this mindset, many of you probably assume most of our safety-related incidents are caused by a complex interaction of issues which result in a bad outcome. While this can certainly be the case in some situations, we’ve seen a recent trend in many of our mishaps where a bad decision or complacency during a seemingly routine, fundamental task leads to a catastrophic turn of events. Especially in aviation, where many of you are executing some of the most advanced tactics in the world, the routine/administrative portion of the mission has been where we’ve seen many mishaps occur, not during the complex, tactical execution phases of flight. This demonstrates we are keeping a good focus during the high-intensity portions of our activities but may be lessening our vigilance when we believe we are in a less demanding phase.

However, as we’ve discussed before, your car, aircraft, body, etc. doesn’t really care what phase of an activity or mission you are in. It will react to whatever inputs and direction it is given. If this results in a bad situation, it doesn’t know or care that it is supposed to be a low-threat, routine task where these things don’t happen. A good analogy is a race car driver performing highly-skilled maneuvering for several laps and then crashing into the wall near the pit crew due to not focusing on the routine task at hand. While everyone has these routine tasks both at home and at work, never let “routine” equal “not important—no threat.”

The point is you need to ensure you are keeping your focus on every aspect of any activity and not stopping this focus until you are done. It ain’t over until it’s over are good words to always keep in mind when performing any activity—and no matter how complex your tasks, remember the fundamentals are always there and important. Have a great winter season and thanks for all that you do every day.

Col. Lawrence A. Nixon
Director of Safety
During this past August, the Air Force Safety Center’s focus was Command and Control (C2) Systems Aircrew Operations safety.

As a prior C2 Battle Management Weapons director, I have more than 15 years of experience in the C2 realm. There were numerous times while controlling the skies over Iraq or Afghanistan, situations could have turned south quickly. I remember one incident in particular; while deployed to Balad Air Base in 2006—I had “tunnel vision” from being over tasked. I learned a lesson in resource management that day.

The conditions were set that could have easily cost the lives of both Marine and Air Force pilots. At that time, there was only one controller on scope talking to the aircraft and another controller, called an “assist,” working with Air Traffic Control via computer chat.

Here was the situation...

I had roughly 40 aircraft under my control, many of which were in a Combat Air Patrol over the Baghdad area ...
There was a flight of F-15E Strike Eagles requesting a transit for a tasking from a CAP around Baghdad to the south; a flight of F-16 Fighting Falcons requesting a tanker point-out; a flight of F-18s established in a CAP just south of Baghdad; a remotely piloted aircraft flying around doing nothing but getting in the way (at least that is what it appeared to me) and had no radio contact with me; and ATC was trying to launch and recover civilian air traffic out of Baghdad. In addition, my senior director (SD) was busy coordinating an issue with the Air and Space Operations Center. I was busy and quickly losing my situational awareness due to over saturation with the mission. The F-15Es were leaving their orbit so I gave them a transit altitude that I thought was safe at the time. My next task was to give the F-16s a point out to the tanker and get them out of the way of maneuvering aircraft. Just after giving the tanker information to the F-16s, the F-18s requested a lower altitude from 18,000 feet to low level for a show of force. I quickly sanitized the immediate area and approved the drop in altitude and pushed them to a Joint Terminal Attack Controller frequency. About that same time, my “assist” was telling me ATC wanted to take an aircraft off out of Baghdad. I quickly told them to hold on the runway until I could clear the airspace. The RPA then re-appeared on my scope after we lost radar contact with it about 10 minutes prior. Luckily, the F-18s already had awareness on the RPA from the JTAC. At this time, I told my SD I needed help because other aircraft started to request movement from one area to the next, or to return to base. The SD told me he was busy and to handle it. No more than a minute later, I get a call on the radio from the lead F-15E. The question was “Were you aware of the F-18s in the airspace, because they just crossed about 300 feet in front of my nose?” At that moment it felt like time froze. I had given a transit to the fighters and forgot about them. I had no idea how to respond. The only thing I could think to say was “copy.” My response did not answer his question, but it was all I could think of at that moment. I was so focused on the F-18s and the RPA, I completely forgot about the transit instructions I gave just minutes before. None of the other people on my crew had caught the near-miss either. The F-15E pilots were able to avoid the F-18s through the rest of the transit, but the near miss was too close. During the debrief with my crew, I discussed what happened and we learned a hard lesson—when the voice on the radio asks for assistance, it becomes the priority. Not only was this incident a failure on my part, it was a failure on my crew as well. I replayed that scenario in my head over and over again. I had many successes in my days as a weapons director, but that one day could have become a serious failure and would have cost more than anyone can repay; the life of a brother in arms. What I learned from that scenario is to listen when someone asks for help. I also learned crew resource management is the key to the success of a mission. All of the pilots in the air are counting on us to make the right decision and make it quick. Resource management can easily be translated into risk management. In this incident, both deliberate and real time risk management played a part. My crew had a plan and executed to the plan as much as possible, but during war the plan can quickly change. We always need to be prepared to quickly assess the situation and make smart decisions in the heat of the moment. Paying attention to what is going on around you, and keeping and maintaining your situational awareness high, can prevent a catastrophic mistake from happening. Have a safe plan, execute the plan, make time-critical adjustments as needed, and make sure everyone goes home safely at the end of the day.
SAFETY, a never out-of-date subject, has been battered around so much over the years that often comments such as these fall on deaf ears. Everything has been said that can be said—but we still have accidents. Basically, there are no new types of accidents—just repeats of accidents that everyone has been warned about with millions of words and pictures. So again, as in advertising, we have to repeat again and again in order to telegraph this important message of safety to our personnel.

SAFETY is knowing your job. The best guard against mishaps is an understanding of every facet of your job. A pilot in command of an intricate weapons system has no room to make mistakes. The slightest miscalculation of a routine job can lead to a serious accident. Our biggest safety hazard is the man who only half understands his job.

SAFETY is pride in your job. A proud approach to your job offers no room for carelessness and automatically protects against safety hazards. When morale and pride in workmanship is low, we are more liable to make mistakes; accidents begin to happen. A proud approach to a job is a safe approach.

SAFETY is not luck; it does not just happen. A safe environment is made to happen when people are aware of hazards which exist. You can't be safe when you aren't alert to hazards around you. Alert people are the backbone of sharp, well-run organizations. In regard to safety, there is no such thing as bad luck. Excellent safety records in an organization are the result of alert personnel who know their business and are keenly aware of their responsibilities. There is no place for luck in the business of preventing accidents.

General Watkins was stationed in Hawaii during the attack on Pearl Harbor in 1941, and he was one of the few pilots to get into the air during the attack. He was later assigned to the 79th Fighter Group in North Africa where he destroyed three enemy aircraft while flying P-40 aircraft. In 1965, General Watkins assumed command of the USAF Air Ground Operations School.
F-100
14.35 Class A mishaps per 100K flying hours in CY1965

F-101
8.75 Class A mishaps per 100K flying hours in CY1965

F-105
22.3 Class A mishaps per 100K flying hours in CY1965

TAC had 8.7 Class A mishaps per 100K flying hours in CY1965

in 2015 ACC aircraft Class A mishap rates were down more than 75% compared to TAC rates in 1965

ACC had 2.13 Class A mishaps per 100K flying hours in FY2015

* ACC rate reflects manned aircraft only

* F-10, F-15E and F-22 rates are Air Combat Command (ACC) Class A mishap rates.
Today, 50 years later, as stated by Brig Gen Watkins in 1965, safety is still not an out-of-date subject. What is evident in reviewing the mishap rates between 1965 and 2015 is the great progress our enterprise has accomplished in decreasing mishap rates and preserving our combat capability in both equipment and people. There is no one area responsible for this progress—it is a combination of individual professionalism, training, leadership, and material/design improvements. What is clear is the aviation mishap rate is drastically improved. The tenets stated in 1965 still ring true today—know your job, act professionally, and continue to utilize risk management to mitigate hazards in our endeavors.

As we advance aviation into new frontiers with Remotely Piloted Aircraft (RPA) and fifth-generation fighters, our command-level efforts to reduce mishaps continue with incorporating recommendations from safety investigations in our processes and equipment, such as the Auto Ground Collision Avoidance System (AGCAS) in the F-16, as well as implementing various proactive safety measures. However, individual efforts and professionalism, in the end, are the major keys to success in mishap prevention. Fifty years from now, in 2065, while the tenets of safety will remain the same, they hopefully will be examining the drastic aviation mishap rate reduction since 2015. Fly Safe!
The mishap flight was scheduled as a 2v1 air combat maneuvers (ACM) training mission. The two-ship included an instructor and a student, and number three in the formation was to act as the adversary. During the incident engagement, the adversary was pointed at the formation from 15-20NM away, with the two-ship heading for the merge spread in tactical formation. The student pilot initially maneuvered as he became targeted by the adversary’s radar, and then visually merged with the adversary aircraft. At the merge, the student pilot began a turn in the direction of his flight lead, but failed to use proper radio calls to ensure proper transfer of responsibility for deconfliction within the formation to the lead aircraft. To exacerbate the situation, the instructor misperceived the wingman as turning away from the instructor’s current position. With the instructor focused on simulating a kill on the adversary, and the student pilot blind on the instructor aircraft while maneuvering against the same adversary, the two aircraft continued on their collision course and impacted. Fortunately, no one was killed, but the mishap resulted in losses to the Air Force of tens of millions of dollars.

**Ground: 1 — Aircraft: 0**

The mission was planned as a student RPA landing practice sortie. Approaching the normal perch point, the instructor directed the student to delay the turn to final, but begin the descent. As the instructor pilot focused on the student’s ground track, he failed to notice an excessive sink rate developing. Degraded data signals exacerbated the instructor’s channelized attention, and led to the RPA impacting terrain well short of the runway. Fortunately, no aircrew were injured during the crash; however, the Air Force lost a valuable combat asset.

**Get the Balance Right**

These two mishaps resulted in some “unplanned” lessons learned for both the student and instructor pilots. They also were both related to instructors losing the “big picture” while performing instruction. The Air Force IP Basic Course manual is fairly clear: “...never allow students to exceed your own abilities/comfort zone and never compromise safety for the sake of instruction.” As you strap in for your next instructor sortie, ensure your teaching duties don’t lower your SA to the point of risking overall mission safety.
Lack of Leadership + 
Human factors 

Aircraft Maintenance Mishap

A maintenance mishap usually involves a misplaced tool, improper maintenance procedures or technical data violations. It may end in a mishap, but where does the mishap begin? We need to peel back the layers to determine why there was a screwdriver left in an inlet, how the sniper pod fell off the pylon and why maintainers were performing maintenance without a technical order. When maintenance is the causal factor of an aircraft mishap, it indirectly comes down to one or a combination of the following factors:

1. Fatigue/Stress
2. Time pressure
3. Misperception of Hazards
4. Inadequate skills
5. Lack of Motivation

Having spent 15 years as an aircraft maintainer, at one point or another, I have experienced all five of the factors mentioned. Being young, dumb and having a belief that you are invincible is a commonly shared among many 18 year olds, but it is a recipe for disaster. Luckily for me, I was surrounded by supervisors that were aware of my strengths/limitations. They took the time to get to know who I was as an individual, enabling them to notice changes in my attitude/work performance.

It is simple to place blame on the individual who was the direct cause of the aircraft mishap, but at the end of the day, it boils down to a lack of leadership/supervision. Couple human factors, with lacking leadership/supervision, then it’s only a matter of time before your unit is facing a site visit from a Safety Investigation Board. As a supervisor, the first step in eliminating maintenance mishaps is by stepping out from behind the desk and develop a relationship with the Airmen that work for you. As long as there are human beings, there will always be human factors, but by becoming better leaders and better supervisors, we can eliminate the equation that results in a maintenance-related aircraft mishap.

Performing aircraft maintenance can be challenging in today’s Air Force. Shrinking manpower, combined with a steady-state operations tempo, can produce disastrous results. Maintainers can feel the pressure of the flying schedule and maintenance deadlines. This was never more evident than a swing-shift crew performing aircraft maintenance late into a Friday night.

The task seemed simple; complete a few time change maintenance tasks on an engine and wrap up for the weekend. There were, however, complicating factors. Engine maintenance was interrupted multiple times by supervision for competing priorities, resulting in overlooked and skipped maintenance steps as the maintainers being bounced between jobs. Each time the maintenance crew returned to the engine, additional broken components were discovered, extending the once short maintenance timeline to a lengthy 12-hour shift. Being that it was a swing-shift Friday night, there would not be an incoming shift to relieve the maintenance crew, leaving them to finish all the work they had started. The Friday crew began to feel the time crunch and pressure from leadership to conclude all tasks before the unit is closing. Time-crunch pressure, combined with bouncing from one maintenance task to the other, led to improper installation of engine components, and was not identified during the 7-Level inspection. The night crew wrapped up and went home for the weekend, leaving the engine operational checks to be accomplished on the following Monday morning. Needless to say, once the engine ignited, numerous parts of the engine exhaust section sheared off and fell to the ground. The ground run was terminated and investigation into the costly mishap began.

What were the determining factors that led to this mishap? A single crew staring down the wrong end of a 12-hour shift while working numerous maintenance tasks simultaneously. Also, there was a 7-Level that failed to identify the incorrectly installed engine components, forcing the maintainers to proceed with the 7-Level inspection into the costly mishap began.

These human factors ultimately lead to extensive engine damage of a fighter aircraft and provide a classic example of how numerous human factors can lead to an aircraft mishap. Passing the maintenance over to a weekend duty crew, concentrating on one task at a time, and performing a thorough 7-Level inspection could have mitigated this mishap and saved the Air Force a large sum of money.

Human factors:
1. Fatigue/Stress
2. Time pressure
3. Misperception of Hazards
4. Inadequate skills
5. Lack of Motivation

What does each symbol represent?

Although not all inclusive, here are the most common symbols you will come across on most Air Force installations.

**Fire Division Symbols:**
- **Mass Explosion Hazard – Blast** is the primary hazard in this division. These explosions generally cause severe structural damage to adjacent objects. Examples munitions range from dynamite to 2,000 pound bombs.
- **Non-mass Explosion, Fragment Producing – The explosion of these munitions will throw fragments, firebrands, and non-functional items from the point of initiation. Blast effects are limited to the immediate vicinity and are not the primary hazard. Grenades are a great example.
- **Mass Fire, Minor Blast or Fragments – Items in this division burn vigorously and the fires are difficult to put out. Rocket motors and fuses are two munitions that fall within this division.
- **Moderate Fire (no blast or fragments) – Items in this division present a fire hazard but no blast hazard. There is virtually no fragmentation or toxic hazard beyond the fire hazard clearance ordinarily specified for high-risk materials. Almost all small arms ammunition (9mm, .50, 7.62, 12ga, etc) are included in this division.

**Chemical Agent Symbols:**
- **Set 1 - Warns firefighting personnel of highly toxic chemical agents in the storage facility. The vivid icon in red notifies firefighters that they must wear a service-certified gas mask, impermeable suit, hood, and boots.
- **Set 2 - Lets firefighters and workers in the facility know about the presence of harrowing agents, riot control agents, and smoke in the facility. Yellow icon notifies firefighters that they must wear a service-certified gas mask/ self-contained breathing apparatus (SCBA), permeable coveralls, and protective gloves.
- **Set 3 - Protects firefighters against dangers of white phosphorous and other spontaneously combustible materials stored in the facility. The white icon reminds firefighters to wear a service-certified gas mask/ self-contained breathing apparatus (SCBA), flame-resistant coveralls, and cowls.

**Breathing Apparatus** - Effectively communicates that a protective mask is required to prevent inhaling smoke from incendiary mixtures.

**Apply No Water** - Makes firefighters aware that using water to extinguish the fire will cause a dangerous reaction.
QUARTERLY AWARDS

**Aircrew Safety Awards of Distinction**
- Zapper 11 Crew – 41 ECS, 55 WG, Davis-Monthan AFB, Ariz. (August 2015)
- Capt Lindsay Yip, Lt Nathan Siemens, SSgt Andrew Cohea – 340 EARS, 379 AEW, Al Udeid AB, Qatar (September 2015)
- Bone 13 Crew – 37 EOG, 379 AEW, Al Udeid AB, Qatar (October 2015)

**Crew Chief Safety Awards of Distinction**
- SrA Marco E. Garcia – 325 AMXS, 325 FW, Tyndall AFB, Fla. (October 2015)
- SSgt Anthony E. Mills – 966 AACS, 552 ACW, Tinker AFB, Okla. (September 2015)
- SSgt Christopher C. Anderson – 552 MXS, 552 ACW, Tinker AFB, Okla. (September 2015)
- SSgt Bethea – 455 EAMXS, 455 AEW, Bagram AF, Afghanistan (August 2015)
- SSgt Anthony E. Mills – 14 EFS, 407 AEG, Muwaffaq Salti AB, Jordan (September 2015)
- SSgt Marissa J. Hastings – 9 AMXS, 552 FW, Beale AFB, Calif. (August 2015)
- SSgt Michael J. White – 455 EAMXS, 455 AEW, Bagram AF, Afghanistan (August 2015)
- SSgt Adam J. Tollett – 552 MXS, 552 ACW, Tinker AFB, Okla. (September 2015)
- SSgt Matthew G. Fortier – 9 RW, Beale AFB, Calif. (September 2015)
- T Sgt Michael J. White – 455 EAMXS, 455 AEW, Bagram AF, Afghanistan (August 2015)
- Maj Jack A. Nelson – 9 AMXS, 552 FW, Beale AFB, Calif. (September 2015)

**Flight Line Safety Awards of Distinction**
- SSgt Bethea – 455 EAMXS, 455 AEW, Bagram AF, Afghanistan (August 2015)
- Maj Jack A. Nelson – 9 AMXS, 552 FW, Beale AFB, Calif. (September 2015)
- SSgt Marissa J. Hastings – 9 AMXS, 552 FW, Beale AFB, Calif. (September 2015)
- SSgt Adam J. Tollett – 966 AACS, 552 ACW, Tinker AFB, Okla. (October 2015)
- SSgt Matthew G. Fortier – 9 RW, Beale AFB, Calif. (September 2015)
- SSgt Michael J. White – 455 EAMXS, 455 AEW, Bagram AF, Afghanistan (August 2015)

**Ground Safety Awards of Distinction**
- SSgt Michael A. Bethea – 9 RW, Beale AFB, Calif. (September 2015)
- SSgt Anthony E. Mills – 966 AACS, 552 ACW, Tinker AFB, Okla. (September 2015)
- SSgt Anthony E. Mills – 14 EFS, 407 AEG, Muwaffaq Salti AB, Jordan (September 2015)
- SSgt Marissa J. Hastings – 9 AMXS, 552 FW, Beale AFB, Calif. (August 2015)
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- SSgt Anthony E. Mills – 14 EFS, 407 AEG, Muwaffa...
threat reaction further into the low level environment and over flat terrain would likely have been to rehack the EP, staying at 1,000' AGL for a longer amount of time, and then executing a AAA TTPs to prevent this from happening again, were discussed as a 4-ship. Finally, on a ride meant these areas. Additionally, a thorough debrief relating to the areas described above, as well as a low level, the instructor should tailor the brief to the "student" to ensure adequate coverage of IAW 11-2F-16V3 paragraph 3.15.6. As these two areas are the most likely to be violated during 11-214 paragraph 3.7.1 Additionally, the EP banked over the 120 degree maximum allowed reaching 6.7g's. The aircraft crossed a subsequent ridge line at 380' AGL and approximately 25 degrees nose low and 130 degrees of bank, the Automatic Ground Collision Avoidance System (AGCAS) activated and initiated a recovery. The AGCAS initially rolled the aircraft to 20-30 degrees nose high. The AGCAS likely saved the EP/aircraft from impacting terrain. An approximately 10 seconds into the threat reaction the EP was approximately 20 degrees nose high and 1,500 ft AGL crossing a ridge line. The EP executed an aggressive nose down "last ditch" type maneuver over the ridge line into the valley. The EP failed to realize the that the ridge line in front of him would be a factor during this maneuver. At approximately 25 degrees nose low and 130 degrees of bank, the Automatic Ground Collision Avoidance System (AGCAS) activated and initiated a recovery. The AGCAS instantly rolled the aircraft to wings level and then began a 5g pull up. The EP overrode the AGCAS by pulling additional G's reaching 6.7g's. The aircraft crossed a subsequent ridge line at 380' AGL and approximately 20-30 degrees nose high. The AGCAS likely saved the EP/aircraft from impacting terrain. An AGCAS Flyup/Over G is not an emergency, so none was declared.

SUBMITTER SUGGESTIONS
Being that the low level portion was to rehack the EP, more emphasis should be made during the flight with peaks approximately 2-3K' MSL, the EP had an instructor input about AAA off his right 2 o'clock. The EP began executing a AAA threat reaction IAW AFTTP 3-1 procedures. Approximately 10 seconds into the threat reaction the EP was approximately 20 degrees nose low, 1,500 ft AGL crossing a ridge line. The EP executed an aggressive nose down "last ditch" type maneuver over the ridge line into the valley. The EP failed to realize the that the ridge line in front of him would be a factor during this maneuver. At approximately 25 degrees nose low and 130 degrees of bank, the Automatic Ground Collision Avoidance System (AGCAS) activated and initiated a recovery. The AGCAS instantly rolled the aircraft to wings level and then began a 5g pull up. The EP overrode the AGCAS by pulling additional G's reaching 6.7g's. The aircraft crossed a subsequent ridge line at 380' AGL and approximately 20-30 degrees nose high. The AGCAS likely saved the EP/aircraft from impacting terrain. An AGCAS Flyup/Over G is not an emergency, so none was declared.

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

As of September 30, 2015

As of September 30, 2015

As of September 30, 2015

FY15 was a bitter-sweet for ACC. We had "zero" fatal PMV-4 mishaps this year—a first in the history of ACC! However, we suffered "10" PMV-2 fatalities during this same timeframe as opposed to only one in FY14. Class B mishaps were also on the rise—15 Class B's in FY15 (as opposed to only four during the same time last year). Most Class B mishaps were work related with only two involving motorcycles, reinforcing the fact PMV-2 mishaps almost always resulted in a fatality. The good news is that traditional solutions to reduce the number of preventable motorcycle fatalities have been effective; yet still, new approaches are needed to battle against unsafe rider behaviors, reduce distracted driving and curb alcohol-impaired riding. We have learned that when our riders are operating within their abilities and the law, they make good decisions and are better able to react when threatened by hazards. Let’s remain cognizant and stick to a sound plan.

It is incumbent for Airmen to ensure safety is an important consideration in all real world and training events. Ammunition and Explosives (A&E) are designed to neutralize the enemy, but if not utilized properly, they can/may/must kill a service member. Keep that in mind when handling A&E, one mistake can be unforgiving. Repetitive training and following guidelines are essential to mishap reduction. Speaking of which, ACC experienced only one mishap this quarter. Great job team ACC!

FY15 has been a challenging year of flying. First and foremost we are saddened by the loss of two members of our ACC family due to flight-related mishaps. Flying isn’t inherently dangerous, but it can be unforgiving. It’s always difficult to process the loss of our fellow Airmen. Our thoughts are with the family and friends of these warriors. Of the 16 Class A mishaps the command suffered this year, half occurred in deployed locations and 11 aircraft were destroyed. While both Class A and C mishaps and rates increased, ACC Class B mishaps were lower than they have been in over 10 years. Additionally, ACC BASH programs have yielded the lowest total number of strikes in over 10 years. With continued vigilance and attention to detail, we can reverse the negative trends and improve upon the positives. In these high demand environments, know your limits and those of your wingmen. Stayed engaged, fly safe, and check 6!

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In these high demand environments, know your limits and those of your wingmen. Stayed engaged, fly safe, and check 6!
Check 3 is a quick and easy method to assess any activity or event for possible hazards. The “Check 3” approach is assessing three areas referenced by the common acronym GPS. In this case, GPS is not referencing a navigation aid. Rather, GPS is: Gear - Plan - Skills. This allows a quick review of your activity to highlight any issues or hazards. For instance, “G” (gear) may be your equipment, vehicle, or availability of drinking water. “P” (plan) may be the timeline, weather, sequence, and backup plans. “S” (skills) may be your rest level or overall experience level. If you see an issue or hazard in any of the areas, then adjust an area to mitigate the hazard, especially the plan. Check 3 allows you to have a quick mental method to assess any activity.

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.

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What about his “Skills?”

Do you think he had a good “Plan?”

How was his “Gear?”

Send us your Check 3 analysis by March 1, 2016 and we’ll print the best (funniest) in a future issue of Over The Edge... AND we’ll send you a free Check 3 activity bag!
SHARE YOUR STORY!

BY MAJOR (CHAPLAIN) WILLIAM K. THORNTON

I was raised in Warren County, Mississippi, just a short distance from the Vicksburg National Military Park. As a young teenager, I rode my bike and trekked through portions of the park too many times to count. I ran up and down hills where battles raged, crawled onto monuments, sat atop huge statues of cavalrymen saddled on their horses, stood next to monuments of soldiers with their weapons raised, and strolled through the Vicksburg National Cemetery and its near-17,000 graves honoring the fallen.

The glorious Illinois State Memorial rotunda is near my childhood home. It is modeled after the Roman Pantheon. I've walked up its massive steps and spent hours viewing the 60 unique bronze tablets lining its interior walls, reading the names of the 36,325 Illinois soldiers who participated in the Vicksburg Campaign. Each of those names represented a story... a story of sacrifice and hardship, separation from loved ones, acts of valor, and service before self.

I wish I could talk to them and hear their stories. Their names being placed on the bronze tablets is the only recognition most of these soldiers ever received for their sacrifice and service. Many, no doubt, performed heroic deeds in the siege of Vicksburg and in their service as soldiers. But we don't know what they did. What they accomplished as individuals was generally not recorded, except maybe in personal diaries. Their stories were often unshared.

You know how it is with war veterans who don't talk about their wartime experiences. These are too often the unheralded heroes.
Fast forward 87 years to another war raging on the Korean peninsula. It was December, 1950, and the U. S. Eighth Army had withdrawn from western North Korea due to pressure from overwhelming numbers of communist troops. By the end of the month, most of North Korea will be back in communist hands, with communist forces crossing the 38th parallel into South Korea and pressing toward Seoul.

Herculean efforts have historically been made by innumerable military members to protect the innocent from the ravages of war. The Korean War was no exception. There was grave concern regarding the evacuation of civilians in peril; Americans in particular, the population in general, but especially for the children who were in the way of the military onslaught. Seoul had been nearly destroyed. Hunger, thirst and disease were nearly destroyed. Hunger, thirst and disease were

In the way of the military for the children who were in general, but especially particular, the population in peril; Americans in the evacuation of civilians grave concern regarding no exception. There was four-day wait for a boat that never arrived. The danger to Blaisdell, Strang, and the children and volunteers in their care was very real and very present. They went days without food or sleep as they carried out their rescue. Whooping cough and measles broke out among the orphans. Eight of the weakest children died. The fate of over a thousand was in their hands. Their

American military personnel to remain with the orphans during the grueling four-day wait for a boat that never arrived. The danger to Blaisdell, Strang, and the children and volunteers in their care was very real and very present. They went days without food or sleep as they carried out their rescue. Whooping cough and measles broke out among the orphans. Eight of the weakest children died. The fate of over a thousand was in their hands. Their

means of rescue was nowhere to be found. But leaving the children to the advancing Chinese would have meant their certain massacre.

Blaisdell went to Air Force Col. T. C. Rogers, Chief of Operations, 5th Air Force, for assistance in the evacuation of the children. Rogers directed Blaisdell to take the children to the airport at Kimpo, another 28 miles away, where C-54s could fly the children to safety. Blaisdell pulled rank as he and Strang commandeered several trucks to transport the cold, starving and sick children to Kimpo, where 16 C-54 transport planes from the 61st Troop Carrier Group flew 930 orphans, six months to 1 year of age, and about 110 orphanage workers to safety at Cheju-do, an island off the South Korean coast.

The planes waited over an hour until the trucks bearing the children arrived. When they arrived at Cheju-do, the chaplain and chaplain assistant helped in resettling the orphanage. When the children arrived. When they arrived at Cheju-do, the chaplain and chaplain assistant helped in resettling the orphanage. When the children arrived. When they arrived at Cheju-do, the chaplain and chaplain assistant helped in resettling the orphanage. When the children arrived. When they arrived at Cheju-do, the chaplain and chaplain assistant helped in resettling the orphanage.

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Precious lives were saved, and just in time for Christmas. To quote from an article published in Airmen Magazine, December 2000, titled, “A Christmas Story... Chaplain Saves Orphans During Dark Days of Korean War, by Senior Airmen Elaine Tarello:

“And it was the beginning of a new life for the children, like Choi Chu-ja, who was on a plane that day. ‘The only memory I have of that plane ride is sitting with the other children on the floor,’ she said. Now named Susie Allen and the mother of four living in Chico, Calif., she owes her life to Chaplain Blaisdell. ‘I don’t know how to describe the feelings in my heart. They have just always been a part of me,’ she said. ‘They were my heroes.’”

and left to die. When the communists invaded in June 1950. It is said they killed every child they found. Blaisdell determined this would not happen again if he could do anything about it. He and Strang obtained a truck and made many round trips to transport the Korean children from Seoul to Incheon Harbor, roughly 20 miles away, where a ship was promised by the Korean government to transport the children to safety. They were the only U. S. military personnel to remain with the orphans during the grueling four-day wait for a boat that never arrived.

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No doubt, all of those rescued would agree. Senior Airman Elaine Tarello continues to write, “One year after the rescue … Chaplain Blaisdell returned to Cheju-do. The head of the orphanage, On Soon-whang, and the children held a parade in his honor … The orphanage moved back to Seoul soon after the invasion …”

Blaisdell returned to a hero’s welcome in South Korea in 2001, where he was greeted by the First Lady of South Korea, and awarded an honorary Doctorate of Social Welfare. He has been referred to as the “Schindler of Korea,” after Oskar Schindler, the German businessman who saved the lives of more than a thousand Jewish refugees during the Holocaust by employing them in his factories. In 2003, Blaisdell received the Air Force’s highest award for chaplains, the Four Chaplains Award for extraordinary humanitarianism. Blaisdell died in 2007.

Strang died in 1998 without ever receiving any official recognition for his role in saving the orphans during his lifetime. He was involved in rescuing many of the estimated 6,000 orphaned and homeless children found in the streets, alleys and bombed buildings of war-torn Seoul. He was posthumously awarded the Bronze Star in 2003. Then-Air Force Chief of Chaplains, Maj Gen Charles C. Baldwin, presented the Bronze Star to Strang’s brother, the Rev. Homer Strang. Strang said his brother was a humble man, not one given to talk about his wartime experiences.

In a personal letter written to now-civilian Strang in 1957, Blaisdell wrote:

“I would like to take this opportunity to say again that I have the highest respect and admiration for you in your integrity, devotion to duty, and especially in your self sacrifice during the time we worked with and transported the orphans. No one could have conceived of a more devoted, hardworking individual to have by his side during such a strenuous, uncertain and, at times, dangerous job than I had in you.” These sentiments were mutual, as Strang wrote in another letter of his highest regards for Blaisdell.

As I read those post-war letters between chaplain and chaplain assistant, and the accounts of the Operation Christmas Kidlift, I thought again about the bronze tablets within the Illinois State Memorial, and the stories behind the names on the tablets. Stories that need to be told … and told again. The story of these two fellow warriors has inspired many through their faith, perseverance, and professionalism. Blaisdell and Strang didn’t save the children and volunteers from certain war-time death for personal credit, recognition or a medal. In fact, credit for their heroic accomplishments was claimed by another, but I won’t go into that story.

Blaisdell added in his letter to Strang:

“The goal of our efforts, in regard to the orphans … was the saving of lives, which would otherwise have been lost. That was accomplished. In a sense, Mike, well-doing has its own reward, which is not measured in dollars, prestige, or good will …”

They did it because it was the right thing to do, and they could do nothing less … or nothing else.
Skidding out of control on icy roads toward a solid object is a decidedly unpleasant event. It is even more unsettling if the object is a roadside barricade meant to prevent vehicles from plunging off an adjacent cliff. The more disastrous scenario is that you have lost control of your 3,000-pound SUV during a snowstorm and are sliding quickly toward a subcompact filled with a pair of astonished parents and their terrified kids. Unless you have been trained in how to respond to a snow- or ice-induced skid, you will invariably succumb to what the experts call “target fixation.” That is: focusing on your impending doom instead of taking proper evasive action. This will, no doubt, result in a crash. Below are some tips to help you when you start skidding out of control.

1. **Be prepared:** Before you set out in winter weather, make sure your vehicle is properly equipped (i.e., snow tires or chains in extreme conditions).

2. **Slow down:** Driving too fast is the No. 1 winter driving error. Slippery roads make every mistake happen faster and more dramatically. Don’t think antilock brakes, stability systems or other vehicle control mechanisms will help you if you’re sliding.

3. **Look ahead:** Be aware of road ice and other slippery conditions, but you should also double the distance you normally allow between you and the car in front of you. Look ahead and get ready for corners and other obstacles before you arrive at them.

4. **Brake before you enter a corner:** Smoothly apply your brakes before you reach a corner and then release the brakes and use all the grip of the car to corner. Then, once you are through the turn, accelerate out.

5. **Be informed:** Regardless of whether your vehicle is rear-wheel, front-wheel or all-wheel drive, the results of a loss of balance is the same. The result can be that the car will pull to the side in a corner and spin out.

6. **Learn how to control a skid:** Turn into the skid. Many over steer skids can be controlled and a disaster averted simply by releasing the brake and gently accelerating. Be careful not to over-accelerate or the tires may spin and you will over steer and slide out of the turn. In an understeer skid (when your car refuses to turn and is sliding), once again it’s important not to react instinctively by over-correcting the steering wheel, by braking or by doing both simultaneously.

Mastering control of your vehicle in snow and other winter driving conditions comes with learning proper driving techniques and with experience. Also, keep a first aid kit and winter supplies in the car. Go slow and stay safe.
Motorcycles are fun and fuel efficient, but it’s a known fact that they are more dangerous than a car. The truth of the matter is, motorcyclists are 30 times more likely to die in a crash than people in a car (according to the Insurance Institute for Highway Safety). Many enthusiasts enjoy a lifetime of riding without injury. The key to optimizing your odds is to be prepared and avoid risks. Basic safety initiatives will help you be safe to ride another day.

ACC lost 10 Airmen (nine male and one female) to motorcycle accidents in FY15, compared to only one in FY14. This is a disturbing trend and a huge concern for many reasons: The devastation it causes the member’s family; parents are without a son, a wife without her husband or a child without their dad. Another is the loss to the ACC family. We tend to make very close connections to those we work with in the AF. The loss is overwhelming and takes months, if not years to finally get back to somewhat of a normal life. Last, but not least is the loss to the AF mission. The mission will go on but will be severely hampered by the loss of even one Airman! Stay safe, always check 3, and keep the shiny side up!

Don’t be a POSER... it wouldn’t end well for you!

Use your head. A full-faced helmet that’s approved by the DOT is the best choice. Modern helmets are strong, light weight and comfortable; they also cut down on wind noise and fatigue. The Snell Memorial Foundation recommends replacing a helmet every five years or sooner if it’s been damaged or has been in a crash. You’ll also want effective eye protection; don’t rely on eyeglasses or a bike’s windscreen.

Wear the right gear. Jeans, a T-shirt, and/or sandals are recipes for a painful disaster on a bike! Instead, you want gear that will protect you from wind chill, flying bugs and debris, and, yes, lots of road rash if you should slide out. For maximum protection, go for a leather or other reinforced jacket, gloves, full pants, and over-the-ankle footwear, even in summer. Specially designed jackets with rugged padding and breathable mesh material provide protection as well as ventilation for riding in warm weather. Be visible—choose gear in bright colors.

Ride defensively. Be extra alert! Keep an eye out for cars suddenly changing lanes or pulling out from side streets. Don’t tailgate! Keeping a safe following distance is critical, both to ensure you have enough stopping distance and so you have time to react to obstacles in the road. An object that a car might easily straddle could be a serious hazard when on a bike.

Avoid bad weather. Slippery conditions reduce your margin for error. Rain not only cuts your visibility, but reduces your tires’ grip on the road, which can make cornering tricky. If you need to ride in the rain, remember, the most dangerous time is right after precipitation begins, as the water can cause oil residue to rise to the top.

Watch for road hazards. A motorcycle has less contact with the pavement than a car. Sand, wet leaves, or pebbles can cause a bike to slide unexpectedly, easily resulting in a spill. Bumps and potholes that you might barely notice in a car can pose serious danger when on a bike. Railroad tracks and other hazards should be approached as close to a right angle as possible, to reduce the chances of a skid.

Be ready to roll. Before each ride, do a quick walk-around to make sure your lights, horn and directional signals are working properly. Check the chain, belt or shaft and the brakes. Inspect tires for wear and ensure they’re set at the proper pressure.

Motorcycle riding is a perfect activity to apply Check 3!
Feeling, emotions, and mood, all affect temperament. What do they have to do with anything? Everything! Psychologists studying stress in humans and animals quickly found they could not easily attribute the results of their experiments to just stress because emotion and even temperament affected their participants’ performance. They could not always mince the effects of negative or positive emotion from the effects of stress.

Aside from the dramatic effects of “emotional flooding” on cognitive processing (a phenomenon called “cognitive interference”), emotions can affect how we perceive, integrate, and process information in more subtle ways.

Negative moods as induced by something as obvious as dwelling on a bad experience or as subtle a cue as a sad face flashed on a screen for a fraction of a second affected attention and decision making via risk assessment and tolerance. People experiencing negative or sad moods display a more narrow perspective, quite literally unable to see the larger picture (the hyper-focus Dr. Powell mentioned) but are more detail oriented, more readily attend to emerging cues and may perceive they need more information in order to make decisions.

On the other hand, positive or neutral emotions drive a more generalized point of view. People in a relatively positive mood expend less cognitive energy searching for solutions because they perceive situations as more benign, paying less attention to detail but display greater creativity in problem solving.

Feelings are for amateurs

Yes, experts can modulate the effect of emotion on performance but they only achieve Jedi-level after much practice working under various types of stress and emotion. For instance, even though experts might compartmentalize non-task related emotion (fight with a spouse; unruly offspring) better than novices, they may underestimate the effects of non-task related emotion on their performance. Furthermore 1) everyone has a threshold and 2) task related emotion (a “standard” mission vs. fear of loss of friendly forces) tends to have a bigger effect on performance.

Good news!

Even though emotions are typically automatically and unconsciously induced (reactionary), they can also be controlled and deliberately modulated. Thus, emotionality need not be a liability. Early research found emotionality correlated well with drive and motivation. Special Operations teams and elite athletes are proof that with practice, humans are very apt at identifying triggers, moderating response, and using emotion to enhance performance.

But first! Let me take a

Selfie

BY DR. P. BHOP

A great example of how the brain is wired for self-centered thoughts and emotions, which then dictate behavior (e.g., bathroom mirror selfies), is how according to a recent study, men admire their appearance approximately 23 times per day whereas women check for flaws 16 times per day. Thus we all already take mental “selfies” throughout the course of a day.

Those same introspective mechanisms allow us to assess the proportion of our emotional experience. In fact, when emotions become significantly heightened, it results in a phenomenon called “emotional flooding.” Emotional flooding occurs when neurochemicals override the brain’s usual frontal lobe reasoning function and results in a physiological back lash of brain stem behaviors. Simply put we sometimes become so overwhelmed with emotion (e.g., anger) that instead of thinking (e.g., articulating concerns) we react (e.g., Hulk Hogan fist punches a wall).

Entering the Flood Zone

Physiologically you might notice emotional flooding along with muscle tension, headaches, spilling of ocular liquid, uncontrolled temper, interrupted sleep, and elevated heart rate (usually above 100bpm). As a result of this assault on our frontal lobes, thinking will also deteriorate (a la Pinky vs. the Brain). This may result in:

• Hyper-focus – So concerned with being tardy, you forget to drop your child off at daycare.
• Decrease in memory quality and quantity – So nervous you don’t remember your own marriage ceremony. Did you even say “I do?”
• Narrowed perspective – During a fit of road rage you damage your classic Yugo and fail to notice that the passenger is currently sardined (literally) and you’re bleeding.
• Decreased social functioning – In your excitement over Olympic badminton, you fail to compliment your wife’s new “minimalist outfit” and mumble something like “more money wasted.”

Balancing the Force (aka maintaining cerebral equilibrium):

• Sleep: Seven to nine hours for 18-64 year olds. Fatigue affects the frontal lobe first.
• Practice: Choose to discuss emotional topics during non-emotional times. This allows you to control the environment and diminishes the “surprise” factor which can start the emotional flooding.
• Imagery: Mentally proactively rehearse potential scenarios and acceptable responses.
• Time-out then Re-engage: Take a 20-30min break; do something mindless or relaxing (e.g., click-bait, reading a magazine), to rebalance emotions and thinking. Re-engaging to complete the task or finish the discussion (as opposed to hiding in the garage for days) is a vital component of brain training.
• Emotion identification: Go beyond mad, sad, and happy as emotion words. Extend your vocabulary and identification of emotions to help manage them and increase problem solving.
• Social support: Yep you need team mates. Have we learned nothing from the A-Team or Cheers?

Bottom line: Take regular emotional “selfies.” Meaning, gauge your current mood by taking stock of physiological cues and proactively balance emotion and thought. Need help getting the right angle? Ask me for help. I may have an app for that.

Bottom line:

BY MEG, AEROSPACE AND OPERATIONAL PHYSIOLOGIST

Sweet Emotion

Feelings, emotions, and mood, all affect temperament. What do they have to do with anything? Everything! Psychologists studying stress in humans and animals quickly found they could not easily attribute the results of their experiments to just stress because emotion and even temperament affected their participants’ performance. They could not always mince the effects of negative or positive emotion from the effects of stress.

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I am a self-proclaimed “gym rat” who has been into lifting weights and fitness for nearly 20 years with the aspirations of becoming a certified personal trainer.

My father was a professional bodybuilder in the 70’s (Mr. New York) and I have taken his knowledge, along with my extensive research, to build programs not only for myself, but also for fellow co-workers throughout my career.

What follows are some thoughts and observations on starting your own fitness program.

There you are standing in front of that weight bench, treadmill, or running track, ready to begin your fitness journey. You’ve purchased new workout gear, maybe some new supplements that are all the rage and loaded that playlist on your iPod. You are ready to go! But are you? Most people forget the most important piece when it comes to starting a new workout routine—research! Now, that could mean a number of things. It could mean doing your research when it comes to the actual “working out” sort. It could also mean checking with your doctor and having a full check up to ensure your body is capable of taking whatever stress you are getting ready to put it through.

It’s a shame when folks finally get the motivation or time to do something about their fitness, but because of either poor planning or not enough research, they end up doing more harm than good.

A simple search in the Air Force Safety Automation System using the parameters of “Sports, Recreation and Individual Fitness” and “Combat Support and Training” (May 2014-15) reflected 2,577 reportable mishaps in these categories. While a portion of these may be attributed to activities such as ATV riding, snowboarding, etc., the majority of these mishaps that have come across our desk occurred during some form of physical fitness activity.

In the following paragraphs we are going to discuss some “tips” to ensure you are working out safely and getting the most bang-for-your-buck.

BY TECH. SGT. RAY E. OTERO


OVER THE EDGE | DECEMBER 2015 - FEBRUARY 2016
As I mentioned earlier, the first thing to sign off your “pre-workout” checklist is a visit to your doctor. Whether it’s your first time lifting a weight or you have been out of physical activity for a while, you want to ensure all the “gears” are working right. You don’t want to start engaging in physical activity and possibly further injure something that was an issue to begin with, but you just did not know about.

It would also be a great idea to discuss with your doctor the topic of supplements. The variety of supplements out there is astronomical. Speak with your doctor (and possibly a dietitian/nutritionist) about your fitness goals and what supplements you are considering using. Keep in mind that the official website for the Food and Drug Administration states, “Although dietary supplement manufacturers must register their facilities with FDA, they are not required to get FDA approval before producing or selling dietary supplements.”

What does that mean for you? Well, you could find yourself taking an unregulated supplement that has never been scientifically proven. Do your research! Muscles don’t come in a bottle folks, and be wary of any supplement that claims it does! If you do take a supplement, be sure to read the “suggested use” and “warning labels” on the packaging.

Bottom line: know what you are taking and how to take it.

Oh, you have received a clean bill of health, decided on what healthy supplements to take, and are raring to go. But wait! Have you figured out your exact “fitness goals”? Are you trying to gain muscle, shred body fat, increase your cardiovascular abilities, or maybe you just want to feel confident about getting into that bathing suit the next time you’re at the beach. Getting into that bathing suit the next time you’re at the beach. Want to feel confident about getting into that bathing suit the next time you’re at the beach.

No matter what your specific goals are, you have to keep them in mind when designing or adopting a new workout routine. You need to learn which types of workouts will help you achieve those goals. While “just winging it” in the gym might have its merits when trying to add variation to a set routine, it is never a good idea to use that as the baseline. While we are on the subject of goals, remember, Rome wasn’t built in a day and neither will your body. It takes time. A good rule of thumb is to start out slow and slightly increase the activity on a weekly basis.

Again, depending on your goals, that could be increasing the weight by five pounds or adding a quarter mile to your run. Our bodies are the best self-defense mechanism ever made! It’s that “self-defense” mode that gets us into shape. Your body adapts to the stressors that you put it under to protect you from getting hurt. That is why our muscles grow and why our cardiovascular system improves with every run or heart rate increasing activity. Your body also gets used to the stressors you put it under. If you do the same thing week after week, your body will just adapt to that particular stressor and not improve beyond that.

The key is to slowly increase your activity as you go. After about a 4-to-6 week period, you should change your routine. Not only can it shock your body a little, but it can also ensure you don’t have too much repetition in your movements and exercises. Overuse injuries can occur when you do the same type of exercise over and over again.

Depending on your goals, don’t be afraid to change it up and throw in something different every now and then. If you are looking for routines, the internet is flooded with them. Just make sure you pick a routine that you can do safely and will help you meet your goals.

We made it to the doc, picked the right routine, and the day has come to start your fitness journey. You walk into the gym or onto the track and are ready! Remember when we said to “start slowly”? Well, this is our first opportunity to put that into practice; specifically, by warming up and stretching.

Make sure your body is primed and ready to take on those “stressors” you are going to put it under. Start out with a good warm-up of about 5-to-10 minutes and with some stretching before starting the actual activity. By priming your body for the activity, you could help avoid a possible injury.

It is never a good idea to jump right into your routine cold. Your body could get “shocked” and react in a way that can possibly result in an injury. Listen to your body. If something doesn’t feel right—stop doing it! Go back to the warm up and reassess. Your body is usually a really good communicator when it comes to letting you know that something is wrong.

Regardless of your fitness goals, just make sure that you put some thought and research into how you are going to reach those goals. If you follow these simple tips, it could very well decrease your chances of suffering from an injury that could possibly put you out for some time and derail that fitness plan.