THE MOBILITY FORUM

THE MAGAZINE OF AIR MOBILITY COMMAND | SPRING 2017

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C-130 Hercules pilots climb to altitude while conducting high altitude air drop missions and static line troop drops.

USAF PHOTO BY SSGT KENNY HOLSTON

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Maj Gen Bence, Expeditionary Center Commander:

Airpower from the Ground Up

By MS. KIM BRUMLEY, Staff Writer

A C-130J Super Hercules waits to unload logistical supplies at Qayyarah West Airfield, Iraq. This is the second aircraft to land there following completion of repairs to the runway after Da'esh damaged it in an attempt to disrupt Iraqi Security forces from gaining control of the area.

U.S. Army photo by Spc Christopher Brecht

The United States Air Force Expeditionary Center (EC) at Joint Base McGuire-Dix-Lakehurst, New Jersey, serves as the Air Force's center of excellence for advanced combat support training and education, while providing direct oversight for en route and installation support, contingency response, and partner capacity building mission sets within the global mobility enterprise.

Maj Gen Christopher Bence, Commander of the EC, summed it up nicely. "Our mission is 'Airpower from the Ground Up.'" Recently, for example, Airmen assigned to the 821st Contingency Response Group (CRG) deployed to Qayyarah West (Q-West) Airfield in northern Iraq—an airfield previously occupied and deliberately destroyed by the Islamic State of Iraq and Levant (ISIL) forces that overran the area several years ago.

"ISIL knew that if the Iraqi government was going to take the fight to Mosul," said Gen Bence, "Q-West would be a very important airfield."

But the 821 CRG is highly specialized in rapidly deploying personnel to quickly open airfields and establish, expand, sustain, and coordinate air mobility operations in austere conditions. The CRG and allied forces faced obstacles reconstructing the airfield, as ISIL forces had planted numerous improvised explosive devices (IEDs) and other booby traps, and carved out deep trenches across the runway. Those obstacles were conquered quickly with the help of the Expeditionary Civil Engineer Group that arrived only weeks before the CRG. Once the CRG arrived, the mission of "airpower from the ground up" went full force, and the runway was operable in only two days' time.

"The ECEG and CRG were able to go in there and repair it all—develop and design the airspace to have the traffic flow in and out safely," said Gen Bence. "It was an amazing feat in just two days. That's what we do. It was a team effort that came together. That's a great testament for the capability that the CRG brings to the fight."

In addition to contingency response, the EC is also responsible for training and educating responders like the 821 CRG, who dispatch at a moment's notice around the globe.

"Our Expeditionary Operations School teaches more than 100 different formal courses," explained Gen Bence. "Using a building block approach, we start with predeployment training courses and development, and we go all the way up to intelligence, logistics, medical, and other things for Airmen to know as they go forward."

Gen Bence went on to express the importance of the EC instructors. "They go through a formal certification course. We also house and own all the tactics, techniques, and procedures for the Mobility Ground Operations in the Contingency Response forces," he said. This enables teams to come together quickly. In addition, the instructors come from a wide range of disciplines, which provides diversity

that meets the unique needs of the contingency response forces.

Diversity is also present in the joint base support at McGuire-Dix-Lakehurst.

"We have all three services stationed here," said Gen Bence, "but I like to remind folks that in addition to the Army and the Navy, we also have a Marine Corps group and Coast Guard aviation detachment, so we have all five services represented here."

Preparing Airmen for expeditionary operations is a challenge because they have to be prepared to go into any environment at any time. Sometimes it is a humanitarian effort, such as humanitarian relief after Hurricane Matthew in Haiti; other times it could be contingency operations in high threat areas, such as Q-West.

"Risk management is at the foundation of all we do—especially in a deployed environment where we must be attuned to our environment and follow AFIs to ensure that we minimize risk at every level," Gen. Bence continued. "Since risk management is ingrained and implemented into planning, the contingency response folks have the capability to look at the problem set and start applying risk management at the very beginning. It is standard practice and it goes into mission execution."

With a presence in 25 different countries, the EC is an unparalleled global force. From expeditionary training and education development, to joint basing and installation support, to global mobility en route operations, to contingency response—it is easy to see that the EC indeed embodies "Airpower from the Ground Up."

In closing, Gen Bence expressed how very proud he is of all the Airmen at Q-West and what they did to get the airfield open rapidly. It did not stop there, however. He says they also built out the airfield to include rotary wing aircraft from all the services and the Iraqi forces.

"Then they worked with the Iraqi security forces and senior Iraqi Air Force officials to begin to transition the airfield," he added. "Again, each piece of the United States Air Force EC enterprise truly contributed to making this mission efficient and successful."

Photo, top: Col Rhett Champagne, left, commander, 821st Crisis Response Group, speaks with the chief of staff of the Iraqi air force upon landing his C-130J Super Hercules at Qayyarah West Airfield, Iraq. This was the first time a fixed wing aircraft from the Iraqi security forces landed at Qayyarah West Airfield since the base was occupied by ISIL in 2014.

U.S. Army photo by 1Lt Daniel Johnson

Photo, bottom: An Airman assigned to the 1st Expeditionary Civil Engineer Group operates a volumetric mixer during runway repair operations at Qayyarah West Airfield, Iraq.

U.S. Army photo by Spc Christopher Brecht

CMSgt Frey Discusses the Art of Leadership

By MS. KIM BRUMLEY, Staff Writer

When asked what is most important—mission, core values, or vision—CMSgt Shelina Frey said the answer is easy.

"They are all equally important. Core values keep us committed to the mission and ensure that we complete it with excellence, ingenuity, and integrity. Vision is what keeps us moving forward. It's what we strive to achieve for the overall mission. Our mission is to fly, fight, and win. That is what we do and why we are here. So, all of those things are equal," she says, "because you can't have one without the other and maintain success."

She added that safety comes first and is the most critical part of AMC's mission at every wing. All Airmen—whether working in an office environment or turning a wrench on the flightline—must have the integrity to report concerns.

"To demonstrate service before self, you can't compromise in the realm of

CMSgt Shelina Frey, Command Chief of Air Mobility Command (AMC), talks with Airmen of the 139th Airlift Wing at Rosecrans Air National Guard Base in St. Joseph, Mo. Frey makes an effort to visit all Airmen under AMC throughout the year.

USAF PHOTO BY SRA PATRICK P. EVENSON

safety," said Chief Frey. "Because if you do, you put the mission and our people at risk. We must put safety first." While training minimizes risk, she said safety is a team sport. "We need each other as wingmen to contribute to a culture that looks after one another while meeting the mission needs."

As a leader, how does Chief Frey communicate her core values to Airmen? Again, she said the answer is easy—she lives them!

"To grow the next generation of leaders, we have to embody the Air Force core values and forge a path for them to continue. The way to convey integrity is to incorporate it into every fiber of our being," she said. "To teach service before self, I have to be willing to live it myself. To communicate excellence, you must personally strive for it. It is important that people learn from their experiences and strive toward the continuous improvement of themselves and others."

To build a firm foundation for excellence, Chief Frey said the best characteristic a strong leader can possess is unwavering integrity, adding it is important that leaders are honest with themselves and honest with subordinates.

"Integrity enables us to identify our weaknesses, so we can continually improve ourselves. As leaders, when we are improving ourselves, we are also improving our Airmen." She added that to continue growing and developing, both personally and professionally, we must never stop learning. "I love growing through mentorship, and I'm always looking to be mentored," she continued. She tells her Airmen she is not out to impress them but to inspire them to be the best leaders they can be.

"To teach service before self, I have to be willing to live it myself. To communicate excellence, you must personally strive for it. It is important that people learn from their experiences and strive toward the continuous improvement of themselves and others."

Chief Frey confessed that being in a leadership position is not always easy at AMC because the mission does not stop.

"Our Airmen work 24 hours a day, seven days per week, 365 days per year to put an aircraft in the sky every 2.8 minutes. The workload is exhaustive and can take a toll on folks. Manpower is at record lows, we are working on a continued resolution, and retention for maintainers and pilots is not where we'd like. We are faced with a challenging set of circumstances. That is why it is so important to show that we value what people do for the Air Force."

Also, going into leadership for the first time can be intimidating and tough. Chief Frey explained that a bit of anxiety and nervousness is good for most people because it opens them up to learning and growing as a leader. However, when leaders get too comfortable, it may mean they have fallen into a rut and are no longer growing as a leader. "As a leader, you should get comfortable with feeling uncomfortable," she said.

Leadership styles evolve, too, according to Chief Frey. In an increasingly competitive and dynamic environment, she believes giving folks room to demonstrate their creativity and ingenuity will drive AMC's future success. She also believes that being part of something bigger excites and inspires Airmen to want to strive for success. Airmen's ideas are important, she said, "because sometimes the way we have always done it is not the best way."

Growing up in the Air Force as a young noncommissioned officer, Chief Frey said leadership was referred to as an art. Now, she understands that leadership is an art, and there is not one perfect leadership style to follow. Instead, leaders will get better results by adjusting their approach to different situations.

"I think we put our personalities into leadership, which tends to create our own unique style. Leadership is not about being cookie cutter; it is about listening, understanding, and adapting. In the end," she said, "if you take care of your people as a leader, then your people will take care of the mission."

In closing, Chief Frey again put safety at the top of the priority list. "Safety comes first. AMC is responsible for generating rapid global mobility for America. We have to put safety first to ensure that we deliver on time, every time, 365 days a year!"

FSA:

An Acronym That Can Save Your Life!

By Ops RAMS Staff

Acronyms! Acronyms! Acronyms! There are so many of them out there, but every now and then, one comes along that can save your life. FSA, for example, is an acronym to remember because it stands for an important concept. It is a warning based on AMC aircraft experiencing perilous events that could have disastrous consequences.

FSA means Flight Safety Alert, which is a critical part of AMC's proactive safety program. The term encapsulates a key aspect of a process that starts with detailed analysis of flight data via the Military Flight Operations Quality Assurance (MFOQA) program software.

Specifically, AMC staff considers FSA events a serious threat to aircraft and crew that are worthy of continuous monitoring. Simply put, they are the kind of event that makes the hairs stand up on the back on your neck! Each FSA is tailored to the standards and operational environments of each mission design series (MDS). Examples include:

- Excessive Unstable Approaches below 300 feet
- Over G/Under G
- Hard Landings
- Stall Warnings
- Improper Takeoff or Landing Configuration (flaps, slats, speed brakes, gear, etc.)
- Excessive Bank or Pitch

If the frequency or severity of FSA events rise to a predetermined excessive level, additional processes are initiated to address possible mitigation efforts. This may include changing policy (publish flight crew information files [FCIFs], change Air Force instruction or checklists, etc.), training (modify computer based training, training guides, or curriculum), operations (engagement with Tanker Airlift Control Center, Area of Responsibility, airfield managers, etc.), and best practices (clarify or codify Air Force tactics, techniques, and procedures, process and training guides, etc.).

MFOQA's key limitation is it tells analysts what occurred during a sortie but not why, so the analyst sometimes needs help from the crew to fill in gaps and clarify the events of the sortie. Determining the "why" is a critical part of helping the MFOQA staff understand the data and address a potential FSA issue, so it is sometimes necessary to contact crews to obtain this important information.

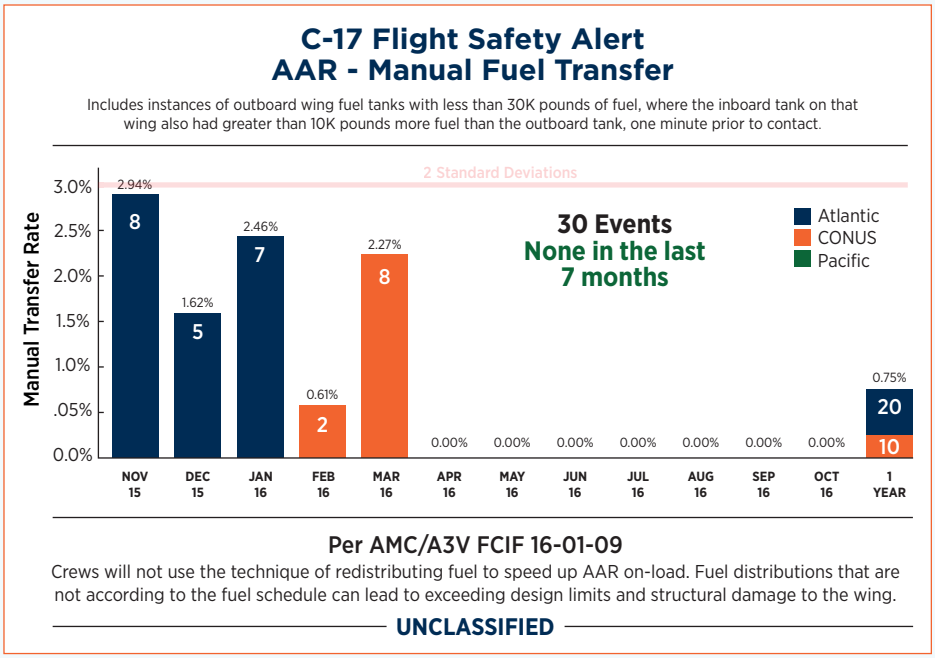
MFOQA crew contacts are voluntary and occur only through AMC safety channels. If there are any concerns about speaking with an analyst, rest assured that information gained through a crew contact is only used for helping analysts understand the data and the conditions that led the aircrew into the FSA event. The goal is to frame the hazard in the proper context, to develop and share appropriate information, and ultimately to reduce or eliminate the hazard. The crew contact process will not result in disciplinary actions—period! In fact, only the aircraft commander and the MFOQA analyst know what was discussed and who participated in the conversation. These discussions have proven invaluable in obtaining additional circumstantial information. Analysts have found that crews were often unaware they even experienced an FSA event, which is all the more reason to have FSA discussions!

Examples of the crew contact portion of the FSA analysis process include:

- Instructor pilots reporting they unintentionally exceeded an aircraft limitation by allowing the pilot they were instructing too much latitude in attempting a maneuver—i.e., going too far before intervening. This has been the root issue with several over G events, excessively slow unstable approaches, and other FSA-level occurrences.
- Pilots reporting they performed improper techniques—using speed brakes without adjusting their power to facilitate quicker separation/rejoins during Air Refueling training. Most crewmembers don't realize this is a dangerous practice. Thanks to the FSA, analysts have provided detailed analyses to units and to the schoolhouse to help instructors and students change habit patterns.
- Pilots reporting the details surrounding takeoffs where MFOQA detected an improper flight control configuration (speed brakes out of the detent on the KC-135). These details

helped facilitate the current effort to fix the takeoff warning system in the aircraft so that it will work at all power settings.

- Pilots reporting they did not know the severity of flight maneuver techniques that placed the aircraft in high sink rate scenarios close to the ground during final approach. While some tactical approaches incorporate more aggressive maneuvering techniques, there are no normal or tactical approach requirements for AMC aircrews to exceed 2,000 fpm rate of descent below 150' AGL. This information helped us message the risk associated with over-aggressive descent rates and encourage crews to go around when they get behind.



FSAs are a critical part of HQ AMC's Threat and Error Management programs, which model Federal Aviation Administration (FAA) proactive safety guidelines, as well as those from a variety of domestic and international sources. Gone are the days where AMC developed its own safety programs in a vacuum without embracing the benefits of outside airline experience, and the constantly evolving lessons-learned processes. We are now all about sharing and learning from experts in aviation safety!

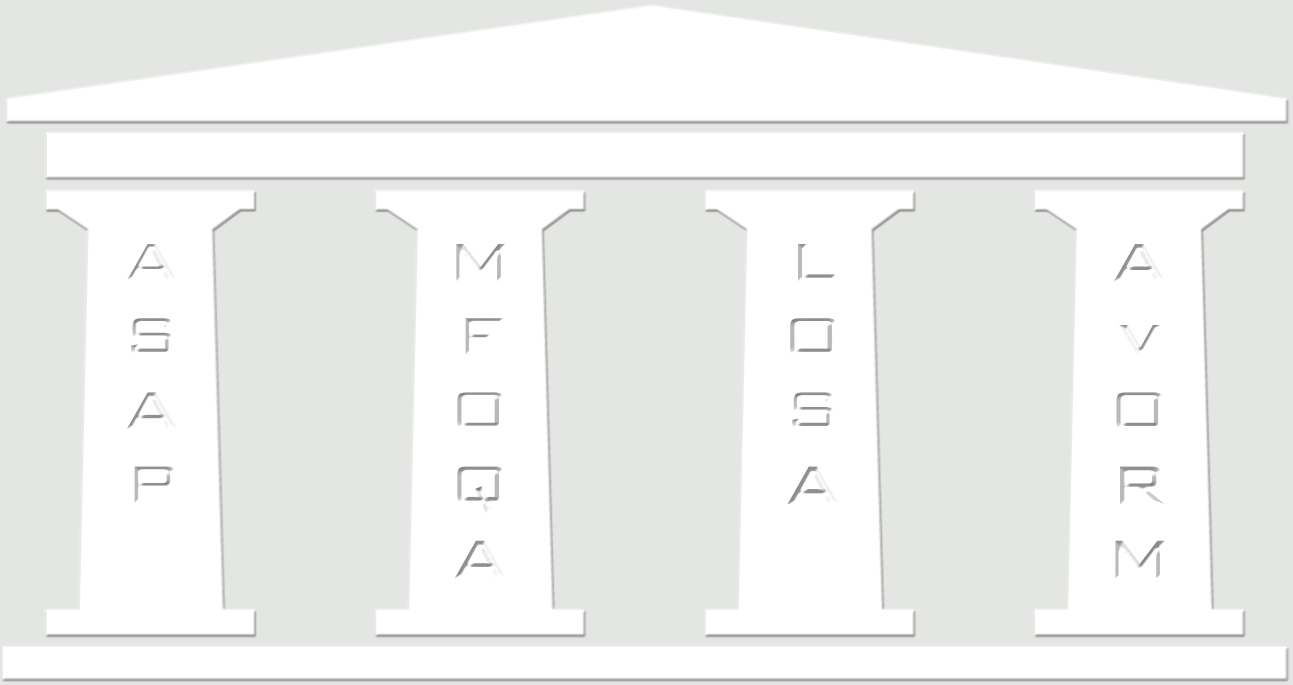
Members of HQ AMC/A3TO attend the semi-annual FAA-sponsored Aviation Safety InfoShare Conference, a confidential meeting of government and civilian aviation safety professionals, to share their safety concerns and best practices in a protected environment. This conference offers a unique opportunity to advance aviation safety outside of individual air carriers and bring about industry-wide improvements by collectively sharing experiences. By participating in forums such as these, AMC is finding new ways to identify hazards and prevent mishaps. The FSA concept, introduced by an airline and modified to meet AMC operations, is a byproduct of this sharing.

The FSA process has already generated success stories in most AMC aircraft. The C-17 Air-to-Air Refueling (AAR) Manual Fuel Transfer FSA illustrates how we can identify and eliminate a hazard.

This FSA originated from MFOQA analysis and crew contact interviews, which highlighted an unvetted AAR technique in the C-17 community whereby crews would manually transfer fuel from the outboard tanks to the inboard tanks prior to AAR. This practice was counter to procedures found in the second item of the C-17 Rendezvous Checklist calling for fuel management to be in AUTO. The desired effect was to have all four wing tanks available for the duration of the contact, under the belief this would speed up fueling and prevent possible pressure disconnects. But Boeing's External Loads Engineers said that by having fuel in the "wrong" places, aircrews could "overload" the wings and risk approaching their structural integrity limits.

Because of the analysis, AMC released two Special Interest Item FCIFs targeting this hazardous technique (the latest released in January 2016). It took approximately two months for the FCIF to take full effect and for the crews to stop performing this procedure. As of this writing, there have been no recurrences of the technique in the last seven months. Analysts call this a win! They identified a hazard, staff worked together to assess and address it, and the crew force responded positively. As a result, command does not have to stand up a Safety Investigation Board to investigate extreme aircraft damage or the tragic loss of an aircraft and crew.

Bottom line: AMC is doing its collective best to reduce the human factor-related hazards that aircrews experience or are at risk of experiencing. Your role is crucial. FSAs represent the highest risks to our missions and operations; they are our primary means of making you aware of those hazards. Your participation in the process and responsiveness to these alerts will ensure prevention of mishaps, thus strengthening our mission capability.



THE FOUR PILLARS OF AMC PROACTIVE SAFETY

By LT COL JASON PAVELSCHAK,
Chief, HQ AMC Flight Safety

Lt Col Jason Pavelschak

Proactive Safety has significantly evolved over the last several decades into a key component of a successful business model. Civilian and military organizations alike have reaped the benefits of executing a robust Proactive Safety program in support of employee, equipment, and mission safety.

To a Fortune 500 company, the decision to support Proactive Safety is driven by cost savings to their insurance premiums, workers compensation claims, and medical costs associated with mishaps, as well as defending the company against civil lawsuits. Conversely, the Air Force earmarks funds for safety concerns, resource conservation efforts, and overall mission efficiency and effectiveness. Over the last several years, AMC has spent significant manpower and money on four distinct Proactive Safety programs:

- Aviation Safety Action Program (ASAP),
- Military Flight Operations Quality Assurance (MFOQA),
- Line Operations Safety Audit (LOSA), and
- Aviation Operational Risk Management (AvORM).

The overarching goal of these programs is to prevent the next loss of life, injury, or damage to aircraft or equipment, as even the smallest mishap impedes mission accomplishment.

These Pillars of Proactive Safety are managed and executed by AMC Flight Safety (AMC/SEF) and the AMC Operations Risk Assessment and Management System (Ops RAMS) branch (AMC/A3TO). We work together to educate; communicate; assess risk; and analyze threats, errors,

and hazards to increase aviation safety and promote *Just Culture* throughout the command. To me, the term *Just Culture* means creating an environment where Airmen at all ranks throughout the organization feel confident they can share information (positive or negative) for the betterment of the enterprise, without fear of reprisal or punishment from their leadership, supervisors, or peers. This ideology has been successful in the civilian world, has senior leader support across the Air Force, and will continue to serve as the foundation of AMC's Proactive Safety efforts in the near future due to its growing popularity within the Armed Forces.

The first pillar, ASAP, is one of AMC's most successful Proactive Safety programs. This web-based tool allows individuals from the operations, maintenance, and operations support career fields to report hazards, threats, errors, and safety observations to Higher Headquarters (HHQ) for awareness and subsequent action. Over the last several years, AMC created a team of functional experts to review, analyze, and coordinate ASAP submissions; and AMC takes great pride in using the tool to mitigate risk to mobility operations and help prevent mishaps. In addition, the ASAP Scoreboard is a great repository of operational information that helps Airmen understand hazards, threats, errors, and potential safety issues they may encounter when accomplishing their mission.

MFOQA, the next pillar, is another highly successful program run by the Ops RAMS team. It is much more than simple flight data points captured from black boxes upon landing. The goal of the MFOQA program is to analyze the captured data for trend analysis purposes to identify strengths and weaknesses for mishap prevention. The MFOQA process

... the ASAP Scoreboard is a great repository of operational information that helps Airmen understand hazards, threats, errors, and potential safety issues they may encounter when accomplishing their mission.

educates and informs the aviation community and HHQ on positive trends and also negative trends that could result in an undesired aircraft state and possibly lead to an aviation-related mishap. Additionally, the MFOQA team uses the captured data to develop Flight Safety Alerts that identify high risk areas associated with certain flight operations in support of mishap prevention across the Mobility Air Forces.

The third pillar of AMC's Proactive Safety program is LOSA. This process starts with identifying a weapon system to review system safety and flight crew performance. Then, a Threat Error Management codebook is written to provide guidance and direction during the observation period. Next, LOSA observers are trained and fly with crews to capture threats and errors made by the flight crew. These observations are analyzed and validated by functional experts so they can be used in the next step of the LOSA process.

Finally, on behalf of the AMC Commander, a Safety Investigation Board is convened to investigate, analyze, and brief the observations, findings, and recommendations. To date, AMC has captured nearly 2,100 observations across seven weapon systems and four crew positions in an effort to identify potential areas of risk that could lead to an eventual mishap. This information has enabled AMC to correct technical order and checklist deficiencies, adjust policy and guidance documents, highlight crew strengths and weaknesses, and champion weapon system modifications. Although the program is new to AMC, the commercial aviation industry has used it for decades and credits it for helping the airline industry reach historically low safety mishap rates.

The last pillar supporting AMC's Proactive Safety program is AvORM. This web-based tool was created nearly eight years ago to replace the manual Operational Risk Management worksheet, reduce aircrew workload, create a data repository for trend analysis, and provide fatigue modeling for planners, leadership, and aircrews. AMC is currently working on version 3.2, which should solve application latency issues and provide better functionality to the crews and mission planners. Within the AvORM application, the Fatigue graph or Mission Effectiveness graph allows planners, leadership, and crews the ability to see in advance where the crew and mission could face low mission effectiveness due to fatigue. Also, previous missions now provide a more accurate representation of what the crew is actually feeling based on previous mission workload. Planners, leadership, and aircrews can use AvORM modeling any time mission entries are input into GDSS. It is the future of predictive risk management.

AMC is leading the way across the Air Force with Proactive Safety. The Four Pillars of AMC's Proactive Safety (ASAP, MFOQA, LOSA, and AvORM) have been proven successful at mitigating risk and reducing aviation-related mishaps. Use them to help you safely execute the mobility mission!

AMC's 2016 ANNUAL *Safety Award Winners*

FLIGHT SAFETY AWARDS

Director of Safety Aircrew of Distinction
Crew of Python 62, 349 ARS
McConnell AFB, KS
Capt Michael F. Casano
Capt Thomas P. Licostie
1 Lt Allison M. Smith
A1C Madison P. Dolata

Safety Officer of the Year – Primary Duty
Capt Joshua Jowiski
305 AMW, JB McGuire-Dix-Lakehurst, NJ

Flight Safety NCO of the Year – Primary Duty
MSgt David M. DiFrisco
317 AG, Dyess AFB, TX

OCCUPATIONAL SAFETY AWARDS

Distinguished Ground Safety – CAT II
436 AW, Dover AFB, DE

Distinguished Occupational Safety – CAT III
319 ABW, Grand Forks AFB, ND

Distinguished Occupational Safety – CAT IV
62 AW, JB Lewis-McChord, WA

Distinguished Occupational Safety – CAT V
734 AMS, Anderson AFB, Guam

Occupational Safety NCO of the Year – Primary Duty
SSgt Jack A. Anderson
19 AW, Little Rock AFB, AR

WEAPONS SAFETY and OTHER AWARDS

Outstanding Achievement Award for Weapons Safety
MSgt Robbie J. Romines, 19 AW, Little Rock AFB, AR

Risk Management Achievement Award
19 AW, Little Rock AFB, AR

Outstanding Safety Civilian of the Year – Primary Duty
Mr. Christopher L. Gill, 19 AW, Little Rock AFB, AR

Safety Office of the Year
19 AW, Little Rock AFB, AR

RiderCoach of the Year
SSgt Adam D. Kies, 62 MS, JB Lewis-McChord, WA

Distinguished Motorcycle Safety Award
TSgt John Oldham, 319 ABW, Grand Forks AFB, ND

2016 AIR MOBILITY COMMAND

Safety Office of the Year Award

19th Airlift Wing, Little Rock AFB, AR Wing Safety Office

By LT COL WALTER J. LESINSKI III, 19 AW Chief of Safety

The 19th Airlift Wing Safety Office recently earned the 2016 Air Mobility Command Safety Office of the Year award. After competing against 33 other units within the command, the 19 AW Safety Office came out as the best unit overall.

"The 19 AW Safety Team is truly amazing and deserving," said Lt Col Walter Lesinski, Chief of Safety assigned to the 19th Airlift Wing Safety Office. "They go above and beyond in every aspect of their job. A key to this success is our strong and close ties to the 314 AW/SE, 189 AW/SE, and 913 AG/SE teams. This creates a Team Little Rock safety program that ensures the safety of all members on the installation."

The AMC Safety Office of the Year award recognizes the ability to demonstrate the combined effectiveness of three safety programs: Flight, Occupational, and Weapons Safety. The 19 AW Safety Office works closely with squadron representatives across Team Little Rock to become more effective while maintaining or raising safety standards. This is evident in the reduction of late mishap reporting from the squadrons. In fiscal year 2015, the safety office was receiving late mishap reports almost 50 percent

Photo, left to right: Lt Col Walter J. Lesinski, Capt Nathanial J. Walker, Mr. Rick S. Myers, Mr. Charles R. Poynor, Deane H. Duerkop, Mr. Chris L. Gill, Mr. Kimm L. Hunt, MSgt Jim D. Stogner, MSgt Albert J. Beckwith, and SSgt Jack A. Anderson. Mr. Brian K. Deckard and MSgt Robbie J. Romines are not pictured.

of the time. Through new initiatives and better communication, late mishaps were reduced to 15 percent in fiscal year 2016.

"It has been a busy year for the 19th Airlift Wing Safety Office," Lt Col Lesinski continued. "Some of the year's highlights included supporting seven AMC and AETC class A/B ISB/SIBs, performing risk assessments and support for the base's July 4 fireworks show, conducting an Air Expo, maintaining safety coordination through the start of a two-year runway replacement project, and moving our office to a new facility. Throughout these efforts, the safety office worked overtime to upgrade our response capability and continued to make the Airmen and their families our priority by spreading the safety and risk management message to everyone on base."

The 19th Airlift Wing Occupational Safety Office also integrated with the 913th Air Reserve Group Occupational Safety Office in fiscal year 2016, further strengthening the Total Force association, according to Mr. Rick Myers, Occupational Safety Manager. "This integration has allowed both offices to complete annual safety inspections together, preventing units from being hit twice by inspections and returning time to the Airmen."

The 19th Airlift Wing Safety Office consists of the following members: Lt Col Walter J. Lesinski, Capt Nathanial J. Walker, Mr. Rick S. Myers, Mr. Charles R. Poynor, Deane H. Duerkop, Mr. Chris L. Gill, Mr. Kimm L. Hunt, MSgt Jim D. Stogner, MSgt Albert J. Beckwith, SSgt Jack A. Anderson, Mr. Brian K. Deckard, and MSgt Robbie J. Romines.

Beyond being named Safety Office of the Year, the team received the AMC Risk Management Achievement award. Individual success was also noted. SSgt Jack A. Anderson won the AMC Occupational Safety NCO of the Year award, MSgt Robbie J. Romines won the AMC Outstanding Achievement award for Weapons Safety, and Mr. Christopher L. Gill won the AMC Outstanding Safety Civilian of the Year award.

"I have been in the safety office for 20 years, and the level of teamwork and camaraderie has never been higher," Myers added. "It is outstanding to see our office and these individuals recognized at this level for their hard work."

"It came down to following through on our 19 AW Safety goal," Lt Col Lesinski added, "to *Create and Maintain Safe and Healthy Workplaces through Safety Awareness and a Risk Management Culture*. Through everyone's hard work, the 19 AW and Team Little Rock will be a safer place for years to come."

Director of Safety Aircrew of Distinction Award

PYTHON 62 CREW

349 ARS, McConnell AFB, KS

The Aircrew of Distinction Award for fiscal year 2016 is presented to 1 Lt Allison Smith (now Capt), Capt Thomas Licostie, A1C Madison Dolata, and Capt Michael Casano in recognition of outstanding achievements in flight.

On July 10, 2016, the crew of Python 62 had just completed aerial refueling in support of Operation Freedom's Sentinel and were enroute back to their deployed base. While leaving hostile territory, the navigator noticed a developing fire under his station, behind the insulation panel. He alerted the crew of the KC-135 immediately and they instinctively reacted by donning their oxygen masks. The navigator unlatched the fire extinguisher located nearby, instructed the boom operator to gather the remaining fire extinguishers, and then began to skillfully dispense HALON onto the growing exposed flames. After depleting two fire extinguishers in response to the emergency, the aircraft commander and copilot professionally executed the descent and approach and landing checklists for the divert. The crew landed safely at an unfamiliar airfield and were met by the base fire chiefs, where they were instructed to shut down all engines. It was determined that the fire was extinguished and there was no longer an immediate need for the crew of Python 62 to egress their aircraft. After extensive maintenance and repairs, Python 62 flew their aircraft back out of enemy territory to their main operating base, and quickly returned to the fight while supporting ATO operations. Due to their exceptional systems knowledge and excellent CRM and decisionmaking, Python 62 deftly managed a severe emergency. Their resourceful actions prevented further damage to a $54 million dollar aircraft, as well as the safety of four Americans. The safe, professional, and coordinated effort by the crew of Python 62 reflect great credit upon themselves, Air Mobility Command, and the United States Air Force.

This AMC award-winning aircrew will compete at the Air Force level for the AF Chief of Safety Aircrew of Distinction.

Safety Officer of the Year

Primary Duty

CAPT JOSHUA JOWISKI
305 AMW, JB McGuire-Dix-Lakehurst, NJ

CAPT JOSH JOWISKI is the Chief of Flight Safety at the 305th Air Mobility Wing, Joint Base McGuire-Dix-Lakehurst (JB MDL), New Jersey. He is responsible for ensuring KC-10A and C-17A operations involving 25,700 flight hours per year are safely executed at the 305 AMW. He is also a C-17A instructor pilot and flies for the 6th Airlift Squadron at JB MDL.

As Chief of Flight Safety, Capt Jowiski promoted an effective proactive safety culture that contributed to zero Class A mishaps in two years. He developed a Squadron Safety Officer training program, expanding access to valuable aviation safety educational materials; and his efforts within the 305th Maintenance Group led to a greatly improved risk management program. Capt Jowiski led investigations into several significant KC-10A and C-17A Class C and D mishaps, and his subsequent recommendations reduced future mishaps in both weapons systems. He was also key to implementing over 35 recommendations from the Air Force Safety Center and United States Department of Agriculture (USDA) to reduce risks to aviation safety from wildlife. His leadership over the BASH program, combined with efforts from the USDA, removed over 70,000 birds and 30 deer from two airfields at JB MDL and contributed to a 55 percent reduction in aircraft damage from wildlife strikes. Capt Jowiski worked to help resolve a decades-long airfield BASH hazard, potentially affecting 30,000 annual takeoffs and landings at McGuire Field.

Raised in Cleveland, Ohio, Capt Jowiski commissioned in 2008 through the ROTC program at Miami University of Ohio. After Undergraduate Pilot Training at Columbus AFB, Mississippi, he was selected to fly the C-17A at Joint Base Lewis-McChord in Washington, where he flew over 1,300 hours in support of Operations Enduring Freedom and Iraqi Freedom before continuing his C-17 career at JB MDL. Following his current assignment, he will serve as an Air Mobility Liaison Officer at Osan Air Base (Korea), advising leadership on important Air Mobility issues.

Flight Safety NCO of the Year

Primary Duty

MSGT DAVID M. DIFRISCO
317 AG, Dyess AFB, TX

MSGT DAVE DIFRISCO is the Flight Safety NCO for the 317th Airlift Group (AG), Dyess AFB, Texas. He is responsible for implementing and managing the AG's flight safety program, which consists of five units. He works closely with the Dyess AFB host unit, the 7 Bomb Wing, to develop guidance and policies across the base. MSgt DiFrisco also engages with commanders, supervisors, and Unit Safety Representatives to provide oversight and guidance to ensure safe flying and maintenance operations. His background includes C-130 maintenance, flightline expediter, and resource advisor.

Over the course of the past year, MSgt DiFrisco led numerous proactive initiatives, including an analysis of human factors in minor incidents, a new trend tracker, and a maintenance event analysis database. He also set the 317 AG safety office on a trajectory for self-sustenance by acquiring $25k worth of mishap response equipment, including a forward-thinking acquisition of a camera drone for mishap site survey and data capture.

MSgt DiFrisco was key to highlighting several airframe safety deficiencies to Higher Headquarters. He identified a material deficiency on the main landing gear support stowage bracket that led to numerous instances of dropped objects, resulting in a fleet-wide inspection to ensure the use of steel brackets rather than aluminum brackets. He also coordinated with engineers to implement a technical order change after several aircraft suffered landing gear indication issues resulting from hydraulic hose-routing chains catching and pulling the wiring of down-limit switches. He also guided the safety office through a difficult ground safety succession in which the position was unmanned for four months. During that time, MSgt DiFrisco took on the additional ground safety duties and maintained full compliance throughout the transition period.

Outstanding Achievement Award for Weapons Safety

MSGT ROBBIE J. ROMINES
19 AW, Little Rock AFB, AR

MSGT ROBBIE ROMINES is the Weapons Safety Manager for the 19th Airlift Wing at Little Rock AFB, Arkansas. He is responsible for implementing the weapons safety program for the world's largest multicommand (AMC and AETC) C-130 aircraft installation, in addition to providing safety oversight and support to four tenant units. This includes explosives operations, storage facilities, and 27,000 pounds of explosives. MSgt Romines ensures compliance of explosives safety standards for 15 base organizations across four MAJCOMs. He conducts safety inspections and oversees 42 unit weapons safety representatives to ensure regulatory compliance, protecting 7,000 personnel and $6.2 billion in assets.

MSgt Romines diagnosed an electromagnetic radiation hazard located within a munitions maintenance facility and implemented measures to minimize the hazard to exposed electro explosive devices. While deployed in support of Operation Enduring Freedom, he authored an aircraft relocation parking plan while creating six explosive risk assessments, which resulted in a 200,000-pound net explosive weight clear zone. This enabled combat operations to resume with no limiting factors. MSgt Romines also created an aircraft flare storage process and drafted three explosive facility licenses, which resulted in a reduced aircraft load time and reduced explosives exposure to surrounding personnel and facilities by 60 percent.

A native of Orlando, Florida, MSgt Romines entered the Air Force in 1993. He began his career as a Munitions Systems Apprentice before serving in various positions and fields, including Conventional Maintenance, Munitions Control, Senior Munitions Inspector, and Precision Guided Munitions. His assignments include Moody AFB, Georgia; Ramstein Air Base, Germany; Langley AFB, Virginia; Kunsan Air Base, South Korea; and Joint Base Lewis-McChord, Washington, before his service at Little Rock AFB. He deployed numerous times in support of Operation Southern Watch, Enduring Freedom, and Iraqi Freedom.

Outstanding Safety Civilian of the Year

Primary Duty

MR. CHRISTOPHER L. GILL
19 AW, Little Rock AFB, AR

MR. CHRISTOPHER GILL is the Aviation Safety Specialist for the 19th Airlift Wing, Little Rock AFB in Arkansas. Working with commanders, supervisors, and safety representatives, his guidance ensures safe workplaces and flying operations. Mr. Gill's responsibilities include implementation and management of the flight safety program for the world's largest multi-command (AMC and AETC) C-130 aircraft installation, in addition to providing oversight and support to four tenant units.

His accomplishments include securing an "Outstanding Performer" rating in the AMC Unit Effectiveness Inspection. The flight safety program was rated "Highly Effective" and obtained a staff award for the 19 AW. He also focused on C-130 fall protection and taught correct technical order procedures, which resulted in zero Class A or B mishaps.

Among his career accomplishments, Mr. Gill completed 844 flight, 14 ground, and 7 weapon major inspections and rectified 46 safety violations, which led to a 50 percent personnel mishap reduction. He also identified six plan deficiencies during pre-construction meetings and provided solutions to mitigate risks. He volunteered to run a 908 AW investigation board and performed failure analysis that saved $4,000. During the year, Mr. Gill oversaw 92 flight mishaps, ensuring identification of root causes and trends.

A native of Hazel Green, Alabama, Mr. Gill began his civil service career in 2015 after serving 23 years in the Air Force. Although now working as a civilian, his background includes management of flight safety as the enlisted Flight Safety Noncommissioned Officer. Duty locations prior to Little Rock AFB include Malmstrom AFB, Montana, and MacDill AFB, Florida. He has a master's degree in Operations Management and a minor in Safety.

Occupational Safety NCO of the Year

Primary Duty

SSGT JACK ANDERSON
19 AW, Little Rock AFB, AR

SSGT JACK ANDERSON is the Safety NCO for the 19th Airlift Wing, Little Rock AFB, Arkansas. His dedication to service earned him the 2016 AMC Occupational Safety NCO of the Year Award. He is responsible for implementing the wing's safety program, provides the Department of Defense mission-ready Airmen, and supports the largest C-130 fleet in the world. As part of AMC's Global Reach capability, the wing's responsibilities include supplying humanitarian airlift relief to disaster victims and airdropping supplies and troops into contingency operations in hostile areas. SSgt Anderson ensures compliance of occupational safety standards for 39 base organizations across four MAJCOMs and oversees 77 unit safety representatives, ensuring regulatory compliance and protecting 7,000 personnel and $6.2 billion in assets.

This past year, SSgt Anderson identified multiple fall protection equipment issues throughout the base; his actions eliminated OSHA's number one safety concern for 2016. He led the wing Hazard Abatement program, reducing RAC hazards. SSgt Anderson revamped the wing lockout/tagout safety program, implementing universal hazardous energy control for 26 work centers across the base. During Little Rock's Military Expo, he was the wing's occupational safety subject matter expert; he authored wing plans and directed safety operations for 30,000 military and civilian personnel in attendance for a mishap free event.

Born in Irving, Texas, SSgt Anderson joined the Air Force in January 2009. After basic training, he attended Aerospace Ground Equipment (AGE) technical school at Sheppard AFB in Texas. After six years as an AGE mechanic, SSgt Anderson retrained into Safety. He attended tech school at Lackland AFB, Texas. He has served at Little Rock AFB, Arkansas; Balad Air Base (AB), Iraq; and Osan AB, Republic of Korea.

RiderCoach of the Year

SSGT ADAM D. KIES
62 MS, JB Lewis-McChord, WA

SSGT ADAM KIES has been the Motorcycle Safety Representative for the 62nd Maintenance Squadron at Joint Base Lewis-McChord (JBLM) in Washington since 2011. As Motorcycle Safety Representative, he manages the motorcycle refresher course training, and serves as instructor and certifier for area riders. He is responsible for 29 riders in his squadron and ensures all riders on McChord Field attend the Motorcycle Refresher Course training as required.

Additionally, SSgt Kies has worked hand-in-hand with Army counterparts at Fort Lewis (Washington) to organize pre-season and end-of-season safety rides historically attended by several hundred riders across JBLM. He put together a two-day, Air Force/Army event that included a bike show and mentor ride with around 200 participants, as well as another Air Force/Army ride to raise awareness of sexual assault and prevention. SSgt Kies is president of the Green Knights Military Motorcycle Club Chapter 3. As such, he is responsible for 28 members consisting of Active Duty, Guard, and Reserve members, as well as retirees, DOD civilians, and spouses. He leads the area club's efforts and works with other services and local motorcycle clubs to raise thousands of dollars for local charities by organizing rides for local non-profits, toy drives, and veterans' homes.

Born in Everett, Washington, SSgt Kies joined the Air Force in 2004. He got his first motorcycle at age 3 and has been riding since. He has been stationed at McChord Field since January 2005 as an Aerospace Ground Equipment (AGE) mechanic, except for a one-year tour to Osan Air Base (Korea). SSgt Kies is the AGE flight training monitor, safety rep, and building custodian; he deployed twice in support of Operation Enduring Freedom.

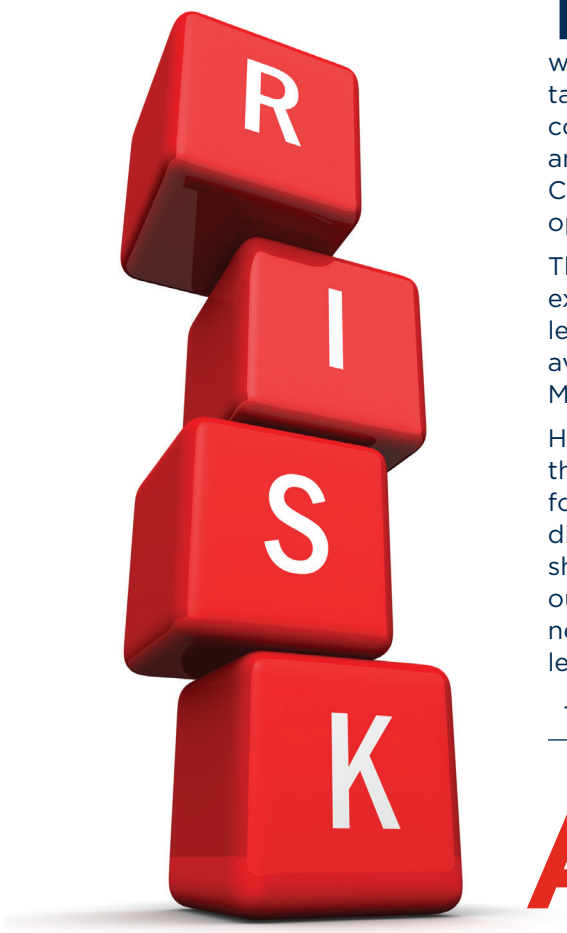
Distinguished Motorcycle Safety Award

TSGT JOHN OLDHAM
319 ABW, Grand Forks AFB, ND

TSGT JOHN OLDHAM is the NCOIC of Occupational Safety for the 319th Air Base Wing, Grand Forks AFB, North Dakota. TSgt Oldham manages the Occupational Safety office, supervising 16 subordinate unit programs. He coordinates facility safety inspections for the base's 2.7 million square feet of industrial and administrative infrastructure, and directs mishap investigations for host and tenant units. TSgt Oldham also manages the wing's motorcycle safety program, which includes over 100 riders across three MAJCOM's.

Over the past year, TSgt Oldham established an AMC Sport Bike Course and secured training for six instructors, assuring future training capabilities. He created a low cost solution for the base's motorcycle training range, saving $16K in resurfacing costs and establishing the only training of its kind in a three-state area. TSgt Oldham also planned and executed four base-wide motorcycle safety events to promote safe riding habits and provide essential training. His efforts contributed to 10 years without a Class A or B mishap. Furthermore, he was the project manager for the wing's winter safety initiative, educating 1,800 personnel on the hazards of harsh North Dakota winters and reducing mishap rates by 18 percent from the previous year.

TSgt Oldham is a native of Gallatin, Tennessee, and joined the Air Force in 2004. He began his career as an Airfield Systems Apprentice at Tinker AFB in Oklahoma. In addition to Tinker AFB and his service at Grand Forks, other assignments include Eielson AFB in Alaska and Cannon AFB in New Mexico.



My first formal exposure to risk management came in the form of a warning in the KC-135 Stratotanker DASH-1: "Flying two airplanes in close vertical proximity is not safe." My instructor used that warning to emphasize the need to make sure we knew the risks we were taking during each phase of the mission. As my role has grown from co-pilot to aircraft commander, to instructor pilot, to squadron, group and wing command, and now to Commander of the USAF Expeditionary Center, I have found that I spend more and more time balancing operational risk.

The Advanced Study of Air Mobility (ASAM) class of 2017 started to explore the complex topic of risk management after a recent visit with leadership at Scott Air Force Base, Illinois. Their Op-Ed below on risk aversion does not reflect the position of the Expeditionary Center or Air Mobility Command.

However, I support the class' intent, which is for us to take a hard look in the mirror, consider the lessons of our recent combat experiences, look forward to future combat mobility operations, and engage in a healthy dialogue on risk management. This dialogue should be in the scheduling shops, roll-call areas, hangar fly sessions, and heritage rooms across our great force … so we continue to be the Mobility Air Force our nation needs us to be for the years ahead. Accepting the right risk at the right levels is a difficult task that we can't afford to get wrong.

– Maj Gen Christopher J. Bence, Commander, USAF Expeditionary Center

RISK AVERSION and Future Operations in the MAF

Submitted by ASAM CLASS OF 2017

Risk is an exposure to potential danger, loss, or harm. In a single day, we constantly make decisions by identifying, assessing, mitigating, and accepting risk despite no guarantee of success. Why? Because risk acceptance is inherent to the decision-making process. As military professionals, Air Force officers, and warfighters, we must be accustomed to, comfortable with, and competent in understanding how to manage risk effectively.

Leaders like Billy Mitchell, who argued the importance of airpower during the birth of aviation, and Jimmy Doolittle, who launched bombers that would never return off carriers helped shape the Air Force on triumphs of bold, risk-based decisions. These leaders understood that organizations comprised of personnel fearful of making risk-based decisions are organizations destined to fail.

Today's MAF culture—characterized by risk avoidance and risk deflection—will be severely challenged against a near-peer adversary. The art and skill required to employ mobility weapon systems effectively in a non-permissive environment has atrophied over the last 15 years of fighting a low-end conflict. Specifically, at the aircrew level, we struggle to understand (and paint a picture of) the commander's intent and integrate rapid global mobility capabilities into the joint mission.

Today's aircraft commanders execute missions bound by endless constraints. These confines are so narrow that personnel feel compelled to defer decisions up the chain of command whenever "abnormal" issues arise. By deflecting risk, crews undermine

Most importantly, leaders must tolerate failure. They must not see failure as an embarrassment or a fault, but as a sign of progress by their crew force.

their fundamental responsibilities of inspiring confidence and leading as effective problem solvers. A warfighter that is continuously looking to leadership for guidance will be incapable of adapting to a dynamic threat environment. We are breeding a generation of risk-averse leaders coddled by the complacency of today's straightforward operational approach—in a permissive combat environment compounded by a lack of focus on weapon system employment training beyond specific mission sets.

Exacerbating this lack of experience and proper training, technology has become a crutch for all Airmen. It provides a tremendous capability to leadership and the warfighter, but we cannot become dependent on it. Future conflicts will rely heavily on newly developed technology. Will MAF Airmen and leadership be ready to employ this technology appropriately? Furthermore, will MAF Airmen know how to operate effectively when it is not available?

As Airmen, we must understand what technology does—and does not—provide. We must draw the line that defines appropriate and inappropriate use. As technology is developed, the senior leader will become more connected than ever to the warfighter. This enables involvement by high-ranking leadership in tactical-level discussions and decisions, leaving Airmen undertrained in risk-based decision-making. If we are not cautious, this can strip Airmen of opportunities to hone their abilities and make autonomous decisions. Such a deficiency creates a critical vulnerability and undermines the Air Force's foundational concept of centralized control and decentralized execution.

Tomorrow's Airmen must be capable of and empowered to make autonomous decisions based on a commander's guidance and intent. This requires less demand for current operations and more opportunities for training in order to exercise risk-based decision-making in a controlled environment. We must strive to build upon current knowledge, uphold rigorous training standards, and leverage our Airmen's expertise. We must sweat in training to avoid bleeding in war. Our mandate is simple: boldly deliver rapid global mobility in a joint environment. We cannot relegate ourselves to being "just mobility experts." We are instruments of national power that deliver precision combat capabilities. We must hold each other accountable to this standard.

How can Airmen become proficient risk-based decision makers? Crews gain proficiency through exercising, with our sister services, and forcing risk-based decisions to failure. Airmen subsequently learn from these failures. Most importantly, leaders must tolerate failure. They must not see failure as an embarrassment or a fault, but as a sign of progress by their crew force. Colin Powell said it best: "There are no secrets to success. It is the result of preparation, hard work, and learning from failure."

In future contested, degraded, and operationally limited threat environments, MAF Airmen will be without the comfort of their technological safety net. Will they be prepared to exploit the characteristics of autonomous, risk-based decision-making? An Airman with the proper experience, training, and leadership will be ready. As the Air Force and MAF move toward an uncertain future, rife with risk, we must ask ourselves whether we, as leaders, will empower our Airmen to employ combat airpower as instruments of national power. If so, we must start with foundational concepts, and we must train our Airmen so they are better prepared for such a future. This will give them the needed confidence and trust to autonomously manage and accept responsible levels of risk.

The Advanced Study of Air Mobility (ASAM) Program at the USAF Expeditionary Center, Joint Base McGuire-Dix-Lakehurst, New Jersey is a partnership between the USAF Expeditionary Center and the Air Force Institute of Technology (AFIT) that prepares mid-level officers to serve as mobility and logistics advisors to warfighting commanders. Students take classes in joint transportation management, joint logistics management, and joint planning. In addition, the students travel globally to hear first-hand the mobility issues and challenges facing the various combatant commands. Graduates also complete a rigorous graduate research proposal with the mentoring of an AFIT professor. When complete, the students earn a master's degree in logistics (air mobility) from AFIT as well as AF Intermediate Developmental Education credit for their efforts.

RUNNING—
But Not In Circles

By MR. MONTE NACE, Staff Writer

We all lead busy lives. We work, play, go to school, socialize with friends, take care of family members, sleep a few hours, and start all over again. But some Airmen manage to STOP awhile each day to heal physically, mentally, and emotionally.

What's their secret? Ironically, it is not STOPPING at all. It is running. You see, they have learned that putting down electronic devices and getting off the sofa is therapeutic on many levels. Do you know people who run? Do you wish you were as disciplined? Well, you can be! You just need to stand up, strap on your sneakers, and get going—but you need to read this first!

The right shoes can minimize injuries and the wrong ones can cause them.

- **A Reason to Run.** Why do you want to run? Is it to lose 50 pounds, shed stress, or prepare for a marathon? Defining your purpose can help motivate you on days when you might be tempted to give up. For example, running for a "cause" (think Susan G. Komen's Race for the Cure) has become a popular way for organizations to raise money, and finding a charity that matters to you is a great reason to start (or continue) running.

- **Gear and Gizmos.** You don't need a fancy electronic device to count your steps. If you have one, great, but it's not required. As for socks, most runners avoid cotton because it stays wet; choose wool or synthetic materials (e.g., acrylic, polyester) instead. Thick or thin is your choice, but wear your "running" socks while you shop for sneakers to ensure a proper fit.

The right shoes can minimize injuries and the wrong ones can cause them. **DON'T** buy the cheapest pair (but don't take out a loan to buy them, either). **DON'T** buy shoes because you like their look or the ads. **DO** shop around, including at specialty stores that employ professionals who can assist you.

One last thing. You will eventually need to buy and apply Vaseline or Band-Aids on your nipples to keep them from chafing. If you think I'm kidding, ask an experienced runner or do a Google search for *nipple chafing*. OUCH!

- **Weather Woes.** In warm weather, drink plenty of water before and during your run. Heat can down the most experienced runners, so stop if you feel faint or uncomfortable. Dress for cold weather conditions, if warranted, with a windproof jacket, hat, gloves, etc. Like with socks, synthetic fabrics help wick moisture from your body.

- **Where to Run.** An indoor track or a treadmill is level and protects you from the elements. But if you prefer running outdoors, choose safe areas that have sidewalks or wide shoulders, or choose well-maintained trails that aren't too isolated. Also, find out ahead of time whether encounters with wild animals might occur in your area and how to deal with them. Outside anywhere, trust your instincts and change direction if you feel uneasy. Run with a partner if possible.

- **Avoiding Injuries.** Remember, you are a beginner! Start with short distances, and increase your range gradually. Perhaps the most important thing to do is warm up before every run by stretching hamstrings and calf muscles. (If you aren't sure where your hamstrings and calf muscles are, you may not be ready just yet .) Also, listen to your body! If you experience signs of injury, take a few days off, and seek medical attention if it doesn't seem better within a reasonable amount of time.

- **Note it!** Chart your progress in a journal, including how you felt each day. Did rainy or cold conditions make your joints ache? Did you feel better resting after two days of running? Include the time of day, terrain (track, trail, hills, flat), and your chosen activity (such as biking or basketball if you didn't run). Look for patterns and factors you can change to make running enjoyable.

So, what do you think? Are you tired of running in circles every day and ready to run for a reason? **You can do it** and I bet you learn to love it, just like millions of other people. Pick your reason and let's get going!

5 FAB RUNNING SAFETY TIPS

1. Wear sunscreen and shades when appropriate.
2. Carry an ID, a cell phone, and a whistle.
3. Tell a friend or your spouse your route and when you expect to be home.
4. Leave your ear buds at home so you can stay aware of your surroundings.
5. Run in daylight or stay in well-lit areas, and wear bright, reflective clothing.

Members of he Green Knights' Motorcycle Club demonstrate proper riding gestures during Motorcycle Safety Day on Joint Base Andrews, Md., June 9, 2016. These signals help the lead rider communicate possible hazards to fellow riders.

USAF PHOTO BY SRA RYAN J. SONNIER

It's a Wonderful Life with **Motorcycles**

By MR. MONTE NACE,
Staff Writer

This past holiday season, my family and I cuddled on the couch to watch the iconic 1946 movie classic, *It's a Wonderful Life*. In the film, a desperate George Bailey (played by Jimmy Stewart) plans to commit suicide, claiming the world would be better if he had never existed. His guardian angel, an unlikely old guy named Clarence, steps in to show George what life would have been like for the residents of Bedford Falls if, in fact, he had never been born.

So what does that film have to do with motorcycle safety? Well, the movie sends a powerful message: **you matter**—and **what you do changes the lives of people**, even if you do not realize it at the time. I firmly believe that instructors of

What you do and how you act can change individuals in ways you may not realize.

anything—whether teachers in a grade school, personal trainers at a gym, or motorcycle safety representatives on a base—have the power to influence the lives of others.

Let's say, for example, that you teach a motorcycle safety session and a guy named Joe attends. Within a year or so, Joe relocates to another base. You don't stay in touch, so you never know what happens to him. One possibility is that Joe continues to ride and eventually becomes an instructor like you. Maybe a young Airman in one of Joe's motorcycle safety classes avoids a very nasty collision because of what he learned in class. Just think—that might not have been possible if you hadn't chosen to be an instructor. Your action subsequently affected Joe's decision to become an instructor, and Joe's actions likely saved an Airman.

The list of potential lives touched downstream is endless. Much like skipping a stone across a body of still water, everything you do in life has a ripple effect. One action or event affects another, and that one affects others, and so on. In the holiday movie, George Bailey saved his brother Harry from drowning. Consequently, Harry went on to become a Navy pilot who shot down a plane that was going to bomb a transport. Harry's actions saved the lives of many soldiers. Without George there to save Harry, those soldiers may have died. And who knows how many lives those soldiers may have changed?

My point is this: whether you are a motorcycle safety instructor or you simply like to ride your bike with friends now and then, let your behavior be a positive influence on people's lives. What you do and how you act can change individuals in ways you may not realize.

- Set the example that you want others to follow. Wear the proper personal protective gear, don't mix drugs or alcohol with motorcycle riding, obey traffic laws, maintain your equipment, pretend you are invisible to other motorists, drive defensively but courteously—well, you know the drill.

- Plant seeds of safety in the minds of riders. You may not know right away whether you made an impact, but seeds sometimes sit dormant for years before they put out roots and grow. The most self-confident (arrogant) rider may not act as if he is paying attention, but he is. Trust me.

- Keep learning. The one constant in life is change. In this context, that means traffic laws, equipment, Air Force regulations, and technology can all change in the future. Never claim to know everything there is about motorcycle safety. Time and experience will teach you otherwise.

Okay, the holidays are over, spring is just around the corner, and I'm ready to ride! Let's all be safe—and project a safety-minded attitude for fellow motorcyclists—so we will be around to watch sappy holiday movies with our loved ones again later this year.

TRIPLE A SAYS ...

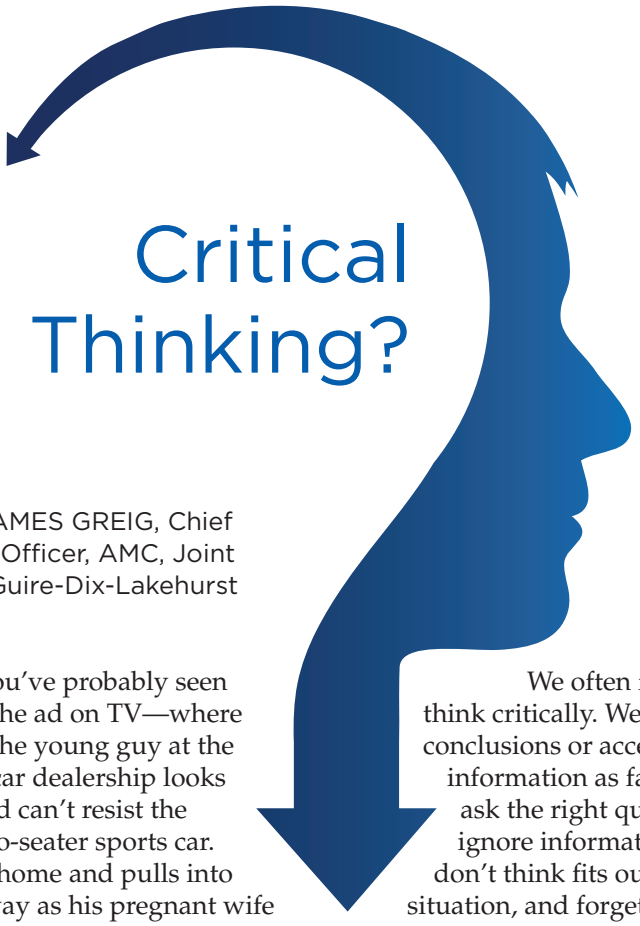
Motorcycle Safety Representatives,

Though often not seen, your efforts contribute significantly to the overall Air Force Mishap Prevention efforts. In fact, FY 2016 saw the least number of motorcycle rider fatalities over the past 10 years. Working together, let's continue that trend and make FY 2017 an even better year.

Thanks for all you do.

Arthur "Triple A" Albert, GS-13
Air Force Motorcycle Program Manager

Critical Thinking?



We often fail to think critically. We jump to conclusions or accept inaccurate information as fact.

By DR. JAMES GREIG, Chief Learning Officer, AMC, Joint Base McGuire-Dix-Lakehurst

You've probably seen the ad on TV—where the young guy at the car dealership looks around and can't resist the yellow, two-seater sports car. He drives home and pulls into the driveway as his pregnant wife and young child look on. Oops! The car doesn't meet the family's requirements, so he goes back and trades for the much more practical SUV or minivan (with no penalty, of course, since this particular dealer guarantees your satisfaction). Critical thinking failure. If our young hero had been thinking critically when he was first at the dealership, he'd have chosen more wisely.

What is critical thinking? Dr. Richard Paul called it, *"thinking about your thinking while you're thinking in order to make your thinking better."* In other words, critical thinking is the art of thinking clearly and logically. It involves learning how to gather and assess information and then apply that to the problem at hand. It requires us to identify the problem accurately and to evaluate how well we are thinking about it as well. Using critical thinking skills allows us to be more effective at work, at home, and even when playing. It is also something we can learn and develop with practice.

We often fail to think critically. We jump to conclusions or accept inaccurate information as fact. We don't ask the right questions, ignore information that we don't think fits our view of the situation, and forget that there may be more than one relevant point of view on the issue. We base our conclusions on assumptions that, more than likely, don't quite reflect reality. Any of this sound familiar?

To be a good critical thinker, you need to be a critic of your own thought processes. It's easy, especially when with a crowd, to just go along with the first thoughts that come to mind. Many problems start that way! The critical thinker, though, stops to consider whether or not those thoughts really make sense. How many people would deliberately endanger their lives (and others) by driving drunk if they really *thought* about it? Usually by that point, thought processes have been impaired and you don't consider the dangers. It doesn't require chemical interference to have impaired thought processes, though. Just "going along" can be an opportunity to give up your own careful consideration and replace it with an emotional response that is not well considered.

How do you develop critical thinking? What can you do to keep from making questionable or even clearly wrong choices when there are so many pressures to take the easy way out? Focus! Question your thinking. Ask yourself, *does this make sense? What is the issue or problem that needs to be addressed? Is what I am proposing going to help, or will it make things worse?* Taken yet a step further, ask yourself if you are asking the right questions. Try to be reasonable, but don't be afraid to play devil's advocate, too.

The Air Mobility Command Enterprise Learning Office (ELO) has prepared a Critical Thinking Toolkit to help you focus on the kinds of questions and activities that will improve your critical thinking skills. The full Toolkit is on the ELO SharePoint site at **https://eim.amc.af.mil/org/amccc/CCL/elo_tools/ctt_/SitePages/Home.aspx**, and an online course is on the AMC Advanced Distributed Learning Service site at **https://amc.adls.af.mil**. The Critical Thinking course is listed under AMC Operational Level (101 LvL) in the course list. The course covers several techniques to help you become a critical thinker and to improve your critical thinking skills. Many thanks to the 81 TRSS for converting Toolkit lessons to ADLS.

SPOTLIGHT AWARD

AFRC AIRCREW OF DISTINCTION

(Left to right) SrA Vasean Townsend, Lt Col James Mann, TSgt Brandon Jones, TSgt Marcello Lindo, TSgt Jason Goodsell, TSgt Justin Walker, MSgt Scott O'Brien, Capt Francis Lessett, and MSgt Troy Heller, 512th Airlift Wing, are members of the 12-person crew who won the Air Force Reserve Command Aircrew of Distinction Award. Not pictured are Maj Blain Brown, MSgt Broderick Williams, and SrA Rebecca Lehotay.

USAF PHOTO BY TSGT NATHAN RIVARD

Lt Col James Mann is a C-5M Super Galaxy pilot with the 709th Airlift Squadron at Dover AFB in Delaware. One particular flight in 2016, however, tested his skills and those of his crew more than usual.

While taxiing out for takeoff at Minneapolis-St. Paul (Minnesota) International Airport, the crew was told to hold short of runway 30L, which was the active runway. Mann did not sense anything unusual, so he set the parking brake and waited for clearance.

Suddenly, the flight engineer reported losing system #4 hydraulics—the brakes failed. They switched to the alternate brakes. A few seconds later, those failed, too. The crew switched to emergency brakes, but those failed, as well! The airplane then began to roll toward the busy runway.

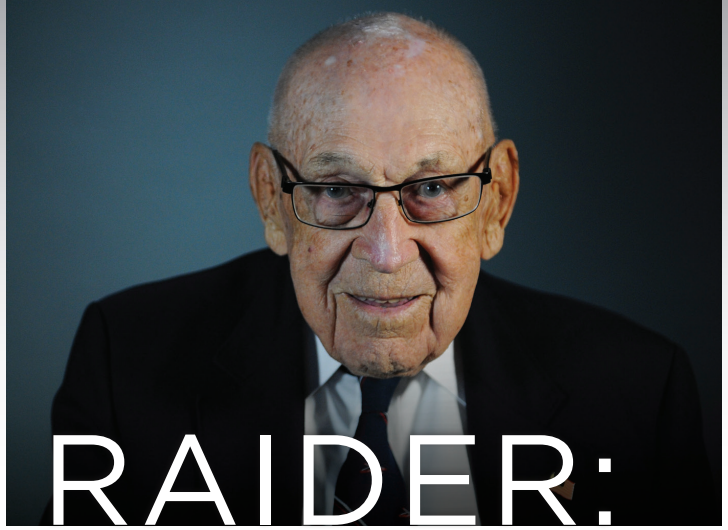
Mann deployed the thrust reversers to stop the plane. It worked—and prevented a potential high-speed collision with a landing commercial airliner—but the crew still needed to keep the aircraft in place. They chocked the nose landing gear, but the airplane rolled over the chocks as soon as the crew retracted the thrust reversers to prepare for engine shutdown. Again, they inched toward busy runway 30L.

The crew tried again, but this time a little differently.

Lt Col Mann explained. "I would bring number one to forward thrust and shut it down while I kept the other three in reverse. And once I brought that down, I did the same with number four." The aircraft was eventually moved to a safe location where a severed hydraulic line was found and fixed.

This demonstrated excellent judgment in an unusual situation. The crew came up with a creative procedure on the fly and it worked—preventing what could have been a catastrophic situation on a busy runway at an international airport.

Mobility crews do great things every day. That particular day, however, this crew saved countless lives by spontaneously developing a plan where none existed. Nice work!



THE LAST RAIDER:

DOOLITTLE RAID THAT CHANGED WWII— 30 SECONDS OVER TOKYO

By MSGT JULIE MEINTEL,
655th Intelligence, Surveillance, and Reconnaissance Group, (ISRG)
Wright-Patterson AFB, OH

Richard Cole is 101 years old. That's impressive on its own—not many people live that long. As if accidents, illness, and old age weren't enough, Dick Cole faced some serious odds of another variety. He was one of Gen Jimmy Doolittle's Tokyo Raiders. In fact, he was Doolittle's co-pilot on the riskiest of missions, and he survived.

The mission took place a few months after the "date which will live in infamy," when the Japanese attacked American forces in the early morning hours of Dec. 7, 1941 at Pearl Harbor, Hawaii. Just over four months later, on April 18, 1942, an attack that involved 80 B-25 crewmembers occurred. Doolittle planned and carried out the aerial attack on the Japanese mainland, which gained nothing in a tactical military sense but made all the difference to America.

As the first offensive counterpunch after Pearl Harbor, it gave a devastated America a much-needed shot in the arm. The mission was to fly into the heart of Tokyo and deliver a message that the United States may have been knocked down, but we had only just begun to fight back. B-25 modified bombers (16 of them) took off from the flight deck of the aircraft carrier named the USS Hornet. Jimmy Doolittle and Richard "Dick" Cole led the charge, dropping incendiary bombs to mark targets for other bombers coming behind them.

Then-Lt Col Doolittle put together the attack. A well-known test pilot with more than a few air-speed records, he was the recipient of America's first ever doctorate in aeronautical engineering. He determined that B-25 bombers would just barely fit on the deck of an aircraft carrier and could take off, but there was no way they could land. He asked for volunteers for a dangerous mission but gave no further details.

Things did not quite go as planned. On the way to Japan, the enemy spotted the USS Hornet more than 200 miles further out from where they planned to launch, effectively eliminating the element of surprise. Originally, the crews were to fly to Japan, unleash their payload, and then attempt to land or bail out over China. The longer distance made safe landings nearly impossible, however, and 19 of the 80 Raiders that undertook the courageous flight died during the war. Some drowned, some were taken prisoner and executed, and some died in captivity.

The mission was gutsy and daring. It did little damage to physical or geographical targets, but it destroyed the Japanese sense of security that American forces could not reach out and touch them. They were on the defensive and at a disadvantage from then on.

The Raiders shared a special bond of brotherhood. In December 1946, Doolittle and the Raiders got together to celebrate his birthday. From then on, they held a reunion every year. In 1959, the city of Tucson, Arizona, presented the Raiders with 80 sterling silver goblets, each one engraved with a Raider's name twice—so the

Photo, top left: (left to right) 2 Lt Henry A. "Hank" Potter, Lt Col James "Jimmy" Harold Doolittle, SSgt Fred Anthony Braemer, 2 Lt Richard E. Cole, and SSgt Paul John Leonard stand in front of a B-25 Mitchell bomber.

COURTESY PHOTO FROM DOOLITTLERAIDER.COM

Top right: Retired Lt Col. Robert E. Cole, the last surviving Doolittle Raider.

USAF PHOTO BY SSGT CARLIN LESLIE

Left: There are 80 goblets representing all 80 Doolittle Raiders. When a Raider dies, his goblet is turned over in the case. The set of goblets is now maintained by the National Museum of the U.S. Air Force.

USAF PHOTO BY SSGT BRIAN FERGUSON

Right: Goblet for Doolittle Raider Lt Col Richard E. Cole.

PHOTO BY LANCE CHEUNG

name would be legible whether the goblet was right side up or upside down. At each reunion, the Raiders honored those who passed on since the previous reunion. Upon toasting their lost comrades, the Raiders turned the deceased men's goblets upside down. They did so every year, with the ultimate intention that when there were only two Raiders left, they would share one final toast to all their departed brothers, drinking from a bottle of cognac that had been saved for the occasion. The special bottle was distilled in 1896, the year Jimmy Doolittle was born. The goblets are now on display at the National Museum of the United States Air Force.

One Raider, Lt Col Richard Cole, remains today, 75 years after that daring mission.

He was born in Dayton, Ohio, home of the Army Air Corps' first test base at McCook Field. How fitting—the boy who grew up where the Wright brothers pioneered flight always wanted to be a pilot, so he joined the Army Air Corps after high school.

He was eventually assigned to the 17th Bombardment Group and was on a training exercise with the unit when the news of the Pearl Harbor attack broke. A squadron bulletin came out requesting volunteers after the attack, and Cole threw his name in the hat. He and other volunteers trained, learning to take off in airframes specially modified for the mission under conditions simulating the deck of an aircraft carrier. Few details were given, so crews could only guess what "hazardous" mission they faced. After being at sea for two days, headed for Tokyo, they learned the specifics. They were excited to finally know their mission and maybe a little nervous at the prospect. Lt Col Doolittle offered any man the chance to change his mind with no repercussions. There were no takers.

Cole became Doolittle's co-pilot mostly by chance after the pilot Cole trained with got sick and dropped off the mission. After lobbying his operations officer, Cole was assigned to Doolittle's crew as co-pilot. The raid launched ahead of schedule because a Japanese vessel saw the Navy ships headed their way, and Doolittle and Cole flew the lead aircraft.

The pair took off in dicey weather conditions and flew four hours to Tokyo. There was some anti-aircraft fire from the ground, but Doolittle and Cole's plane did not take any direct hits. The weather turned bad on the way, and the airplane was low on fuel. The two bailed out in the dark, not knowing for sure where they would hit the ground. Cole's crew successfully found each other by the next night. The Chinese helped the Raiders escape capture by the Japanese and get out of the country.

According to Cole, the Raiders never felt like heroes, but history says they were. They believed they were just doing their job—part of the bigger picture—and were glad their mission helped the United States gain an advantage in the war. The men were recognized with the Distinguished Flying Cross. Doolittle received the Medal of Honor. Ironically, he was afraid he'd be court-martialed for losing aircraft and men in the mission.

The one remaining Raider, Dick Cole, gave several interviews on the 75th anniversary of Pearl Harbor and the Doolittle Raid. He always reminds listeners that while all those involved volunteered, they were going to fly the mission whether they liked it or not. You see, when Jimmy Doolittle calculated that the B-25 was the only aircraft that could fit on the deck of the USS Hornet, and the 17th Bombardment Group was the only Group trained to fly the B-25 . . . well, you can see where this is going.

Without the Raiders' courage and willingness to tackle an extremely dangerous mission against all odds, the war might have taken a very different turn. The Raiders blazed a path of daring and innovation that helped America win a war and shaped the future of military aviation. Every so often, a new generation of military warriors and aviators don't want to see themselves as heroes, but we must never forget those who came before us.

Lt Col Cole, thank you. I offer my deepest respect and wish you Godspeed, sir.

Your Best DEFENSE

By MS. JANET PURDY, Staff Writer

I grew up with an older brother and we frequently fought. Sound familiar? I don't remember any of the reasons for our fights (just sibling rivalry, I'm sure) but, occasionally, the confrontations became physical. Since he was older and bigger, I didn't have a lot to work with as far as protecting myself. I really didn't want to hurt him, but I didn't want to be hurt, either. He usually overpowered me but I *always* had my one weapon with me: my fingernails. I could really dig in! Although he always had the upper hand, I used this technique with some success and, in the end, we usually just agreed to disagree. He bears no scars from my defense technique, and we have outgrown our brawls.

We've been taught that violence and hurting others is wrong. But in an aggressive situation, you must prepare to fight back—even injure the attacker if necessary—to protect yourself. It is unlikely the fingernail defense would work in a threatening situation, but situational awareness and self-defense may be the difference between life and death.

Our natural response to fear due to a threatening situation is referred to as "fight or flight." This physiological response prepares us for an acute threat to our survival. Instinctive changes in the endocrine and nervous system prepare us for conflict. The nervous system transmits impulses to the endocrinological system to release adrenaline, noradrenaline, and additional hormones into the blood stream to prepare for fight or flight.

Although the body inherently responds this way to improve your response to a threatening situation, avoiding a confrontation is the ultimate defense. Unexpected threats are inevitable and preparation is vital, particularly in light of increasing violence and dissention.

There is a lot of information available regarding self-defense and appropriate techniques for fighting off attackers. Most agree the following techniques are effective.

- Fingers in the eyes – gouging, poking, or scratching to affect the attacker's vision.
- Palm of the hand to the nose or chin – thrust the heel of your hand upward under the nose or chin with all your force.
- Blow to the neck – with either a chopping motion with your hand or elbow, go for the jugular vein in the neck.
- Blow to the knee – kick the knee either on the side or front (the front will cause more damage but will not likely result in imbalance).

Recognizing potentially threatening situations and averting confrontation should be your goal for personal safety. Whether you are in a crowd or remote location, be aware of your surroundings and convey a strong, confident body language to avoid becoming a victim of violence.

GENERAL SAFETY REMINDERS:[1]

- Don't walk or jog early in the morning or late at night when the streets are deserted.
- When out at night, try to have a friend walk with you.

[1]*Excerpt from the National Crime Prevention Council*

PHYSIOLOGICAL CHANGES DURING "FIGHT OR FLIGHT"

- Increase in heart rate, blood pressure, and glucose levels.
- Pupils dilate to take in more light.
- More blood is pumped to the major muscle groups.
- More oxygen is allowed into the lungs.
- Non-essential systems shut down to allow for the necessary response to the threat.

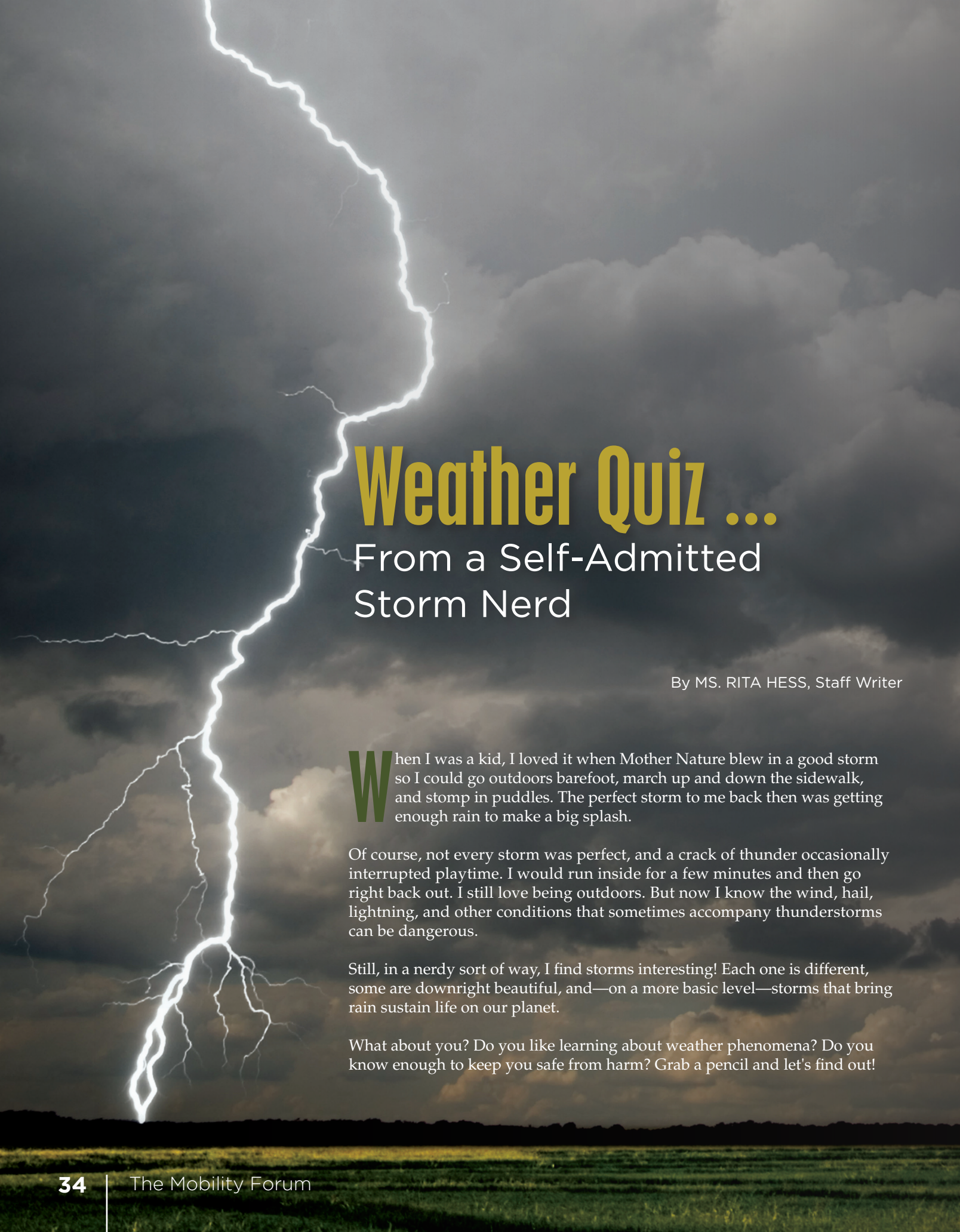
Airmen from the 107th Airlift Wing receive instruction on self-defense techniques during a class as part of Wellness Week at Niagara Falls Air Reserve Station.

USANG PHOTO BY SSGT RYAN CAMPBELL

Recognizing potentially threatening situations and averting confrontation should be your goal for personal safety.

- Carry only the money you'll need on a particular day.
- Don't display your cash or any other inviting targets such as cell phones, hand-held electronic games, or expensive jewelry and clothing.
- If you think someone is following you, switch directions or cross the street. If the person continues to follow you, move quickly toward an open store or restaurant or a lighted house. Don't be afraid to yell for help.
- Try to park in well-lighted areas with good visibility and close to walkways, stores, and people.
- Make sure you have your key out as you approach your door.
- Always lock your car, even if it's in your own driveway; never leave your motor running.
- Do everything you can to keep a stranger from getting into your car or to keep a stranger from forcing you into his or her car.
- If a dating partner has abused you, do not meet him or her alone. Do not let him or her in your home or car when you are alone.
- If you are a battered spouse, call the police or sheriff immediately. Assault is a crime, whether committed by a stranger or your spouse or any other family member. If you believe that you and your children are in danger, call a crisis hotline or a health center (the police can also make a referral) and leave immediately.
- If someone tries to rob you, give up your property—don't give up your life.
- If you are robbed or assaulted, report the crime to the police. Try to describe the attacker accurately. Your actions can help prevent someone else from becoming a victim.

As highly skilled Airmen, these tips serve only as reminders and a resource for your family and friends. After all, not everyone has strong fingernails!



Weather Quiz ...

From a Self-Admitted Storm Nerd

By MS. RITA HESS, Staff Writer

When I was a kid, I loved it when Mother Nature blew in a good storm so I could go outdoors barefoot, march up and down the sidewalk, and stomp in puddles. The perfect storm to me back then was getting enough rain to make a big splash.

Of course, not every storm was perfect, and a crack of thunder occasionally interrupted playtime. I would run inside for a few minutes and then go right back out. I still love being outdoors. But now I know the wind, hail, lightning, and other conditions that sometimes accompany thunderstorms can be dangerous.

Still, in a nerdy sort of way, I find storms interesting! Each one is different, some are downright beautiful, and—on a more basic level—storms that bring rain sustain life on our planet.

What about you? Do you like learning about weather phenomena? Do you know enough to keep you safe from harm? Grab a pencil and let's find out!

QUESTIONS

1. **Approximately how many thunderstorms occur each year in the United States?**
   - A. 20,000
   - B. 100,000
   - C. 200,000
   - D. 1,000,000
2. **When do most thunderstorms happen?**
   - A. In spring and summer
   - B. During the afternoon and evening
3. **What kind of weather elements can thunderstorms cause?**
   - A. Flash floods
   - B. Hail
   - C. Lightning
   - D. Strong winds
   - E. Tornadoes
4. **What is a derecho?**
   - A. A small hailstone
   - B. A bullfighter who practices in rainy weather
   - C. A long streak of lightning
   - D. A long-lived windstorm
5. **What is the 30/30 rule in weather?**
   - A. The first 30 minutes and last 30 minutes of a storm are most dangerous.
   - B. Take shelter when you count 30 seconds or less between lightning and thunder, and stay sheltered for 30 minutes after the last thunder.
   - C. The best storm shelter is 30' square and big enough for 30 people.
   - D. After lightning strikes a location, it won't strike within 30 miles for the next 30 days.
6. **Only some thunderstorms are dangerous.**
   - A. True
   - B. False
7. **What causes thunder?**
   - A. Lightning
   - B. Wind
   - C. Hail
   - D. Global warming
8. **Which rules should you follow when thunder and lightning happen in your area?**
   - A. Avoid contact with electrical devices and corded phones
   - B. Avoid contact with plumbing (showers, baths, washing hands or dishes, etc.)
   - C. Stay away from windows, doors, and porches
   - D. Do not lie on concrete floors or lean against concrete walls
   - E. Avoid contact with anything metal
   - F. Hide under a mature tree with large branches
   - G. Avoid hilltops, open fields, the beach, or a boat on the water
   - H. Move away from flagpoles and other tall items in open areas
9. **Does lightning always strike the tallest object?**
   - A. Yes
   - B. No
10. **Is lightning only produced by a thunderstorm?**
    - A. Yes
    - B. No

You'll find the answers on page 39. Admittedly, a few of these questions will only interest storm nerds like me. But if you learned at least one thing, then you will be better prepared the next time Mother Nature stirs up a perfect (or not-so-perfect) storm. For more information, check out the National Severe Storms Laboratory at **www.nssl.noaa.gov** or the National Weather Service at **www.weather.gov**.

HAVE YOU EVER WONDERED ...

...whether lightning can strike the same place twice? It can and it does. The Empire State Building is hit an average of 23 times a year.

...whether trying to help someone who was struck by lightning is dangerous? Don't worry. The human body does not store electricity, so it is perfectly safe to render aid to a lightning victim.

...how many people die from lightning strikes? There are about 25 million lightning strikes in the United States each year, killing an average of 49 people and severely injuring hundreds more. In 2016, there were only 38 U.S. deaths attributed to lightning.

...where lightning strikes are most frequent in our country? In a year, the most cloud-to-ground lightning is between Tampa and Orlando in Florida. Regions along the Pacific west coast have the least cloud-to-ground lightning.

Reporting Safety Issues Has Never Been So Easy

By MR. KEITH WRIGHT,
Air Force Safety Center
Public Affairs

Reporting a safety issue, whether a hazard or mishap, is about to get much easier across the Air Force with the upcoming release of a new web-based application by the Air Force Safety Center.

This simple tool, the Airman Safety App, will provide a streamlined process for all Airmen, their families, and anyone accessing the base to report a safety issue as they encounter it.

Currently, hazards are reported using many different forms in accordance with guidance per Aviation, Occupational, Weapons, and Space safety disciplines. Many times, people either don't know which form to use or don't take the time to fill it out. Even when filled out, there is still a submission, coordination, and resolution process that takes time and offers little feedback.

The Airman Safety App is accessible anytime, anywhere, and with almost any device—desktop, laptop, tablet, or smartphone—and focuses on minimizing the most common obstacles, making reporting quicker and easier to accomplish.

"Healthy safety cultures report hazards," said Maj Gen Andrew M. Mueller, Air Force Chief of Safety. "Voluntary reporting has the potential to prevent serious injury and future mishaps."

The Airman Safety App is off-line enabled so a report can be started at any time and submitted when an internet connection is available.

Follow the Air Force Safety Center public website: **www.safety.af.mil**, Facebook @AFSafetyCenter, and Twitter at AFSAFETY for updated information when the Airman Safety App goes live.

Falls Cause Lost Work Days, Fatalities

By MS. RITA HESS,
Staff Writer

Back in May 2016, the Air Force Safety Center (AFSEC) participated in a campaign focused on fall protection. The reason? During calendar years 2011 through 2015, falls were responsible for more than 6,700 Air Force injuries, including three fatalities. These mishaps resulted in over 42,000 lost workdays at a cost of over $64 million.

The purpose of the campaign was to remind all Airmen—Active Duty, civilian, Guard, and Reserve—and their family members what they can do to avoid fall-related injuries both on and off duty. The Safety Center did not intend for the emphasis on falls to stop after the two-week campaign, however, and some locations understand that on a personal level. One of the fatalities occurred at Hanscom AFB in Bedford, Massachusetts, which experienced 54 fall injuries during the period, resulting in 310 lost workdays.

"Fall protection is not only for activities related to heights, but also includes falls that can happen because of wet floors or obstacles on a walkway," explained Galen Williams, Hancom's 66th Air Base Group Safety Office director earlier this year. Williams said that as part of the campaign, section supervisors were encouraged to talk directly to personnel about safety in their specific work centers with a focus on fall hazards.

How does all of this stuff affect you? Well, even though the May 2016 event has passed, AFSEC encourages frequent discussions about falls. For example, supervisors can work with unit safety representatives to develop events (e.g., formal or informal discussions, presentations, guest speakers) for all departments.

According to the Safety Center, some personnel (e.g., aircraft maintenance, civil engineering) are more prone to serious injuries or deaths from falls from heights, but there are statistically far more lost work day injuries from falls on the same level, such as with slips and trips.

NOTABLE FINDINGS IN U.S. AIR FORCE FALLS MISHAP REVIEW, FISCAL YEARS 2010–2014

- Falls were an important cause of injuries in the USAF—the third leading injury mechanism in count and second in lost workdays and cost.
- Parking lots are a leading location for falls at the same level.
- Ice and snow, the second leading cause of falls, were more localized than general slips, trips, and falls.
- Aircraft maintenance (work outside), security forces (work outside), and services (wet floors) are the leading functional areas for falls.

For more information, see the **Suggestions to Prepare for a Successful Fall Protection Focus** at **www.safety.af.mil/Divisions/Occupational-Safety-Division/Fall-Protection/Fall-Protection-Suggestions**.

MISHAP-FREE

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54th Airlift Squadron, Scott Air Force Base, IL
Seven Years | 5,800 Hours

★★★★★

10,000 HOURS

101 ARW, Bangor ANGB, ME
Brig Gen John Derrico

7,500 HOURS

142 AS, ANG, New Castle, DE
CMSgt Jeffrey Springsteen

6,500 HOURS

101 ARW, Bangor ANGB, ME
Col David Pratt

142 AS, ANG, New Castle, DE
MSgt Todd D. Flickinger

5,000 HOURS

101 ARW, Bangor ANGB, ME
Brig Gen Douglas Farnham
Col Adam Jenkins
Lt Col Matthew Bourassa
SMSgt Gerald Martin

310 AS, MacDill AFB, FL
Lt Col Patrick Schuldt
MSgt Keith O'Steen

3,500 HOURS

101 ARW, Bangor ANGB, ME
Col Andrew Marshall
Lt Col Tyler Blake
Lt Col Ian Gillis
Lt Col Alexander Preble
Lt Col Brian Risley
Lt Col Jeffrey Surran
Capt Derek Gilley
SMSgt Daniel Benner
MSgt James Dickson
MSgt Charles Doughty
MSgt John Fidler
MSgt Ronald Martell
MSgt Raymond Rauscher
MSgt Andrew Robichaud

142 AS, ANG, New Castle, DE
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MSgt Sherman T. Buchanan
MSgt Christopher J. Coarse
MSgt Leonard J. Gill
MSgt Jesse B. Levy
MSgt Andrew P. Spears
TSgt Eric C. Lauppe

310 AS, MacDill AFB, FL
Lt Col Edward Grundel
Lt Col John Hartigan III
Maj Robert Gatti
Maj Todd Staniewicz
SMSgt Henry Hewitt
MSgt Phebe Frye
MSgt Jonathon Jackson
MSgt Bruce Klima
TSgt Matthew Gardner
TSgt Daryl Jolly
TSgt Wesley Sorenson

2,500 HOURS

101 ARW, Bangor ANGB, ME
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Lt Col David Everett
Lt Col Jesse Salisbury
Lt Col Andrew Wnek
Maj John Gauld
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Maj Chad Hillen
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mobilityforum@us.af.mil **HQ AMC/SEE, 618.229.0927 (DSN 779)**
Please submit as shown in the listings above (first name, last name, sorted alphabetically within rank).

QUICKSTOPPERS

LOSA Produces Successful Results

By LT COL KENNETH R. PICHA
HQ AMC Flight Safety

Since AMC began conducting Line Operations Safety Audits (LOSA) in 2010, over 1,800 observations on eight different aircraft have been completed. The results have produced more than 200 actionable recommendations that the Safety Investigations Boards (SIBs) have used in conjunction with ASAP and MFOQA reports. These recommendations have impacted the pilot, loadmaster, and boom operator positions with big wins. Big wins included updates to the C-21 avionics suite, C-5 and C-17 software upgrades for nuisance alerts, KC-135 auto-throttles emphasis at the HQ level, KC-10 radio upgrade, re-examination of C-40 crew duty day requirements, crew sleep-cycle management, and others.

The reason for this success is due to the aircrews' understanding of what the LOSA observer is doing and then permitting the LOSA observers onboard. This is a critical action by the crews because these observations provide not only AMC senior leaders a "snapshot" of what is occurring, but also provide the foundation with which the SIBs can work. LOSA is now one aspect of the Proactive Safety mindset. Using ASAP, MFOQA, and LOSA—along with active communication with other HQ directorates—allow the SIB to produce what it has thus far.

LOSA is simply a tool used in Proactive Safety. It is the crews—YOU—that have led to the wins mentioned. Keep submitting your ASAP reports, allowing LOSA observers onboard, and actively communicating your solutions to see more positive changes occurring.

ANSWERS TO WEATHER QUIZ

1. The answer is B. The United States experiences about 100,000 thunderstorms each year; about 10 percent of those are severe. Worldwide, approximately 16 million thunderstorms occur annually—or around 2,000 at any given moment!
2. Both A and B are correct: most thunderstorms develop in spring and summer, mostly during the afternoon and evening, BUT they can occur year-round at all hours of the day and night.
3. All of those answers are correct, of course. Flash floods kill more people annually than hurricanes, tornadoes, or lightning. Large hail can damage cars and homes, as well as injure livestock and people. Lightning may spark fires, high winds can topple trees and power lines, and tornadoes (in certain conditions) can destroy anything in their path.
4. If you said D, you are pretty good! A derecho is a widespread, long-lived windstorm associated with rapidly moving showers or thunderstorms. Derechos can produce swaths of damage extending more than 240 miles and have wind gusts of nearly 60 miles per hour along most of its length.
5. All lifeguards know this one. The correct answer is B.
6. False (B). All thunderstorms are dangerous! Every thunderstorm produces lightning, and some include tornadoes, strong winds, flash floods, and hail.
7. The answer is A; lightning causes thunder! Energy from a lightning channel can heat the air to around 18,000 degrees Fahrenheit, causing it to expand quickly and create the loud sound. Thunder can be heard up to 25 miles away from the lightning discharge.
8. Follow all rules except F. Never hide under a tree during thunder and lightning! Were you curious about D? The reason you should avoid concrete is that it often has metal wires or bars embedded inside to make it stronger. Lightning can hit the ground and travel a fair distance; that "ground current" can travel through concrete because of the metal materials inside.
9. No. Lightning *usually* strikes the tallest object, but it does not always happen this way. I hope you answered B.
10. Thunderstorms always have lightning, but you can have lightning without a thunderstorm. For example, you may see lightning in volcanic eruptions, extremely intense forest fires, surface nuclear detonations, and heavy snowstorms. So the answer is B, lightning is not always produced by a thunderstorm.

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A DAY IN THE LIFE

Capt Rachael DeRoche, a pilot from the 15th Airlift Squadron, poses for a photo in front of a C-17 Globemaster III at Joint Base Charleston, S.C. DeRoche and her flight crew took on an additional mission to transport a patient from Tegucigalpa, Honduras, to Tampa General Hospital on May 19, 2016.

USAF PHOTO BY A1C KEVIN WEST