

THE

MOBILITY

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FORUM

Critical Days of Summer 2018

Air Force SE Maj Gen Rauch Talks About

Who We Are and How We Do Business

Sharing Flight Safety Information with Junior Maintainers



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ON THE COVER

Fireworks explode behind a C-130 Hercules during Celebrate America at Yokota AB, Japan.

USAF photo by Yasuo Osakabe

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AIR MOBILITY COMMAND

Gen Carlton Everhart II



DIRECTOR OF SAFETY

Col Brandon R. Hileman

brandon.hileman@us.af.mil

EDITORS

Kim Knight

kim.knight@schatzpublishing.com

Sherrie Schatz

Sheree Lewis

sheree.lewis@schatzpublishing.com

GRAPHIC DESIGN

Elizabeth Bailey

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Air Force SE Maj Gen Rauch Talks About **Who We Are and How We Do Business**

BY MS. RITA HESS, STAFF WRITER



Maj Gen John T. Rauch Jr., Commander of the Air Force Safety Center at Kirtland AFB

Like many organizations, the Air Force Safety Center has a mission:

**SAFEGUARD
AIRMEN**

**PROTECT
RESOURCES**

**PRESERVE
COMBAT
READINESS**

www.safety.af.mil

To accomplish its mission, the Safety Center responsibilities include promoting mishap prevention programs and policy; overseeing mishap investigations; developing safety and risk management education; and maintaining the mishap database.

Maj Gen John T. Rauch Jr. serves as Commander of the Air Force Safety Center at Kirtland AFB in Albuquerque, New Mexico. He is also Air Force Chief of Safety in Washington, D.C. Despite a busy schedule, he says safety is his passion.

"I don't see safety as a separate component of our business, and it shouldn't be a goal. Safety needs to be part of our Air Force culture—who we are and how we do business."

Over many decades, safety has tended to transition from risk-based management to operational risk management.

"Just telling Airmen to be safe is not necessarily enough," he explains. "We need to help Airmen manage risks. For example, maybe we present information in easy to digest ideas. Do you have the right gear? Do you

have a good plan? Do you have the skills necessary?"

Rauch believes technology and the resulting data will continue to dominate our future. He cited the Line Operations Safety Audit, a program Air Mobility Command implemented, as something others want to emulate, and says Air Combat Command, Air Force Special Operations Command, and others are looking at latching onto parts of LOSA.

"We are also making sure programs like the Airman Safety Action Program are where they need to be so Air Mobility Command can embrace the opportunity for every Airman to be a sensor. Integrating Military Flight Operations Quality Assurance data gathered from airplanes is an area that nobody uses to the extent AMC does."

Still, Rauch says progress continues, as do ideas about ways to provide easier access to the magnitude of data collected to make it more useful. However, he pointed out that the flip side of having so much information is the challenge of protecting it. As new platforms come on, whether a program of record like the K-loader or something entirely different, Rauch

“The Air Force safety organization trains today at levels everyone understands, so Airmen know how to evaluate risks and make good decisions on and off duty.”

Maj Gen John T. Rauch Jr., Air Force Chief of Safety and Commander of the Air Force Safety Center, and MSgt Michael Cupp stand ready to greet Air Force Chief of Staff Gen David L. Goldfein at Kirtland AFB, N.M., Oct. 19, 2017. Goldfein met with the Safety Center to learn how they support the nuclear mission and the Air Force nuclear enterprise.

USAF photo by SSgt J.D. Strong II



wants to be sure the service collects and uses information constructively.

“When the National Transportation Safety Board and others investigate a collision, they pull data from a multitude of sources. We are on the cusp of utilizing this same technology for our vehicles on the flight line that will likely be able to do the same thing we did in aviation where we recreate incidents to learn from what happened. But we have to figure out how to do that smartly. We need to develop something like what we call a Just Culture, so if you’re making an honest mistake, we can all learn from it.”

Another concern is the push to get products and services faster than ever. Rauch hopes our focus on

acquiring them more quickly does not overshadow the need to ensure those products have the tools that we need built in. He explains that the Air Force is looking at ways to blend safety and maintenance data efficiently, regardless of whether it is data AMC generated or came from elsewhere.

Rauch hopes we continue to learn from our past and describes a few incidents that made safety personal for him.

“We used to learn about systems the hard way when a mishap happened,” he says. “I lost a college friend to the accident in Alaska when an AWACS flew through a flock of geese. In another incident, an airplane collapsed during a maintenance procedure and injured someone who mentored me in my first operational squadron.”

In closing, Rauch says it is interesting to watch AMC’s efforts applied to other areas of the service, and he wants to help all MAJCOMs solve issues for a very important reason.

“Airmen are our most precious asset. It is painful to lose somebody, both for us as individuals and as an organization. The Air Force safety organization trains today at levels everyone understands, so Airmen know how to evaluate risks and make good decisions on and off duty. Still,” he concludes, “we have a moral requirement to do the best we can to help keep our teammates safe as we execute the mission, and it is more than just telling them to be safe. It is looking out for each other, and always being a good wingman.”

Sharing Flight Safety Information with Junior Maintainers

BY MR. LALO MAYNES, HQ AMC FLIGHT SAFETY

As a safety professional in the Air Force, one of the biggest challenges I've had is ensuring our Airmen "wrench-turners" receive current and accurate safety mishap information. The information in most aviation mishap reports is privileged safety information (PSI) and must be protected in accordance with Air Force Instruction 91-204, *Safety Investigations Reports*. In this article, I'll discuss what PSI is, why it's protected, the reluctance or fear of sharing PSI with maintenance personnel, and why PSI is vital and needs to be shared with our maintainers to prevent future mishap occurrences. I'll also demonstrate how certain Air Force safety officials are authorized to share PSI with Air Force members on a need-to-know basis in accordance with AFI 91-204.

On some evening, at some location, on some particular aircraft, a mishap occurred and one engine of the aircraft was damaged. To prevent that same situation from happening again, we need to know how and why the event(s) took place that developed into a mishap. When Air Force personnel are involved, they are required to tell the safety investigators what happened. That information may be "privileged" and therefore CANNOT be used against the person for administrative punishment or any other punitive action.

If we do not protect the person's testimony, people involved in future mishaps may not be willing to testify openly to investigators about events that led to the mishap. Without the witness testimony, we may not be able to determine why it occurred. If we

don't know that, we can't prevent it from happening again. That is why privileged safety information is protected—to ensure it's used only by people and agencies whose duties include relevant mishap prevention responsibilities. I've shared with you why we have an obligation to protect PSI, now let's find out what PSI is.

Privileged Safety Information results from the deliberative process of the investigation. The analysis, findings, causes, and conclusions are all privileged. The testimony given to an investigator, the computer generated animations, the simulation or simulator reenactments in which the investigator analysis is incorporated, and the diagrams or photographs developed by the investigator are all considered PSI. This list is general and is mentioned here for the purpose of this article. For more detailed information, please see AFI 91-204.

Privileged Safety Information is used only for "officially authorized mishap prevention purposes." Sharing PSI is taken very seriously in the Air Force and we (safety professionals) have a duty to protect its use. In accordance with AFI 91-204, we are given strict guidance how to handle its use. As quoted here from paragraph 3.1.1., "Violations of the prohibitions in paragraph 3.3.1. of this instruction are punishable under Article 92, UCMJ and may be grounds for disciplinary actions according to civilian personnel regulations, or may lead to contract action."

We must follow this instruction, exactly as written, to ensure proper handling and use of PSI. Limiting the



It is a challenge to ensure the most junior members of the maintenance community receive flight safety information. Airmen make up a large number of the aviation workforce. Safety professionals can help reduce maintenance related mishaps by sharing mishap experiences with junior maintainers.

release of PSI within the Air Force is authorized, but it must be carefully followed. This is where most safety offices fall short in their quest to ensure the "one-striper-wrench-turner" will see this critical information. Most safety offices just won't do it. Why? Fear of punishment for improper handling of PSI.

So, PSI is that critical information vital to understanding who, what, when, where, why, and how the mishap took place. It is used only by those whose duties include relevant mishap prevention responsibilities. We safety professionals constantly provide mishap briefings to members of the aviation committee. We discuss various topics and provide information as "lessons learned" on a need-to-know basis and solely for mishap prevention. Additionally, often



this information is inadequate when “sanitized,” which means removal of PSI (or the who, what, when, where, why, and how) in the mishap report. However, people whose duties include relevant mishap prevention responsibilities need to fully and completely know those details of the mishap to glean “lessons learned.” Otherwise, our people only get half of the mishap picture.

Humans make mistakes—that includes humans who fly the aircraft and those who maintain it. Safety professionals need to follow guidance in AFI 91-204, paragraph 3.7.2. “Chiefs of Safety, Safety Investigation Board (SIB) presidents, Single Investigating Officers (SIO) are authorized, when sanitized information is inadequate, to provide PSI as lessons learned to Air Force members on a need-to-know basis and solely for mishap prevention. They will ensure members are instructed on properly protecting PSI, their responsibilities to prevent unauthorized release, and that they sign non-disclosure agreements.”

It is a challenge to ensure the most junior members of the maintenance community receive flight safety information. Airmen make up a large number of the aviation workforce. Safety professionals can help reduce maintenance related mishaps by sharing mishap experiences with junior maintainers.

Before becoming a wing flight safety NCO, I was a maintenance instructor

(MI). At maintenance training (MT), all instructors were tasked to develop and review the courses we taught. Each year, numerous wing agencies met to concur or make changes to the course documents.

When I became the Flight Safety NCO, I contacted the training managers to ensure I represented wing safety for each review. For each course, I gave the MI who taught that course a list of relevant, current mishaps, which I do in MT offices throughout AMC today.

As the FSNCO, I sanitized each mishap report. Initially, it was labor intensive to ensure all PSI was removed from each mishap report. However, later that year, I watched an Airman servicing liquid oxygen. After he finished, I asked if he heard about a mishap that occurred at Base X doing the same task he was performing. I was delighted to hear the junior crew chief say, “Yes sir. My instructor told me about the mishap. I’ll always remember him saying, ‘Don’t let this happen to you!’ He briefed a different mishap for every task; it was like he cared.” Obviously the MI left an impression on this Airman.

If you, as a safety professional, need another reason to share flight safety information with maintenance personnel, look in AFI 91-202, The U.S. Air Force Mishap Prevention Program, paragraph: 7.6.4.

“Flight Safety personnel will inspect, assess and monitor flight-related


TSgt Alidio A. Ventura, 514th Maintenance Squadron, 514 AMW, monitors the opening of the reverser doors on a C-17 Globemaster III at Joint Base McGuire-Dix-Lakehurst, N.J.

USAF photo by MSgt Mark C. Olsen

workplaces, operations and support. Potential spot inspection/monitoring areas include but are not limited to: 7.6.4.2.12. Flight safety information use in maintenance training flight.”

This paragraph suggests that maintenance personnel should be briefed on aircraft mishaps; more specifically, flight safety information should be used in the maintenance training flight so that instructors brief their students on the potential of maintenance mishaps. Today, Flight Safety and Maintenance Training staff members are looking at ways to do just that.

I hope I’ve clearly communicated the importance of protecting PSI. The Air Force protects those who testify openly to investigators so they can determine the cause of the mishap for the purpose of mishap prevention. I also hope you see that the AFI allows for limited release of PSI but must be strictly followed. If you have any questions on the process, please contact me. I’ll be happy to help.

It was indeed a great feeling hearing a junior crew chief tell me about a mishap that I gave his instructor six months earlier—and knowing he’ll share the same experience with crew chiefs that follow him. 

You Can't Make This Stuff Up!

BY MSGT KEVIN CRUZ, AMC OPS RAMS

As Air Mobility Command professionals, we prepare as best we can for upcoming missions, though we never really know what to expect while on the road. We pump our schedulers for information, study regulations, and “chair fly” our missions. We might even read ASAP reports related to our Mission Design Series to see what lessons we can learn from other crews who have experience at the same locations.

In addition, we try to think of things that may happen to us (threats) in order to catch them immediately. But one can't think of every scenario and must adapt to the threats as they come. Hopefully, the threats are dispersed across multiple missions and not targeted at a single flight. Recently, however, AMC Ops RAMS received an ASAP report from a crew who encountered multiple obstacles throughout their mission. Thankfully, they were experienced and ready for almost anything.

The beleaguered mission began delayed by four days. The aircraft commander (AC) for the mission (an instructor) had his student call the Tanker Airlift Control Center (TACC) planning cell to point out that (1) their prior permission required (PPR) was not complete for the mission, (2) they didn't have a courier slated for their mission as outlined in the Foreign Clearance Guide, and (3) their diplomatic clearances were out of date.

After the four-day delay, the crew was nearly ready to depart home station to pick up their cargo at a CONUS location; however, they still didn't have a PPR.

As mobility aircrew members, we are used to paperwork mistakes and shouldn't be caught off guard, right? Though the TACC suggested they take off from the CONUS enroute location and get the PPR enroute, the AC refused to depart until the PPR issue was resolved. After sitting in the aircraft for two hours past departure time, the crew was informed by TACC that they could not proceed to their subsequent enroute stop in Spain's Canary Islands. That incomplete paperwork (along with a maintenance issue for a sheared starter) delayed the mission another four days.

Finally, after a total of eight days, the crew departed for their destination. Approximately two and a half hours into the flight, they received a call from TACC stating that their diplomatic clearances and PPR were denied, despite being previously approved. Forbidden to land at their destination with the hazardous cargo they had on board, the crew diverted to Lajes, Azores, to remedy the problem.

The crew finally arrived at their next destination in the AOR a few days later. Upon arrival, they were told to taxi to the military ramp. The crew knew that the Giant Report and airfield diagram showed the military ramp

After the plane was double-blocked for the refuel, the loadmaster—while accomplishing his After Loading checklist—realized that a passenger had tried to hide a dog beneath a blanket to take it out of the country.

as a dirt patch without proper weight bearing capacity, specifically stating that C-17s are restricted from using the military ramp. The crew complied with the “follow me” truck as far as possible, then stopped as close as they could to the cargo; a good call. The crew then realized that the documents were incorrect and a large paved ramp north of the restricted ramp was the actual military ramp. Having different information and terminology between ground personnel and the Giant Report only added to the confusion.

After the plane was double-blocked for the refuel, the loadmaster—while accomplishing his After Loading checklist—realized that a passenger had tried to hide a dog beneath a blanket to take it out of the country. The passenger, when answering the loadmaster's questions, originally claimed the dog to be a service dog and provided a commercial



C-17A Globemaster III

Despite the long delays and multiple obstacles encountered, the long-suffering crew didn't let their guard down. They saw problems and handled them appropriately, completing the mission successfully and safely.

vaccination record. The dog was not on the manifest, did not have a proper kennel, and was not cleared through customs and agriculture.

Also, a customs agent was on board manifested as a passenger! The AC spoke with the troop commander, describing how his troop almost cost the crew a lot of money and almost got someone arrested for having the dog. The AC finally demanded the dog be removed from the aircraft. A bit embarrassed, the troop ensured the dog was removed from the aircraft (it was left with a unit member who was remaining in the country). This situation delayed the mission 40 minutes; but again, the crew saw something out of the ordinary and handled the situation appropriately.

Adding to the already chaotic mission, the crew chief noticed during the next day that the lavatory had been over serviced. As if these unusual events were not enough, four passengers had to deplane due to a passenger suffering from a possible drugging while at a local bar!

Despite the long delays and multiple obstacles encountered, the long-suffering crew didn't let their guard down. They saw problems and handled them properly, completing the mission successfully and safely. After arriving at their home station, the crew submitted ASAP report number 5617 so their peers could read about what they encountered. Hopefully, the MAF community will watch for similar situations.

You can't make this stuff up! As aircrew members, you never know what to expect when out on the road. But with the right training and attention to detail, you can spot a situation that isn't right and handle it appropriately while successfully continuing even the most rigorous mission.

To read the entire ASAP submission, visit the ASAP scoreboard at the AFSAS website at <https://afsas.safety.af.mil>. I want to thank the crew for providing their contact information so we could reach out to them and gather the details needed to help close the loop on this mission. As always, personal identity will never leave the Ops RAMS office. Stay vigilant out there, and continue to fly safely! 🇺🇸

• RICAN 68 •

Honoring Their Memory

Maj José R. Román Rosado from Manati, Puerto Rico, had 18 years of service.

Maj Carlos Pérez Serra from Canóvanas, Puerto Rico, had 23 years of service.

1Lt David Albandoz from Puerto Rico, residing in Madison, Alabama, had 16 years of service.

SMSgt Jan Paravisini from Canóvanas, Puerto Rico, had 21 years of service.

MSgt Jean Audriffred from Carolina, Puerto Rico, had 16 years of service.

MSgt Mario Braña from Bayamón, Puerto Rico, had 17 years of service.

MSgt Víctor Colón from Santa Isabel, Puerto Rico, had 22 years of service.

MSgt Eric Circuns from Rio Grande, Puerto Rico, had 31 years of service.

SrA Roberto Espada from Salinas, Puerto Rico, had 3 years of service.

On May 2, 2018, a WC-130H from the 156th Airlift Wing of the Puerto Rico Air National Guard crashed near Hilton Head Airport in Savannah, Georgia. The mishap took the lives of nine personnel.

Air Mobility Command mourns this tragic loss and remembers their sacrifice.





BY MS. KIM KNIGHT, STAFF WRITER

The C-5M Super Galaxy is the largest aircraft in the Air Force inventory. With a primary mission to transport cargo and personnel, this modernized version of the legacy C-5 definitely meets expectations—and it does so in style!

Col Gerard Malloy, Deputy Director of Air, Space and Information Operations at Air Force Reserve Command Headquarter on Robins Air Force Base, Georgia, says the C-5M is in a class of its own and that nothing compares to it.

“The C-5 has been a stable workhorse for the Air Force for a number of years,” he said. “It underwent over

70 aircraft improvements compared to legacy models. One of the biggest is the new GE [General Electric] engines, which provide over 22 percent more thrust, cut the climb time in half, and offer a tenfold increase in engine reliability.”

Mr. Mark McUmb, Headquarters AFRC C-5 Program Manager, agreed about the updates.

“The last few major modifications—the Avionics Modernization Program and the Reliability Enhancement and Re-Engineering Program—are the two biggest in the last 10 years. The first one addressed the C-5 cockpit, adding more glass and getting rid of many gauge indicators. The second

one modernized the engines and mechanics of the airplane, which is a reliability focus.”

Air Mobility Command began the aggressive program to change C-5s in 1998. In addition to engines and other system upgrades, this modernization program also enhanced aircraft reliability, maintained structural and system integrity, and increased operational capability. A state-of-the-art maintenance diagnostics system can record and analyze data from more than 7,000 test points, reducing the maintenance and repair time.

Another big difference is that the Super Galaxy is quieter than the

“

The C-5 is the only strategic airlift capable of linking warfighters in all theaters of combat without refueling. It can carry more cargo farther and more reliably than any other strategic airlift—up to 36 pallets of cargo, which can weigh up to a quarter of a million pounds.”

ITS OWN

C-17 Globemaster III. That is impressive, considering the four General Electric CF6 80C2 L1F (F138) commercial engines Malloy mentioned provide a lot of power in the air. The five sets of landing gear (28 wheels) provide a smooth landing, too. The upgrades didn't overlook functionality, either. The displays inside the cockpit now have state-of-the-art glass and instrumentation, as well as improved lighting in the cargo area of the aircraft.

Perhaps one of the most important features of the C-5 Super Galaxy is cargo capacity and range.

“The C-5 is the only strategic airlift capable of linking warfighters

in all theaters of combat without refueling,” said Malloy. “It can carry more cargo farther and more reliably than any other strategic airlift—up to 36 pallets of cargo, up to a quarter of a million pounds. It can carry six Apache attack helicopters or four N2 or N3 Bradley tanks—that's like six Greyhound buses.”

Indeed, specifications indicate that with a cargo load of 281,001 pounds, it can fly 2,150 nautical miles, offload, and fly to a second base 500 nautical miles away from the original destination—all without aerial refueling. With aerial refueling factored in, the aircraft's range is limited only by crew endurance.

A C-5M Super Galaxy aircraft from Travis AFB, Calif., prepares to land at Amedee Army Airfield, Calif., as part of a week-long readiness exercise.

USAF photo by TSgt Liliana Moreno


McUmber estimated the larger C-5 can carry twice the load size of the C-17.

“The primary concept is to use a large aircraft that can accommodate a large load to get it where it's needed,” he explained. “Some cargo items—NASA rocket motors, for example—require a C-5 because they can't fit into a C-17. The final deliveries of aircraft with these enhancements should take some of the burden off the C-17.”

Both the nose and aft doors open on the C-5, allowing ground crews to simultaneously load and off-load cargo from both ends. Drive-on ramps at each end enable double rows of vehicles to be transported. It can also take off and land on relatively short runways.

Col Malloy summarized by adding that the C-5M Super Galaxy equips the AF Reserve and the Total Force with a more capable and reliable weapon of mass delivery, whether supporting relief efforts or supplying the warfighter.

“This opens a new chapter in rapid global response to ensure the Air Force Active Duty and Reserve are equally trained and equipped,” he said. “Final deliveries are scheduled for summer, after which there will be 52 in the total inventory, with 16 totally operated by AF Reserve.”

Future modernization efforts include incorporating advanced weather radar, mission computing, communication systems, and air traffic management to meet FAA mandates and survivability in theater. 

CRITICAL DAYS OF SUMMER 2018



BY MSGT CLINTON HAMMONS, HQ AMC OCCUPATIONAL SAFETY

Air Mobility Command's Critical Days of Summer (CDS) campaign began on Memorial Day weekend and will continue through Labor Day weekend. With the summer months bringing warmer weather, they also bring more opportunities for Airmen to participate in risky activities.

The annual CDS campaign focuses Airmen on personal risk management and sound decision-making during this time of increased activity. To help combat these risks, AMC continues to promote the annual safety awareness campaign.

This year's CDS campaign slogan is "Sound Decisions" to remind Airmen of the importance of conducting proper personal risk management assessments for both on- and off-duty activities. All too often, personnel overlook minor details or simply ignore known risks, which results in injuries or even death. AMC is combating this by providing multiple sources of media and educational information, as well as

mishap scenarios used as small group discussion topics between supervisors and work center personnel. Together, these spark conversations between Airmen and help instill the importance of personal risk management.

Preventable mishaps lurk around every corner during the summer. It is imperative for us to assess the risk of our activities and make sound decisions based on these assessments. While it may sound easy, when activities are coupled with heightened excitement, peer pressure, and alcohol or other mind-altering drugs, the line between sound decisions and poor decisions tends to blur. Because of this, a culture of personal risk management is needed. It's your life—do you really want to risk it unnecessarily?

The goal of the CDS campaign is zero fatal mishaps. We are glad to say that last year, we accomplished it for the second year in a row and only the third time in AMC's history. We hope to have continued success during

this year's CDS effort because one Airman lost due to preventable mishaps is one too many.

While AMC was fortunate to have zero fatal mishaps during last year's CDS campaign, the Air Force as a whole wasn't as fortunate, losing 10 Airmen to mishaps during the CDS. Many of these fatal mishaps were motor vehicle accidents, which are often the result of poor choices like driving too fast, drinking and driving, and/or distracted driving. Alcohol was determined to be a factor in at least 4 of the 10 mishaps. In most of the mishaps, sound decisions could have prevented the incident or at least reduced the injury severity.

We hope you enjoy this summer. However, while you are out there enjoying the weather and various activities, remember: if you didn't conduct a sound risk assessment, then you may not be making a "Sound Decision" and let's face it... sound decisions save lives! 🍷

732 AMS Inspection Diverts Disaster at Joint Base Elmendorf-Richardson, Alaska

BY MS. KIM KNIGHT, STAFF WRITER

The strategic location of Joint Base Elmendorf-Richardson (JBER) in Alaska provides a diverse and unique mission that sets it apart from any other in Air Mobility Command. Lt Col Paul Copper, Commander of the 732d Air Mobility Squadron (AMS), explained.

“Other bases have one mission, aircraft assigned to a specific location, and personnel who deploy—it’s all one team,” he said. “Here, we support the PACAF base as a tenant and support services such as the Coast Guard who fly in, as well as various radar sites across Alaska. We don’t just have a single mission. Where we are geographically, we support the state of Alaska and the entire Pacific area. A lot of cargo flows through us going to the Pacific, being the first land mass coming out of Asia and going back to the lower 48 states.”

JBER certainly plays a key role in rapid global mobility for the enroute, which keeps the hardworking Airmen on the flightline engaged. Upon arrival and departure, each aircraft undergoes a lengthy list of inspections by ground and flight crews to ensure a safe flight. Normally, the preflight checks go according to plan—but not always.

For example, while inspecting a C-5M prior to launch, the maintenance crew pulled off each of the four engine covers. In the process, a pin used to attach a cover dropped down into the engine. With the noise of the heaters and power

units running close by, the sound of the pin dropping went unnoticed.

“C-5M technical data doesn’t require us to get into the inlet,” said SMSgt Michael Puppe, Aircraft Maintenance Unit Superintendent, 732d AMS. “The aircrew came out, did a walk-around check, and proceeded with engine start procedures. As soon as they started up, they could hear something bouncing around and immediately shut down.” The loose pin had banged around and damaged three of the blades.

“I requested the aircraft be impounded to lock it down,” Puppe said. “We immediately pulled out the covers to determine how it had

happened. We identified there were three covers that had broken lanyards and one unaccounted for pin.”

Thankfully, the \$15 million motor was unharmed by the rogue pin. A specialist was called in and determined the damaged blades could be blended and did not have to be replaced, so the severity of the situation was greatly reduced. However, the maintenance crew took the incident very seriously because JBER endures long winters with extreme conditions that require the use of engine covers often.

“I talked with Chief Jason Benford, Maintenance Superintendent, 732d AMS, about how to avoid a repeat occurrence,” added Puppe. “Some of



An Airman from 732 AMS, Joint Base Elmendorf-Richardson, attaching engine covers.

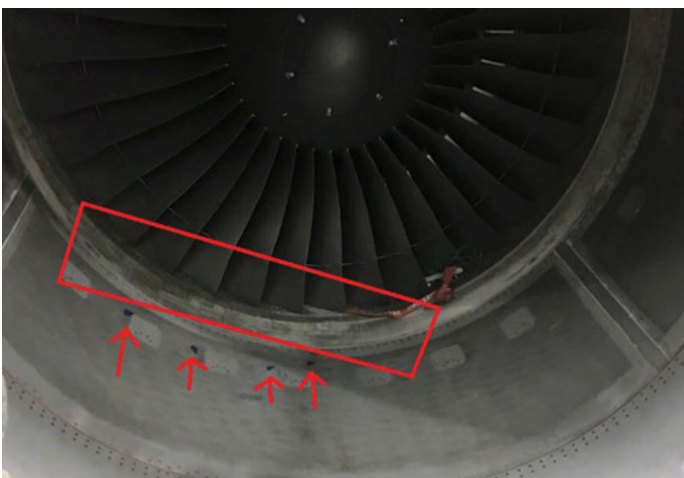
Photo by Kim Knight



Right upper wing trapezoid panel delamination



Engine inlet crack



#2 and #4 engine blade damage

The decision to voluntarily add the inspection to the pre-launch sequence quickly proved a valuable use of time.

the old practices, such as an inlet inspection, have gone away based on educated decisions. We decided to add this to our local operating instruction, as there was no requirement to climb up in the inlet in this case. The Chief and I decided to implement a preflight inlet and exhaust foreign object [F.O.] inspection for all C-17 and C-5M aircraft prior to launch."

The decision to voluntarily add the inspection to the pre-launch sequence quickly proved a valuable use of time. Shortly after the implementation, while SSgt Daniel Linger, Crew Chief, 732d AMS, was conducting the new inlet and exhaust inspection on a C-17, he noticed an 8.5-inch crack on the nacelle portion of the #1 engine. Another crack was discovered during a sheet metal inspection. The cracks were severe enough that flight was unsafe, so the entire inlet nacelle had to be replaced.

Also, a basic post-flight/pre-flight (BPO/PRE) inspection is required when an aircraft has extended ground time. In this case, the inlet nacelle replacement drove extended ground time and a BPO/PRE inspection was required. During the in-depth inspection of engine intakes and exhausts, TSgt Dominic Castagna, Crew Chief, 732d AMS, discovered two nicked blades in the #2 engine and a bent blade in the #4 engine that required blending. In the #4 engine, Castagna also pinpointed 10 areas of acoustic liner or perforated liner delamination that sheet metal maintenance personnel deemed out of limits and required repair. In addition, while conducting the upper wing inspection during the BPO/PRE, SSgt Jonathan Bice, Hydraulic Systems Craftsman, 732d AMS, identified a right wing trapezoid panel separated from the body of the aircraft, which also required repair.

"If it were not for the 732d implementation of the inlet and exhaust F.O. inspection and SSgt Linger's keen eye, none of the discrepancies following the #1 engine cracks would have been identified, posing a potential catastrophic foreign object damage mishap," stated Puppe.

Lt Col Copper's vision statement, *People first: Pride in our Profession* is evident in the Airmen at the 732d AMS who go above and beyond in their duties to ensure high standards are met. Whether heading to a remote Alaskan destination, the Pacific, or the lower 48, each aircraft is thoroughly inspected for a safe flight. 🇺🇸

AMC Safety Operations Flight Hosts Second Biennial Conference

BY MSGT NICHOLAS HALL,
HQ AMC SAFETY OPERATIONS
SUPERINTENDENT

The AMC Safety Operations Flight hosted an enroute safety conference in December 2017. The objective of the conference was to provide an avenue for professional development and information sharing for AMC enroute safety professionals assigned to the 521st and 515th Air Mobility Operations Wings (AMOWs).

Attendees gained an enhanced strategic perspective, as well as critical thinking and executive-level communication skills necessary to execute the Command's Enroute Mishap Prevention Program. This was accomplished through robust enroute safety professional dialog focusing on command/leadership positions and expectations, mishap response duties and responsibilities, and executive leadership influence. The majority of attendees were 1S0s (full-time Air Force occupational safety professionals) or their respective alternates and unit safety representatives. Director of Operations Lt Col Michael Ueda from the 5th Expeditionary Air Mobility Squadron and additional maintenance personnel attended and responded positively in written feedbacks.

Safety Operations personnel, who also serve as the wing safety staff for the AMOWs, reached out to the American




Standing, left to right: Mr. Chris Flaherty (727 AMS), Ms. Stella Bazzo (724 AMS), MSgt Dustin Hayden (AMC/SEO), TSgt Anthony Fagalde (721 AMXS), TSgt John Fox (726 AMS), Mr. Mike Wahler (AMC/SEO), TSgt Carlton Anthony (721 AMXS), MSgt Ryan Armour (721 APS), TSgt Amy Barnett (725 AMS), MSgt Justin Musall (735 AMS), MSgt Nick Hall (AMC/SEO), Lt Col Michael Ueda (5 EAMS), and Mr. Joel Tietjens (ASSE). Kneeling, left to right: TSgt Chelsie McCall (730 AMS), TSgt Rachel Johnson (731 AMS), and TSgt Chris Bunn-Toves.

Society of Safety Engineers (ASSE), St. Louis University College for Public Health and Social Justice, and the Air Force Safety Center to determine availability, cost, and suitability. Safety professionals assigned to AMC enroute units were also solicited for ideas and inputs. The group ultimately decided on the ASSE Influential Leadership Skills course because they liked the focus on strategic thinking and planning, and influencing executive, middle, and line management.

The 2017 enroute conference marks the first time the 1S0X1 Career Field Manager (CFM) was invited to specifically address enroute safety professionals in one-deep assignments. The attendance and availability of the CFM had the single biggest impact on attendees, based on verbal and written feedbacks. Representatives from respective AMC safety disciplines addressed the attendees,

focusing on enroute weapons safety considerations, Interim Safety Board/Safety Investigation Board actions and responsibilities, mishap prevention from the Flight Safety perspective, and command occupational safety updates. The weeklong conference was rounded out by the Influential Leadership Skills course; AMCI 91-205, *The AMC Enroute Mishap Prevention Program*; and AMOW safety awards guides workshops. Individual inputs for the AMCI and awards guides were coalesced and discussed for implementation in future updates.

A group social rounded out the week's events. This enabled the hosts and the attendees to discuss official and unofficial business in a more relaxed environment. It also provided networking opportunities for all. The conference was rated a tremendous success, and planning is already in progress for the 2019 enroute conference. 



Elinor Otto



Elinor Otto visits March ARB, Calif., on Dec. 18, 2017, for a flight aboard a C-17 Globemaster that she helped build. She is welcomed by Gen Carlton D. Everhart II, AMC commander, and Lt Gen Maryanne Miller, Air Force Reserve Command commander.

USAF photo by A1C Michelle Ulber

A “Rosie the Riveter” Honored with Lifetime Achievement Award and C-17 Flight

BY MS. KIM KNIGHT, STAFF WRITER



Today, the “Rosie the Riveter” poster is an iconic image representing thousands of women who went to work producing munitions and supplies during World War II. But in January 1942, the brightly colored poster was a help wanted ad for Ms. Elinor Otto. The poster read, “Men are going off to war, come and do your part.” So, Ms. Otto rolled up her sleeves and went to work building planes at Rohr Aviation in Chula Vista, California, for 65 cents an hour.

“They didn’t have time to train us, we didn’t go to school—just did on the job training with lead men who were experienced building airplanes,” she said of the early days. “They were very helpful and showed us what to do. We appreciated it because we had heard

the men weren’t very happy about us women working with them, but they accepted it as we did our jobs.”

She explained that those starting out as a “Rosie” didn’t work on the big planes at first.

“It took a while for that, but we had big parts that went on all the war planes. We didn’t always know what part we were working on or what it was going on. We just had to keep on schedule, so the planes could go to combat.”

Ms. Otto said the working women didn’t realize their role during the war was of any importance. When the war was over, and the men returned home, all the assembly women were handed pink slips and they were let go—that was it.

“There was a time when men said women can’t do this or that, but we’ve proved ourselves in every way. It’s just marvelous how women can now do all these things. We’ve come a long way!”

– Elinor Otto



CMSgt Deborah McGuane, 336 ARS, and Elinor Otto look at a Rosie the Riveter “We Can Do It” poster at March ARB, Calif. CMSgt McGuane was part of the all female KC-135 Stratotanker aircrew that refueled the C-17 Globemaster III Elinor flew in for her first C-17 flight.

USAF photo by MSgt Eric Harris

She tried her hand at secretarial work but didn’t care for sitting at a desk, so she quickly found her way back to the aeronautical industry and resumed her Rosie the Riveter duties. Over the course of her 68-year career, she helped build the C-17, KC-135, DC-10, DC-9, and DC-707, as well as the fighters for war.

“From building airplanes in 1942 on up, the technology changed,” she explained. “The material became thicker and more difficult to work with, but I liked it. One of the planes I worked on in the 1950s was the KC-135. I worked on the entire fuselage. I worked on a lot of planes and am thrilled some are still in operation.”

When asked which plane was her favorite, she said it was undoubtedly

the C-17 because her small but sturdy hands built 279 of them.

“We were such a wonderful crew, and we got a lot of recognition by keeping the plane and costs on schedule. And all the pilots love to fly that plane,” she added.

Ms. Otto got up at 5 o’clock every morning, stopped for a cup of coffee on the way to work, and had a rivet gun in her hand almost daily until she was 95 years old. As the longest working Rosie, she is quick to say she never retired. But the Boeing plant where she worked closed in 2014, so she was laid off.

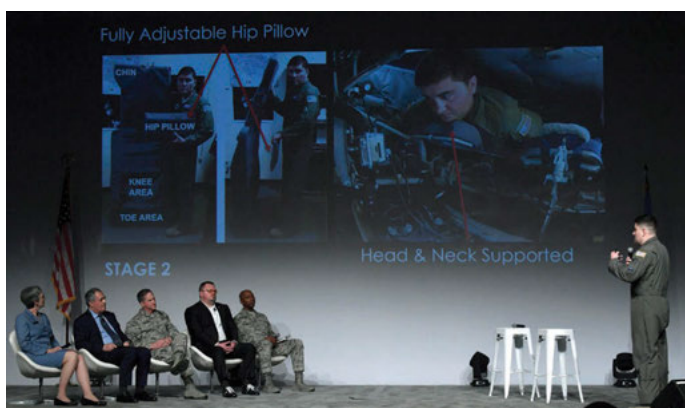
“People ask me why I worked so long. It was because I enjoyed doing my job, working on airplanes, and being around

people,” she said. “I think I’ve inspired people to keep working.” Indeed, this living legend is a true inspiration who paved the way for women. Her 68 years of hard work and dedication also earned her the well-deserved Lifetime Achievement Medal from the Air Force Association on September 18, 2017. At that time, Gen Carlton Everhart learned that despite having built 279 of the mighty C-17s, Ms. Otto never had an opportunity to fly in one. A special mission was organized in her honor.

“The airplane flight ...” she exclaimed. “I just couldn’t sleep! I was on cloud nine for days! I’m so proud of the honor and privilege. The Air Force has been so kind to me.”

Prior to her epic flight, which was orchestrated from March Air Reserve Base in December 2017, Gen Everhart said, “There are people on the other side of the world right now whose lives have been destroyed by war or natural disaster. They are receiving lifesaving humanitarian aid, delivered on the wings of one of the many aircraft that you built. They will probably never know your name or the way in which you affected their lives, but on their behalf and on behalf of the Airmen that are bravely flying those aircraft, I am honored to represent them and to say thank you. Thank you for the incredible airplanes you have built. Thank you for the example you have set. Thank you for the inspiration you have given all of us.” 🇺🇸

Five Years of Hard Work Wins Inaugural Spark Tank Innovation Cup for AMC Airman



MSgt Bartek Bachleda (right), 22d ARW aircraft boom operator from McConnell AFB, Kan., briefs his idea to the Spark Tank panel during the Air Force Association Air Warfare Symposium in Orlando, Fla., Feb. 22, 2018.

USAF photo by Wayne A. Clark

BY MS. KIM KNIGHT, STAFF WRITER

Back in 2012, when MSgt Bartek Bachleda was in charge of scheduling flights for KC-135 instructors and students at Altus AFB, Oklahoma, he noticed it was a regular occurrence for instructor boom operators to have an ailment(s) which earned them DNIF (Duties Not Including Flying) status.

“When primary instructors went DNIF, I’d have to find a replacement and juggle to make sure every instructor had a day with their student to brief, fly, and debrief because each student sortie requires three consecutive days of availability. So, it was very frustrating,” he said. But, what started out as frustration turned into a quest for answers.

“I researched what was going on and compiled information from instructor boom operators who had had surgeries for back, neck, and knee or shoulder complications. The medical expenses for a single squadron totaled \$2 million” he continued. “In fiscal year 2014—including Active Duty, Reserve, Guard, and veterans—it was \$132 million in medical costs, and that does not include the quality of life issues.”



MSgt Bartek Bachleda

USAF photo by SrA Robert Gunn



An Airman demonstrates use of the ergonomic boom instructor platform and pad designed by MSgt Bartek Bachleda.

As a KC-135 boom operator for nearly 14 years, Bachleda explained that it is a small career field of roughly 800 people spread out all over the world. There had never been much medical cross talk so the problems went unnoticed. If it had been a larger career field, the large medical expenditure most likely would have been recognized and corrected long ago.

Bachleda did not stand idly by; he took it upon himself to find a solution. He determined the source was the non-ergonomic floor design and lack of support of the boom instructor platform.

“We’ve been using a 2D solution for a 3D problem since 1956, and it’s simply not working” he added.

“If you have an idea, submit it. No more excuses.”

MSgt Bartek Bachleda

“The solutions to current Air Force problems are walking in our Air Force today. If you have an idea but don’t know how to proceed, learn and figure it out. Go out and research or find people who do know. You don’t have to solve all the problems. You just have to know what the problem is and have a rough solution. Talk to the experts who can help you along the way,” he said.

He designed a chin rest for neck/head support and redesigned the floor panel and then the entire cushion. The panel was easy, but the cushion took almost a year because it went through five revisions after being tested by over 200 operators in flight simulators at Altus AFB. All the materials used in the new design are fire retardant, and the cushion can be used as a floatation device. The weight of the final product is the same as the current configuration, so the weight and balance aircraft calculations do not need to be revised.

Once the final design was ironed out, he put together a pricing proposal with an estimated cost of \$1.5 million for all KC-135s in the Air Force inventory. The legwork needed to be done, so Bachleda had to build blueprints for everything with correct measurements. Then he drafted instructions for how to take the old platform out of an aircraft and install the new one, which only takes 15 minutes. Another added bonus is that the panels can be made on any KC-135 base because he developed easy-to-follow directions. Not having the panels manufactured commercially saves the Air Force roughly \$700,000.


Anything new that goes into an aircraft has to have an Air Force Form 1067, which indicates the modification has been approved by MAJCOM for the platform. Currently, his 1067 has been approved and he’s waiting for final flight testing approval.

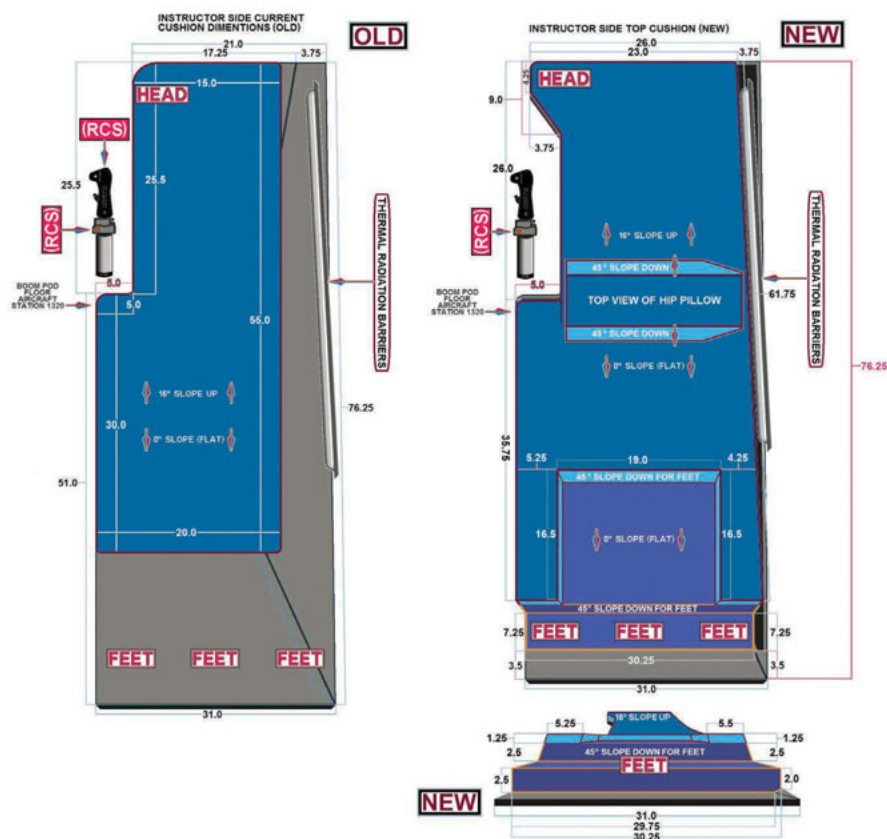
At the Airlift Tanker Association Symposium last year, Bachleda heard

Gen Carlton D. Everhart II, AMC commander, speak of innovations in the works around AMC and did not miss the opportunity to pitch his platform idea. Right off, he told Gen Everhart he could save the Air Force over \$100 million a year, which grabbed his attention.

“Innovation is central to our ability to apply airpower,” said Everhart. “At a time when we are challenged with resource constraints, with no rest from our adversaries, we need to find more effective ways to continue as the world’s most dominant Air Force.”

As an Airman at the 22nd Air Refueling Wing, McConnell AFB, Bachleda submitted his idea at the wing level for Spark Tank, a call for Air Force wide innovative ideas. He won and became one of six finalists at the Air Force level. At the Air Force Association (AFA) Air Warfare Symposium in Florida on February 22, 2018, he presented his KC-135 boom instructor platform proposal to Air Force leadership and won the first-ever Spark Tank innovation competition.

“When I got up on the stage at AFA, I went into the standard brief mode. But what I really wanted to say was that if you ever had an idea but were afraid it wasn’t going to get approved by your supervisor, squadron commander, or leadership, your excuse is no longer valid,” he said. “There’s a SSgt to a full Colonel on stage presenting their ideas to our AF leadership. If you have an idea, submit it. No more excuses.” 

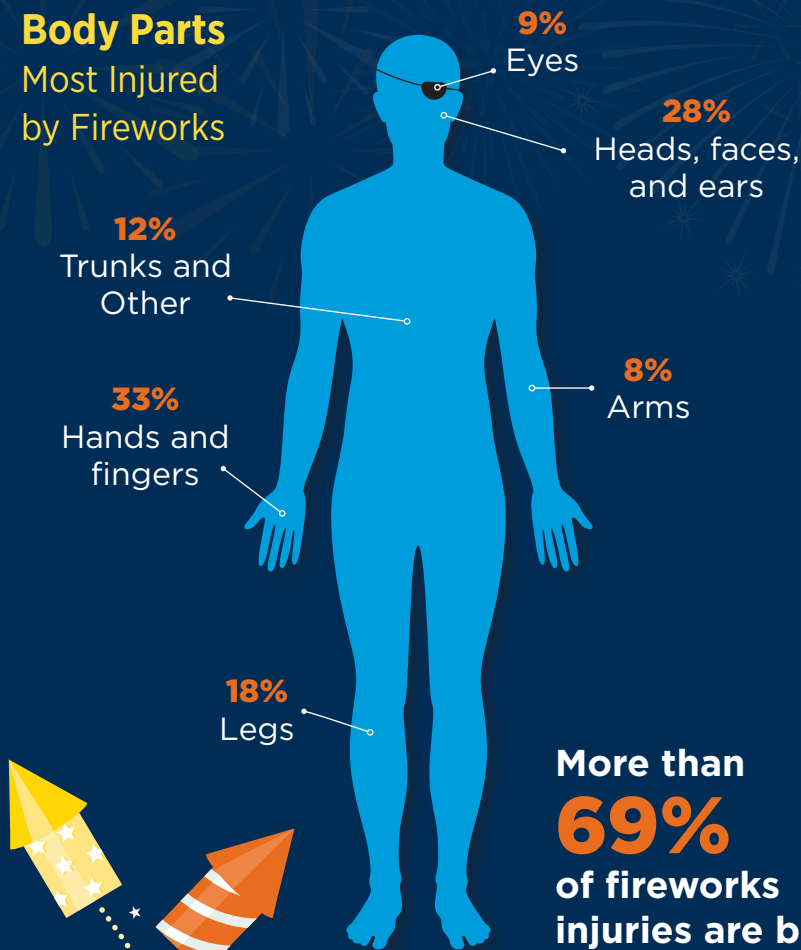


FIREWORKS SAFETY

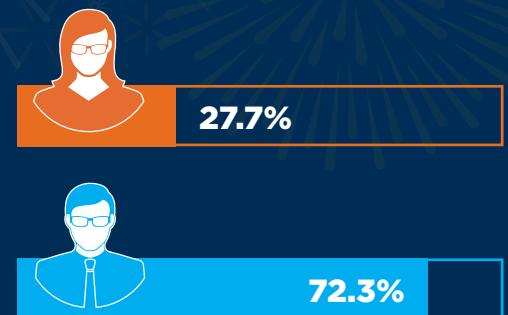
Fireworks are synonymous with our celebration of Independence Day, yet the thrill of fireworks can also bring pain. On average, **250** people go to the emergency room with fireworks-related injuries every day in the weeks around the July 4th holiday.

Body Parts

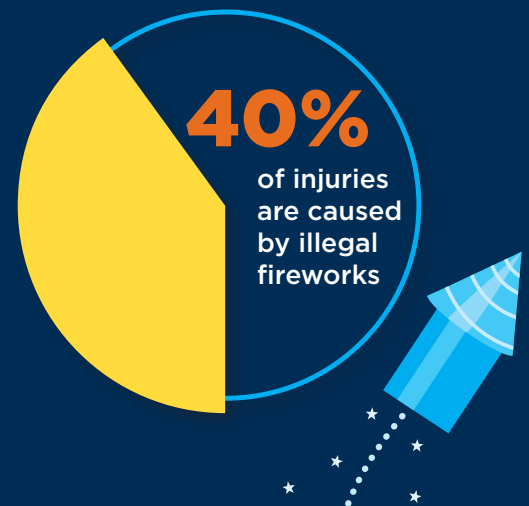
Most Injured by Fireworks



More men than women are injured each year by fireworks.



More than **69%** of fireworks injuries are burns.



Tips for Keeping Your Independence Day Celebration Safe and Fun



Make sure fireworks are **legal in your area** before buying or using them.



Always have an adult supervise fireworks activities. Parents may not realize that young children could suffer injuries from sparklers. **Sparklers burn at temperatures of about 2,000 degrees**—hot enough to melt some metals.

Avoid buying fireworks that are **packaged in brown paper** because this is often a sign that the fireworks were made for professional displays and they could pose a danger to consumers.

Never allow young children to play with or ignite fireworks.



Light fireworks **one at a time**, then move back quickly.



Never try to re-light or pick up fireworks that have not ignited fully.



Keep pets indoors and away from fireworks.

Never point or throw fireworks at another person.

After fireworks complete their burning, **douse the spent device with plenty of water** from a bucket or hose before discarding it to prevent a trash fire.

Never carry fireworks in a pocket or shoot them off from metal or glass containers.



ALWAYS KEEP WATER HANDY WHEN DEALING WITH FIREWORKS





Hon

Military families recognize the risk of losing a loved one in battle, but few ever imagine a loved one will die while riding a bicycle. Yet that is exactly what happened to a 31-year-old instructor pilot earlier this year in Altus, Oklahoma.

This young captain—assigned to the 54th Air Refueling Squadron—taught others to fly KC-135 tankers. He loved his wife, of course, and he loved competitive sports. He even participated in the 2016 Ironman at Coeur d'Alene (Idaho) event. His life ended abruptly when a truck struck the bicycle he was riding on Sunday, February 11, 2018.

In his honor, I respectfully submit a Top 10 list of bicycle safety tips. Please take time to read them. More importantly, please adhere to them.

1. **Wear a properly fitting helmet** made for bicycling. Sizes vary by manufacturer and not all are created equal. See the information provided by the Bicycle Helmet Safety Institute at <https://helmets.org>.¹ In summary, wear a helmet that fits, secure the straps, and replace the helmet after a bad crash.

2. **Ride a bike that appropriately fits your body**, as this gives you more control. I remember a painful bicycle accident that happened when I was about 14 years old—a young girl riding an adult male's bike ended in a crash. Enough said.

3. **Know your bike.** Check with area bike shops or advocacy groups for riding classes. People say you never forget how to ride a bike, but it is a good idea to brush up on your skills if you have not ridden in a few years.

4. **Know the laws** and requirements where you will be riding and adhere to them. Drive with the flow (in the same direction as traffic). Obey street signs, signals, and road markings, just like if you were driving a car.

5. **Check to see if the bike works properly** before you begin every ride. Without functioning brakes

or properly inflated tires, you may as well be trying to steer a sled down a steep, icy slope while wearing a blindfold.

6. **Be visible day and night**, but try to avoid riding at dusk, at dawn, or after dark. Wear appropriate reflective gear, and ensure your bike has a white front light, a red rear light, and reflectors. Even then, assume others do not see you—because you can't know for sure.

7. **Choose a route** with less traffic and slower speeds, or avoid all vehicles by using a bike lane or bike path. Also, avoid riding on sidewalks, which is illegal in some locales. If you lack a bicycling partner, let someone know where you plan to go and when you will return.

8. **Drive defensively** by anticipating what others may do before they do it. The quicker you spot potential trouble (i.e., irregular surfaces, debris, pets, wildlife, and parked car doors opening), the quicker you can act to avoid it.

¹ The Bicycle Helmet Safety Institute is a non-profit helmet advocacy group in Washington, D.C.

Top 10 List ors an Airman

BY MS. RITA HESS, STAFF WRITER

9. **Drive predictably** by using hand signals so others know what you are about to do. Alert other bicyclists about road hazards by pointing to them, and tell them your intended maneuver (“Passing on your left” or “Passing on your right”).

10. **Leave your hands on the handlebars** unless signaling a turn or otherwise motioning to fellow riders. This means **NO** texting, music, or other distraction that takes your eyes, ears, or mind off

the roadway and the traffic. Carry a fully charged cell phone to use in case of emergency, but do not use it (or any other electronic device) while riding.

I could go on and on, but the bottom line is this: ride smart and ride safe. Do not risk your life or the lives of others with an over-confident attitude that “Anyone can ride a bike.” Finally, if you prefer to drive a vehicle instead, respect all bicyclists who share the road with you. They have a right to be there—same as you. 🚔

WHAT WAS TRENDING ... IN 2016²

The Insurance Institute for Highway Safety reveals alarming 2016 trends.

- There were 835 bicyclists killed in crashes with motor vehicles, the highest number since 1991.
- Most bicyclist deaths in 2016 (87 percent) were riders age 20 and older.
- Every year since 1975, more male bicyclists died in crashes with motor vehicles than female.
- Bicyclist deaths were highest during June (12 percent) and lowest during February (5 percent).

² According to the Insurance Institute for Highway Safety (<http://www.iihs.org/iihs/topics/t/pedestrians-and-bicyclists/fatalityfacts/bicycles/2016>).



STUFF HAPPENS

Sometimes you can do everything right and crummy stuff happens anyway—such as a bike crash. Similar to any other kind of accident, you have responsibilities. You must remain calm, assess the situation, tend to injuries, gather information, and notify the appropriate authorities.

If one or more people are involved, get the following information before you leave the scene.

- Name, contact information (address, phone number, etc.), and driver's license number from any drivers, bicyclists, or pedestrians involved.
- Insurance company name, address, and policy number for each of those people.
- Descriptions of the vehicle(s) involved, including license plate number.
- Contact information for witnesses not involved in the crash.
- A copy of the police report or the report number, as well as the name and contact number of the responding officer.

Also, use that cell phone (the one you had in your back pocket) to document damage to all involved bicycles and/or vehicles. After you calm down—but as soon as possible—write down your recollection of what happened in case you need it later.

The Road Less Traveled

BY MR. MONTE NACE,
STAFF WRITER

When I was young and single, I often dreamed of being a nomad—packing all my belongings into my back seat and driving across the country with no firm destination and no definite timeline. The closest I ever got to doing it was a five-day road trip with some friends ... no maps, no reservations, just a desire to GO! It was everything I hoped for, and we made some great memories!

I am (much) older now, but the lure of spontaneous travel still piques my interest occasionally. If you share my wanderlust spirit and adventurous desire to *experience* a vacation rather than *plan* one, here are five quick tips for a spur-of-the-moment trip.

The magic of discovery can be much more exciting than having every aspect of travel rigidly laid out.

1. Realistically match your journey to your days off.

I like time to relax at home for a day at the end of a trip rather than jumping immediately back into work. If that sounds familiar and you have an end-point in mind, allow more than enough days to get there and back. For example, don't try to drive from coast to coast in a week—unless, of course, you have several drivers and enjoy seeing the country on the fly. Fewer miles traveled means more time for more experiences at each stop.

HINT: If you have a general destination in mind, go there and find a place to stay. You can use that as a “home base” of sorts and still take spontaneous day outings—or not!

2. Choose travel partners wisely.

While I think it is usually a good idea to travel with someone rather than alone, this is not the type of trip everyone will enjoy. When my friends and I did it, we got up every morning and decided over coffee what to do. Some days that meant staying another day and night in the area. Other days we drove until someone yelled STOP! One particular day, we packed up and left a riverside cottage in the morning, drove 20 miles, and saw a sign that intrigued us. We pulled in, made a reservation, and unpacked. Yes, really.

HINT: Travel with friends who are willing to slow down and “play it by ear” on the trip. Turn off your electronic devices, find a two-lane road, and drive until you decide to stop. Repeat the process.

3. Ask locals for recommendations.

I love asking locals where to eat and stay, as well as asking for tips about

“must see” or “most unusual” area attractions. Depending on where you are, you will likely encounter things you might otherwise miss. For example, I saw the (allegedly) World's Largest Hand Dug Well in Greensburg, Kansas. It cost \$45,000 to build in 1887 and served as the municipal water supply. Nerdy? Perhaps. Unusual? Definitely! But I never forgot that place—I even returned there years later to see how it was rebuilt after an F5 tornado destroyed most of the town in May 2007.

HINT: Camping or cabins at state and national parks are often good lodging choices, but do not count on impromptu availability during peak season. Don't forget about B&B options!

4. Bring less clothes and more patience.

This kind of vacation is best suited for those who like life in the slow lane. But since you may not be sure where you are headed or what you will find to do there, it can be tempting to pack too much stuff. Don't worry about taking a change of clothes for every day you will be gone. Instead, consider stopping in Anytown, USA and spending a few hours in a coin-operated laundry. While your garments are in the spin cycle, talk with the residents. Don't be shy! Make it your goal to find a connection to them—something you have in common.

HINT: People make this country great. Take a break from the hectic, hustle-bustle pace of life and “get there when you get there.” Make friends along the way. At our core, I suspect we are more alike than different ...

5. Look for roads to ... nowhere?


We all want to go *somewhere* on vacation, but don't focus too narrowly on a destination. Instead, I encourage you to just kick back and enjoy the journey. A few years ago, I drove to the Grand Canyon with my spouse. It was as spectacular as we expected, but we also enjoyed some terrific unplanned stops along the way. One evening, we dined outdoors at sunset in a locally owned barbecue joint. One morning, we watched a young man fly fish in a bubbly Colorado stream—just before we went into the town's tourism information center and spent several hours listening to a volunteer tell us about local history.

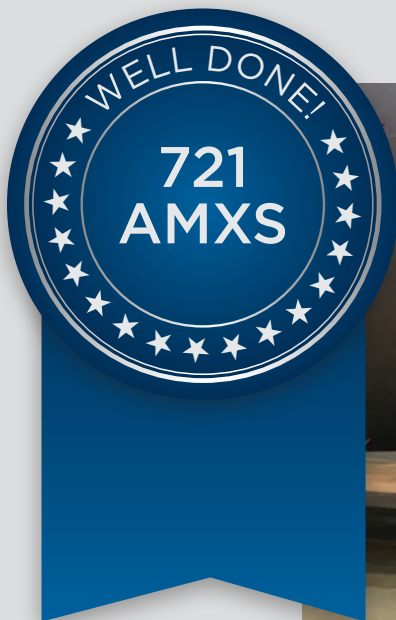
HINT: Do not plan every moment of your trip before you back out of the driveway. Leave time for impromptu excursions that let you wander the road less traveled for a couple of hours—or days.

You're a wingman, right? America is your country and mine. We owe it to ourselves to get off the interstates and truly experience the land and its people.

I am not encouraging you to ignore your safety training, such as having a properly serviced vehicle, letting someone know where you are, yadda yadda yadda. I am simply saying it can be refreshing to leave room for flexibility on vacation rather than having your plans etched in stone. The magic of discovery can be much more exciting than having every aspect of travel rigidly laid out.

If you are traveling alone, I hope you return home ready to tackle whatever life throws your way. If you have a travel partner, I promise that this type of trip will bring you some unforgettable moments.

You're a wingman, right? Relax! Get out there and wing it! 



AMC Well Done Award Presented to the 721st Aircraft Maintenance Squadron Impoundment Team, Ramstein AB, Germany

MSgt Arthur C. Billings
MSgt Devin J. O'Donnell
TSgt Olivia D. Sandrini
SSgt Christopher C. Gary
SSgt Jessica E. Tharp
SSgt Christopher S. Alderman
SrA Justin D. Ivey
SrA Taylor G. McLean

The Commander and Command Chief Master Sergeant for Air Mobility Command recognized the 721st Aircraft Maintenance Squadron Impoundment Team during a recent visit to Ramstein Air Base, Germany. While there, the team received the *AMC Well Done Award* in recognition of outstanding achievement.

It seems that a C-17 aircraft, tail number 92003292, was in the process of a quick-turn when technicians discovered a hydraulic leak. While maintenance team members prepared to repair the main landing

gear hydraulic leak, they noticed a significant amount of fuel leaking from 21 different wing locations.

The aircraft was towed into the fuel cell hangar for further inspections, which revealed a stress fracture on the right forward main landing gear trunnion and significant vibration damage to the #1 engine inlet, fan blades, and v-band support clamp.


Even though crew debrief and propulsion data did not identify any anomalies, the abundance of various maintenance discrepancies compelled the technicians to impound the aircraft and conduct a thorough aircraft inspection.

The impoundment team's assertiveness and exceptional safety measures enabled a successful aircraft recovery after complete failure of the right forward main landing gear trunnion caused the right wing to drop approximately 8 feet. The team immediately cordoned

off the area, assessed the situation, and devised a recovery plan with Boeing engineers.

Swift action and decision-making by the team prevented additional strain and damage to the right aft main landing gear; it also prevented a possible catastrophic aircraft loss. Additionally, the impoundment team worked directly with a C-17 Recovery and Modification Services team to ensure all inspections and temporary repairs were completed, which facilitated a smooth transition for the aircraft to complete a one-time flight back to a depot repair facility for permanent repairs.

The excellence displayed by the impoundment team did not go unnoticed. This incredible accomplishment reflects great credit to the members of the impoundment team, Air Mobility Command, and the United States Air Force.

Well done, team! 



Left to right: 1Lt Joel Stark (Co-pilot), Capt Robert "Craig" Hyatt (Instructor Pilot/Aircraft Commander), SrA Zachariah Ploeger (Boom Operator), SrA Patrick Moore (Flight Engineer), Capt James Leli (Co-pilot), and TSgt Chrisrobertson Sy (Instructor Flight Engineer)

SPOTLIGHT AWARD

PETRO 91 Crew, 60 AMW, Travis AFB, California

BY MS. RITA HESS, STAFF WRITER

In 1942, United States forces attacked Japan in the Doolittle Raid—a retaliation for Pearl Harbor that demanded flexibility among crews and detailed coordination among multiple Department of Defense agencies. A more recent complex joint mission was not an act of war but was nonetheless dramatic! It demanded superior professionalism, leadership, and courage from a quick thinking KC-10 crew in challenging conditions.

January 18, 2017. During the first-ever United States Marine Corps (USMC) F-35B overseas deployment in response to North Korean threats in the Pacific Air Force region, 10 aircraft were being moved to Japan. After days of severe weather delays in Alaska, the crew of a KC-10 (PETRO 91) from the 60th Operations Group at Travis Air Force Base, California, departed in formation but suddenly experienced total failure of the horizontal stabilizer, which precluded any ability to trim the aircraft.


While Capt James Leli (FP) struggled to maintain aircraft control, Capt Robert Hyatt (IP) and the remaining crew began troubleshooting the problem. They climbed, negotiated a 3,000' block to avoid colliding with other aircraft, and began dumping fuel to lighten the load for landing. Gradually, the craft descended to a lower altitude to conduct precautionary checks with the aircraft configured for landing. At landing speed, the increased control pressure

required the pilot flying to use full strength to maintain aircraft control. This quickly resulted in fatigue, so the pilots alternated every three minutes.

Despite the serious failure, the pilots used extraordinary skill, fighting their exhaustion to coordinate a successful precision approach and landing on a snow-covered runway at Elmendorf AFB, Alaska. The crew then used superior skill, judgment, and airmanship to recover their crippled KC-10 to a safe landing.

Everyone on board PETRO 91 performed meritoriously. They maintained composure, calmly managing emergency checklists. They communicated with each other, with others in the formation, and with those on the ground to ensure this potentially life-threatening scenario concluded safely. Their actions, which exemplify crew resource management (CRM) at its finest, saved lives and an \$88 million asset.

Please join us in congratulating the following PETRO 91 crew from the 60th Operations Group:

- › Capt Robert Hyatt (IP)
- › Capt James Leli (FP)
- › 1Lt Joel Stark (FP)
- › TSgt Chrisrobertson Sy (IF)
- › SrA Patrick Moore (FE)
- › SrA Zachariah Ploeger (BO) 

Harvey the Horrible

BY MS. RITA HESS, STAFF WRITER

A monster is born.

People who lived through certain events in modern American history—such as the assassination of President John F. Kennedy or the terrorist attacks on September 11, 2001—will never forget those moments. Recalling them brings up indelible images. One natural disaster permanently etched in my mind occurred when Hurricane Harvey hit the Gulf Coast with ferocity during the summer of 2017.

Harvey began life off the West African coast, thousands of miles from Texas. Then, lumbering toward the United States, it gathered fuel from the warm Caribbean waters and rapidly strengthened as it set sights on the Lone Star state. It crossed the Gulf of Mexico and made landfall near Rockport and Port Aransas as a Category 4 hurricane with 130 mph winds, causing massive damage onshore.

The worst was yet to come, however, as meteorological conditions transformed Harvey into a horrible monster and locked him in place for

several days. The storm produced copious rainfall totals over Houston and south Texas from August 25–30.

RECORDS ARE BROKEN

People in the area knew they were at risk of hurricanes, but this storm was epic. According to the National Weather Service, 51.88 inches of rain fell at Cedar Bayou, Texas—the highest rainfall total for any storm in recorded U.S. history. The estimated **24 trillion gallons** of water produced, when combined with wind and storm surges, actually cooled the Gulf of Mexico's surface waters drastically!

Indeed, Hurricane Harvey will go down as one of the wettest storm systems in U.S. history. According to the National Oceanic and Atmospheric Administration (NOAA):

- More than 6.7 million people in a 29,000 square mile area (the size of West Virginia) received at least 20 inches of rain in seven days.
- Houston observed two of its wettest days ever back-to-back. August 26 brought 8-plus inches of rain; August 27 brought around 16 inches of rain. A large area east

Hurricane Harvey near the coast of Texas at peak intensity late on Aug. 25, 2017.

Photo courtesy of NOAA

of Houston observed 40 inches of rain during the event.

- Rivers and creeks overflowed, quickly flooding the region. About 70 percent of Harris County (home to Houston) was flooded by at least 1.5 feet of water.

2017 STORM COSTS ... AND CAUSES?

According to NOAA, the United States experienced 16 weather and climate disasters in 2017 with losses exceeding \$1 billion each. The cumulative damage of these 16 events is over \$306 billion, which shatters the previous record. NOAA also notes that 2017 was the third warmest year since record keeping began in 1895. The average annual temperature for the contiguous U.S. last year was 54.6 degrees Fahrenheit, which is 2.6 degrees above the 20th-century average.

6 SURVIVAL STARTER STEPS

1. **Know the terms.** When the National Weather Service releases flooding forecasts, know the terms used (Areal Flood Advisory, Flood Warning, Flash Flood Watch, Flash Flood Warning) and what to expect.
2. **Turn around. Don't drown.** The number one killer during natural disasters in the United States is flooding. ***Never drive into water that has crossed a roadway.*** Instead, find an alternate route or wait until the danger has passed. Call 911 to report water covering a roadway.
3. **Cover your ... belongings.** If you live in an area prone to flooding, consider flood insurance. This is typically not part of homeowners and renter's insurance. Visit www.floodsmart.gov for more info.
4. **Make a plan.** Regardless of where you live, you need a plan so you know what to do, where to go, and how to reach other family members in the event of a flood, wildfire, tornado, ice storm, or other disaster. Excellent resources for assimilating a plan include your base's Readiness personnel, area emergency managers, and online guides such as the one at www.Ready.gov. Use one resource or use them all. Doing something beats doing nothing!
5. **Pack an emergency supply kit.** Every family is unique, so your kit's belongings may not match mine. The resources listed in #4 can provide tips for assembling an emergency supply kit—including a "shelter-in-place" kit in case you decide not to evacuate. Either way, make sure you have a way to receive emergency alerts (e.g., phone, radio, television, and/or weather radio) even without power.
6. **Know thy neighbor.** Accidental heroes saved countless lives in Texas simply because they were willing to check on their neighbors when first responders were blocked by high water or overwhelmed by calls for help. Regardless of where you live, get to know your neighbors. They may need you someday—or vice versa.

- › The storm moved slowly east, continuing to break records. Beaumont, Texas, recorded its wettest day ever on August 29 with over 26 inches of rain, more than doubling Beaumont's previous record.

RUN (OR SWIM!) FOR YOUR LIFE

Thousands of Texans—including their pets and livestock—were rescued. Many trudged through potentially contaminated water from Houston refineries and chemically contaminated "Superfund" sites that also flooded. Bacteria from sewage posed a threat, as did snakes, alligators, fire ants, and other creatures looking for a dry spot.

Residents in some areas are still struggling, as many lost everything and had no flood insurance. Yet they did survive ... Hurricane Harvey directly or indirectly took the lives of at least 88 Texans—most from drowning or falling trees (62). Another 26 deaths were caused by "unsafe or unhealthy conditions" related to lack of utilities, transportation, or medical care (e.g., medical conditions, electrocution, traffic accidents, flood water-related infections, fires, and burns).

LET'S MOVE FORWARD—SAFELY

I hope you found my recollection of Harvey interesting and simultaneously frightening. My **6 Survival Starter Steps** provide a handful of important flood preparedness tips, but they are exactly as the name implies: starter steps. Perhaps most important is #4, which encourages you to develop an emergency plan. Please, no matter what else you do, create that plan. 🛡️



Flooded areas in Port Arthur, Texas, Aug. 31, 2017. Multiple states and agencies nationwide were called to assist citizens impacted by the epic amount of rainfall in Texas and Louisiana from Hurricane Harvey.

U.S. Air National Guard photo by SSgt Daniel J. Martinez

Keeping Cool in Summer HEAT

BY MS. ARYN KITCHELL, STAFF WRITER

Summer seems like the perfect time to get outside and work on staying fit. Nothing makes me want to stay inside and bundle up more than cold weather. As soon as the sun comes out, however, I want to go outside and appreciate the warm weather. The warmth encourages me to walk and jog more. It is also a good time to get motivated about your physical fitness test (PFT) goals. Any time we go out in the heat, we risk heat-related illnesses if we do not take the right precautions. When we exercise or play sports in hot weather, we increase our risk of heat stress. So what precautions do we need to take?

WHAT ARE HEAT-RELATED ILLNESSES?

The healthy human body stays at approximately 98.6 degrees Fahrenheit. If sweat does not evaporate fast enough, the body can become too hot and suffer from heat stress. Symptoms of heat stress are mostly due to losing too much salt and water. These symptoms can include muscle cramps, headache, and dizziness. Heat stress causes heat-related illnesses, all of which can be dangerous. These illnesses are heat stroke, heat exhaustion, heat cramps, heat rash, rhabdomyolysis, and heat syncope.



HEAT STROKE

Heat stroke is the most dangerous of the heat-related illnesses, as it can cause death or permanent disability without treatment. Heat stress occurs when the sweating mechanism of the body fails and cannot keep the body temperature normal. Body temperature then rises rapidly; it can reach up to 106 degrees or higher within 10 to 15 minutes. Symptoms of heat stroke include confusion, altered mental status, and slurred speech; loss of consciousness; hot, dry skin or profuse sweating; seizures; and very high body temperature. If you feel the symptoms of heat stroke, move to a shaded area and call 911. Since heat stroke can cause confusion and altered mental states, it can be hard to treat yourself; having a trusted workout buddy to help you get the treatment you need is important.

HEAT EXHAUSTION

Heat exhaustion is caused by losing too much water and salt because of extreme sweating. During heat exhaustion, the body's temperature can reach 104 degrees. Symptoms of heat exhaustion are rapid heartbeat; heavy sweating; extreme weakness or fatigue; dizziness; nausea and vomiting; irritability; and fast, shallow breathing. Heat exhaustion can lead to heat stroke! If you experience these symptoms, move to a cool area, drink water, take a cool shower, and consider seeking medical treatment right away.

HEAT CRAMPS

As mentioned previously, sweating lowers the body's salt and water levels. Low salt in muscles can cause painful muscle cramps, pain, or spasms in the abdomen, arms, or legs. Heat cramps can also be a symptom of heat exhaustion. If you experience heat cramps, you need to drink water or a sports drink that will replace your lost electrolytes.

HEAT RASH

Heat rash is caused by excessive sweating and causes a skin irritation that can look like a red cluster of pimples or small blisters. Heat rash is usually on the neck, upper chest, groin, under the breasts, and in elbow creases. These areas can become irritated from sweaty clothes, so it is important to wear undergarments that wick away moisture. If you have heat rash, keep the area dry and avoid going back into the heat or humidity.

RHABDOMYOLYSIS

Rhabdomyolysis is associated with heat stress and prolonged physical exertion. This results in the rapid breakdown and death of muscle. When muscle dies, electrolytes and proteins are released into the bloodstream; this can cause irregular heart rhythms, seizures, and kidney damage. Symptoms of rhabdomyolysis include muscle cramps, abnormally dark urine, weakness, and exercise intolerance. It can also show no symptoms. If you suspect rhabdomyolysis, stop your physical activity and hydrate with water. You should also get immediate medical care.

HEAT SYNCOPE

Heat syncope is a fainting episode or dizziness that usually happens when you stand up after sitting for a long time. It can also happen when you stand a long time or if you suddenly stop exercising (such as after a long run). Dehydration and lack of acclimatization can cause heat syncope. If you experience heat syncope, sit or lie down in a cool place and slowly drink fluids.

PROTECT YOURSELF WHEN WORKING OUT


Simply being out during especially hot weather can cause heat stress; exercise and activity increase the

stress on your body. If humidity is high, your body temperature can be pushed even higher because the humidity does not allow sweat to evaporate. For exercise during warm-weather months, take precautions to keep yourself safe and healthy.

First, be aware of temperatures throughout the day, and avoid exercising during the hottest points. Since dehydration is a significant factor in heat stress, drinking plenty of water or sports drinks is essential to healthy summer exercise. You can use hydration calculators (such as this one from ARNG's Guard Your Health website www.guardyourhealth.com/health-tools/hydration-calculator) to figure out how much water you should be drinking. Simply put, drink enough water to ensure you never feel thirsty.

Second, exercise all year. If you keep up your exercise routine during the cooler seasons, your body will be better able to handle exercise in heat. It is also important to wear appropriate clothing for the weather. Choose lighter colored clothes over dark colors during summer since darker colors absorb heat. Natural fibers like cotton are better than synthetic ones. Loose fitting and lightweight clothes allow sweat to evaporate.

Third, take breaks often so your body has the chance to cool down, and stop exercising if you feel any symptoms of these heat-related illnesses. If the weather outside is too hot, find a place indoors where you can work out.

Heat-related illnesses are preventable. Drinking water and avoiding the hottest parts of the day, or staying indoors to train, are your handiest tools. Keep these tips and symptoms in mind as you start to train for your PFT or start working on your beach body. 



C-17 + Whitetail Deer = CHAN

BY MS. THEODORA MALISON-WEBB,
STAFF WRITER

Accidents happen when least expected. Such was the case for crewmembers aboard a C-17 performing assault landing zone approaches (ALZ) at Joint Base McGuire-Dix-Lakehurst (JB MDL), New Jersey. An interesting turn of events made what should have been a seamless landing anything but!

During first approach, the C-17 struck and landed atop a whitetail deer, sending the deer soaring down the length of the strip nearly 100 yards—and it wasn't until the second approach that the crew noticed the carcass and its remnants along the ALZ strip.

MSgt Nicholas Mueller says the incident revealed that a 300' gap in the Lakehurst fence was a hazard. This flight in particular had 305th Air Mobility Wing (AMW) leadership on board—the Vice Wing Commander, Operations Group Commander, and others. The event also spurred funding and acknowledgement in safety pertaining to the airfield as a

whole. For example, Mueller notes that multiple cameras were installed by USDA Wildlife Services (WS) at all entry points of the JB MDL flight line, and gates were installed along the airfield—to be closed at all times when not in use—in hopes of deterring deer from entering. Only one deer has breached the fence.

Capt John David Webb, KC-10 Flight Safety Officer, says the gates will only render a temporary fix, however, and further measures should be considered outside the airfield.

Through the efforts of the 305 AMW Safety Office and the 87th Air Base Wing Commander, WS agents conducted a deer depredation event in April 2017, which Webb says was a huge success, noting a substantial drop in the deer population. The deer population before was estimated at 99 per square mile—five times the normal carrying capacity—but decreased to 1.2 after.

Lt Col Robert McAllister says an internal Risk Management Assessment had to be conducted in order to move

A C-17 Globemaster III, assigned to the 816th Expeditionary AS, sits on the ramp at Al Udeid Airbase, Qatar, before conducting combat airlift operations, Jan. 8, 2018.

USAF photo by TSgt Gregory Brook

forward with depredation, which also benefitted Hunters for the Hungry. Nearly 1,000 pounds of venison was donated to a local social services organization assisting the homeless.

Aside from the efforts put forth regarding control in the deer population, McAllister also notes the BASH program's focus on bird management. In 2017, JB MDL completed an Environmental Assessment (EA) that authorized them to reseed 500 acres of the inner airfield triangle, while transferring the habitat to a separate area for environmental concerns.

"The EA took over three years to resolve and implement," he notes. "Each year, 100 acres will be reseeded, and plots will be reseeded on an alternating basis. This will allow us to mow the inner airfield from April to October on a regular basis and keep an ideal grass height to help

According to a 2016 Federal Aviation Administration report, deer resulted in over 1,100 wildlife strikes to civil aircraft from 1990-2015.



GES

deter both large and small bird patterns at JB MDL."

"USDA and the 305th Flight Safety Office work hand-in-hand on enhancing the BASH program here at JB MDL, and USDA Wildlife Services utilizes what we call an integrated approach to create safer skies for both wildlife and people," adds Mr. Michael Luna, USDA WS Airport Wildlife Biologist. "The 305th, USDA WS, and the 87th Civil Engineering worked closely together to create new vegetation management practices on the McGuire airfield, which will help us detect mammal species while complying with AF management guidelines."

Other changes include the creation of TDY BASH kits by the 305 AMW Flight Safety Office for gathering samples on the road for bird and wildlife strikes—something that's never been done until recently. The kits, which are easily accessible to crew chiefs, will place an even stronger emphasis on the importance of collecting accurate data on changing bird migration patterns.

In addition, the samples will help gauge the effectiveness of USDA's approach on wildlife management and deterrence.

"Data analysis helps us identify risk," Webb explains, "and when risk is unknown, we are nearly forced to take the most conservative approach, which could be crippling to operations. It gives us an accurate picture of the wildlife hazards surrounding both airfields, and gives us an avenue by which we can create a BASH plan that's tailored to the airfield."

"Migratory birds are a substantial issue at airports around the country," adds Luna. "Our USDA team is on the airfield dawn to dusk monitoring bird watch conditions and relaying real-time observations to air traffic controllers and the Flight Safety Office. We have the authority to raise and lower bird watch conditions on a situational basis and alert pilots of potential bird hazards. This helps

aircraft avoid collisions with migratory birds. We also use our real-time observations to recommend limited pattern work at specific times outside the BASH window to see if there's a trend in the migratory bird patterns that poses a significant risk."

These changes are certainly far from the last to the BASH program, and the 305 AMW is optimistic for the future. Webb hopes to improve the education on BASH's importance among aircrew in identifying and mitigating wildlife hazards, in addition to streamlining the process and consolidating regulations as appropriate.

"Currently, there is BASH guidance in three different regulations outside of a local BASH plan," Webb says. "My goal is to align the BASH plan with the other three regulations—simplifying the program at the local level."

McAllister adds that other plans include automatic airfield gate closures by summer 2018 and replacement of the McGuire perimeter and inner airfield fence over the next few years. 🇺🇸



Secret WWII Mission Fueled the Fight

The U.S. oil tanker *Pennsylvania Sun* torpedoed by the German submarine U-571 on July 15, 1942.

Photo from Library of Congress

BY MS. KIM KNIGHT, STAFF WRITER

Wars are won and lost by efforts on and off the battlefield. During WWII, there were numerous unsung top-secret missions going on behind the scenes that shifted momentum in the American and Allied forces' favor. One in particular that took place under the cover of trees in Sherwood Forest was a quest to fuel the relentless battle raging across Europe. Some say it, in part, won the war.

A common saying in AMC is that "nobody kicks a** without tanker gas." The adage is very true and the concept was no different in the war against the Axis powers. But in the days before AMC's flying fortresses and its capability to provide the essential commodity in a moment's notice to any location on the globe, U.S. Naval ships transported fuel to our British allies. However, our lifeline by sea was met with incredible resistance, and enormous oil tankers such as the *Pennsylvania Sun* were slow moving targets that were often torpedoed by the German U-Boats constantly patrolling the Atlantic.

By 1942, oil reserves were two million barrels below safe limits. Britain had to find a solution for the crisis—the entire war effort depended upon it. It was clear that transporting oil into the country by sea wasn't a viable option, so it had to be found close to home. When British Secretary of Petroleum Geoffrey Lloyd called for an emergency meeting with the Oil Control Board, it was discovered that a


little-known oilfield deep in Sherwood Forest near Dukes Wood existed. The site, referred to as the unsinkable tanker, was the perfect location because it provided natural cover from enemy planes flying overhead. But there were other obstacles such as shortages in manpower and equipment, so the Brits turned to America for assistance. Of course, the call was answered and American oil companies, such as Noble Drilling Company, put together the finest bunch of 42 roughnecks for the job.

The men embarked on the journey in 1943 on the troopship H.M.S. *Queen Elizabeth* for the one-year secret mission with the objective of drilling 100 oil producing wells. Upon arrival, the men's accommodations were at the elaborate and ultra-secluded monastery at Kelham Hall—a nice retreat after daily 12-hour shifts.

There were four drilling rigs shipped on four different ships, but one of the ships fell prey to a German submarine and another rig had to be hastily transported. The British crews already on location were drilling one well every five weeks, but with the high tech "National 50" rigs that were brought over, the American crews were knocking out at least one well every week. Oil production went from 300 barrels a day when the Americans arrived to more than 3,000 barrels a day by the end of work in March 1944. The "unsinkable tanker" ultimately produced more than 3.5 million barrels of oil by the end of the war.

Not all of the men returned home to their families. Herman Douthit died after falling from an 87-foot drilling mast and was buried with full military honors in the American Military Cemetery in Cambridge. He remains the only civilian ever buried there. The men who did return home went right back to their regular routines with few people knowing of their extraordinary accomplishment.

There was little known about the top-secret mission that fueled the fight until a book was published in 1973 titled *The Secret of Sherwood Forest: Oil Production in England During World War II*. The book eventually made it into the hands of Tony Speller, British member of Parliament. Speller, like many others, believed the unsung roughnecks deserved a tribute. Thus, a seven-foot bronze statue dubbed Oil Patch Warrior was cast. Noble Drilling Company paid for the 14 surviving roughnecks to be present at the dedication ceremony held in May 1991 at England's Dukes Wood Oil Museum in Sherwood Forest.

In retrospect, the oil crisis during WWII provides insight into the importance of fuel and how, in modern conflict, the outcome depends upon it. Today, AMC continues to fuel the fight with a fleet of unsinkable tankers strategically placed and ready to answer the call. In 2017 alone, AMC delivered over 131,000,000 gallons of fuel. Mobility Airmen accomplish extraordinary feats daily and a testament to their success is every grey tail in the sky—a well-deserved tribute. 

Above *and* Beyond

Did you or your wing go above and beyond the call of duty? Share it with us so we can share it with fellow Airmen.

No writing required — *The Mobility Forum* staff will interview you and do the writing!

Topics can include:

- Safety Culture: A “There I was” story or actions that prevented a mishap
- Risk Management
- Resilience
- Humanitarian Response
- AMC Heritage

Please send topic ideas with contact information to info@schatzpublishing.com, or mobilityforum@us.af.mil, or call **580-628-4607** to speak with a member of *The Mobility Forum* staff.





Left to right: SSgt Jonathan Catell, MSgt Christopher Pappas, and TSgt Robert Caldwell

See Something, Say Something!

BY SMSGT NATHAN ANAYA,
OCCUPATIONAL SAFETY MANAGER,
101 ARW, BANGOR, MAINE

On January 16, 2018, MSgt Christopher Pappas, TSgt Robert Caldwell, and SSgt Jonathan Catell were performing heavy maintenance on their KC-135 aircraft 58-0021 while a C-17 Globemaster III was doing touch and go maneuvers on the airfield. As the C-17 taxied past and prepared for another takeoff, MSgt Pappas' years of experience and situational awareness enabled him to see that the C-17 had blown two adjacent main landing gear tires and was dragging portions of the tire behind it.

"The C-17 was still able to roll and the pilot was totally unaware the tires had been blown," TSgt Caldwell said. "It was clear from our position that the plane was proceeding back to the end of the runway for another takeoff."

MSgt Pappas directed TSgt Caldwell and SSgt Catell to stop that aircraft before it started its high-speed takeoff


“

Had the KC-135 landed in the debris field, it could have been disastrous.”

roll. For safety reasons, MSgt Pappas had to stay with his aircraft since maintenance was already in progress. TSgt Caldwell and SSgt Catell sprang into action and found the closest truck with a radio that could contact the control tower. They informed the tower that the C-17 had a problem with main landing gear. They then proceeded to follow the aircraft until it stopped to ensure no other debris came off the C-17 that could endanger other aircraft at the busy civilian airport. The C-17 was unable to make it to a parking location and was forced to shut down engines in the middle of the Alpha taxiway, which blocked all other aircraft

and caused the tower to reroute them one by one. MSgt Pappas, TSgt Caldwell, and SSgt Catell expedited the delivery of a military tow bar to the civilian airport so the C-17 could be moved and normal airfield operations could resume.

"We later learned that a KC-135 was on approach and heard us radio the tower," said Caldwell. "The aircraft turned off in the last five minutes before touchdown and avoided the runway that was covered in shredded tires. Had the KC-135 landed in the debris field, it could have been disastrous."

The swift response of these three Airmen potentially saved multiple lives, as well as a C-17 asset at a value of \$218 million. If they had not stopped the C-17 in time, it would have had catastrophic landing gear failure at a high speed. Once again, the Airmen of aircraft 58-0021 have shown they set the standard in professionalism, attention to detail, and safety for others to follow. 



MISHAP-FREE FLYING HOUR MILESTONES

10,000 HOURS

165 AW, Savannah, GA

CMSgt Timothy B. Gaines

709 AS, Dover AFB, DE

MSgt James M. McKelligan

8,500 HOURS

326 AS, Dover AFB DE

Lt Col Mark A. Jeffrey

7,500 HOURS

121 ARW, Rickenbacker IAP, OH

SMSgt Paul Emler

166 AW, New Castle, DE

CMSgt Jeffrey Springsteen

182 AW, Peoria, IL

Lt Col Douglas Applegren

Lt Col Richard Wainman

CMSgt Kelly Delaney

6,500 HOURS

121 ARW, Rickenbacker IAP, OH

SMSgt Arturo Zavala

MSgt Kevin Cartwright

166 AW, New Castle, DE

Col Robert Culcasi

MSgt William Chakwin

MSgt Todd Flickinger

5,000 HOURS

121 ARW, Rickenbacker IAP, OH

SMSgt Todd Devoe

MSgt William Gilbert

MSgt James Taylor

166 AW, New Castle, DE

Col Ronald Wesley

Lt Col Andrew Sides

CMSgt Thomas Rutt

182 AW, Peoria, IL

Col Daniel McDonough

Lt Col Scot Decker

Lt Col Terry Feather

Lt Col Jeffery Herrmann

Lt Col Jeffrey Teuscher

CMSgt Cyrus Snider

SMSgt Terry Jones

SMSgt Matthew Stone

201 AS, JB Andrews, MD

MSgt Shant Palouliau

3,500 HOURS

60 AMW, Travis AFB, CA

MSgt Luis Noriega

121 ARW, Rickenbacker IAP, OH

Lt Col Dennis Bird

Maj Jake Allen

MSgt Dave Sorrell

166 AW, New Castle, DE

Lt Col Troy Bockius

Lt Col Jeremy Goodwin

Lt Col Daniel Sheridan

Lt Col Eric Young

SMSgt Michael Murphy

MSgt Sherman Buchanan

MSgt Christopher Coarse

MSgt Leonard Gill

MSgt Jesse Levy

MSgt Andrew Spears

TSgt Eric Lauppe

182 AW, Peoria, IL

Col William Robertson

Col Timothy Stumbaugh

Lt Col Bruce Bennett

Lt Col Matthew Cain

Lt Col Robert Dodson

Lt Col Eric Dolan

Lt Col Peter Labarbera

Lt Col Scott Livermore

Lt Col Patrick Ober

Lt Col Gabriel Salazar

CMSgt Matthew Weghorst

MSgt Samantha Lanier

MSgt Jakob Pogeman

MSgt Craig Thurman

TSgt James Guetschow

310 AS, MacDill AFB, FL

Lt Col Michael Charles

Lt Col Andrew Karas

Lt Col Marc Summers

Maj Christopher Marron

Maj Nicholas Robbins

Maj Patrick Uhes

326 AS, Dover AFB DE

Capt Oneff L. Reyes

709 AS, Dover AFB, DE

Maj Dennis C. Philipavage

2,500 HOURS

121 ARW, Rickenbacker IAP, OH

Maj Dave Lohrer

166 AW, New Castle, DE

Lt Col Brian Beisheim

Lt Col James Chaikowsky

Lt Col Robert Damon

Lt Col Julian Jacobson

Lt Col Steven Sheldon

Lt Col Jason Strickland

Maj Christopher Esterline

MISHAP-FREE FLYING HOUR **MILESTONES**

Maj Mark Linzmeier
Maj Jeremy Meartz
Maj Michael Minner
Maj Maurice Scales
Maj Jason Subach
SMSgt Mickey Dixon
SMSgt Jamie Kohr
TSgt Jose Sanchez

182 AW, Peoria, IL

Lt Col Jacob Stoecker
Lt Col Kevin Strauss
Lt Col Jason Trevino
Maj Nick Biggs

Maj Jason Hurt
Maj Brandon Retherford
Maj Brian Rezac
Maj Daniel Stowell
SMSgt Matthew Ericson
SMSgt Bethany Hackney
SMSgt Erik Lane
MSgt Brian Blythe
MSgt Lacey Dilbeck
MSgt Justin Kass
TSgt Glen Louthan

310 AS, MacDill AFB, FL

Lt Col Daniel Lindley

Lt Col Carol Mitchell
Lt Col Gregory Pleinis
Lt Col Anthony White
Maj James Mailliard
Maj Johnathan Robbins
MSgt Bobbie Taylor
TSgt Benjamin Doyle
TSgt Christopher Phillips
TSgt Kate Ruehl
SSgt Matthew Young

709 AS, Dover AFB, DE

Capt Adam G. Bearden
MSgt Eric R. Darago

A KC-135 Stratotanker descends
before landing at McConnell AFB, Kan.

USAF photo by A1C Erin McClellan



TO SUBMIT MISHAP-FREE FLYING HOUR MILESTONES:

Send your request to: 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

Safety Tool (not what you're thinking)

BY LT COL WALTER BORJA,
HQ AMC FLIGHT SAFETY


I think we can all agree that Situational Awareness (SA) is key to being a safe pilot. If you know what's going on around you and have a clear big picture, you'll avoid getting that uncomfortable, rushed feeling. In fact, with high SA, you give yourself the power to slow time down. Flying at that point then becomes a calm, methodical set of steps that leads to safe and successful mission accomplishment.

So SA seems like a true benefit to every pilot. It's something that, if it were for sale, you would swoop off the shelves

of your local stores or order online with next-day delivery. No matter the price, you'd be making a wise investment in a product that will have some major returns in safe outcomes.

Well, today is everyone's lucky day. Through this special magazine offer, AMC Flight Safety is offering a tool that has been proven effective for establishing and maintaining super-human SA, called Verbalize-Verify-Monitor (VVM)—FREE! All you have to do is crack open your Mission Design Series (MDS)-appropriate Vol 3 to review how and

when to use this tool accepted by major airlines and put it to use in the jet. SA RESULTS GUARANTEED!

I have seen VVM in action throughout my 20 years of military flying and have noted that crews that use this closed-loop system of communication perform much more efficiently and much safer than those that do not. Why? Because the crews' SA is through the roof. Start being a stickler about using VVM and become a witness to—and then an advocate for—the powers of VVM and high SA. 



Maj Daniel D. Kaufman (left) observes 1Lt Patrik J. Mohr (center) pilot a KC-10 Extender while MSgt Gregory L. Thomas (KC-10 extender flight engineer) monitors the aircraft's progress during a flight to Joint Base Charleston, S.C. All are with the 76 ARS, 514 AMW.

USAF photo by MSgt Mark C. Olsen

A DAY IN THE LIFE



SrA Christian Espada, an individual protective equipment journeyman assigned to the 6th Logistics Readiness Squadron, fits a student with an individual operator tactical vest (IOTV) and helmet during the Science, Technology, Engineering, Arts, and Math (STEAM) Day at MacDill AFB, Fla., March 21, 2018. Students were allowed to try on IOTV and mission oriented protective posture gear at STEAM Day.

USAF photo by A1C Scott Warner