THE MOBILITY FORUM

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Gen Mike Minihan's 2022 Air Mobility Command Strategy for Victory

Looking Back on ALLIES REFUGE

AMC Secretary of the Air Force SAFETY AWARD WINNER 4 YEARS IN A ROW

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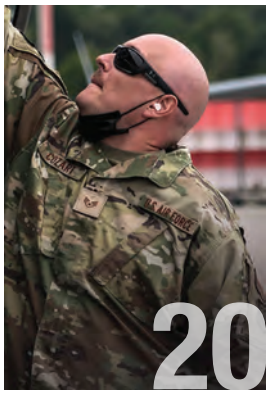

ON THE COVER

Airmen assigned to the 379th Air Expeditionary Wing load munitions onto a C-17 Globemaster III assigned to the 816th Expeditionary Airlift Squadron at Al Udeid Air Base, Qatar, Dec. 6, 2021.

USAF photo by SSgt Joseph Pick

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AIR MOBILITY COMMAND
Gen Michael A. Minihan

EDITORS
Sherrie Schatz
Sheree Lewis
sheree.lewis@schatzpublishing.com

Tatiana Torres
tatiana.torres@schatzpublishing.com

GRAPHIC DESIGN
Elizabeth Bailey

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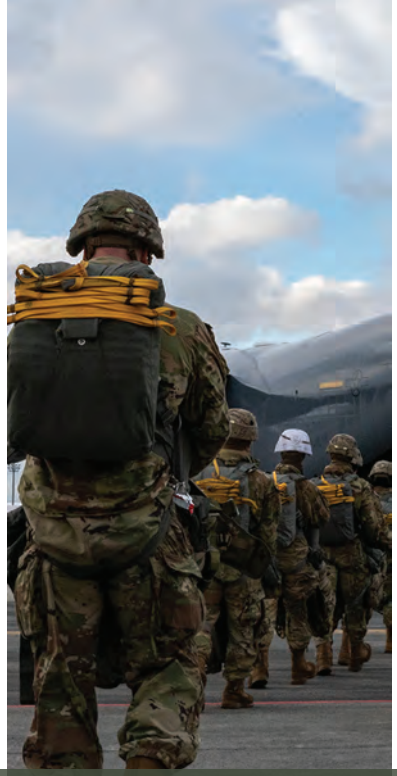


Gen Mike Minihan's 2022 Air Mobility Command Strategy for Victory

BY MS. LAUREN SCHATZ, STAFF WRITER

The Air Mobility Command (AMC) Commander, Gen Mike Minihan, released the 2022 AMC Strategy at the Spring Phoenix Rally focusing the command on what is needed to win now and in the future. The four-page document promotes Warrior Heart culture, readying the Minds, Bodies, and Crafts of Mobility Airmen knowing that "victory will be delivered on the shoulders of MAF [Mobility Air Force] Airmen, and victory starts now," wrote Minihan.

Minihan set the tone in his opening letter, empowering MAF Airmen and their families to be "biased toward action, unencumbered by bureaucracy, and intentionally disruptive of the status quo." He identified four mission imperatives the Command will focus on to be ready for peer conflict: Global Command, Control, and Communications; Navigation; Enroute under Attack; and the Tempo Needed to Win.

Minihan structured the strategy around four vectors: Develop Ready Airmen and Families, Advance Warfighting Capabilities, Project and Connect the Joint Force, and Ensure Strategic Advantage. The following points summarize the four vectors.

VECTORS FOR PERSISTENT RAPID GLOBAL MOBILITY (RGM)

1. Develop Ready Airmen and Families

AMC will develop, manage, and sustain Airmen with strong tactical and technical competency, a warfighting spirit, a high level of discipline, innovative mindsets, and a driven bias toward action. AMC will provide unmatched service and support to Airmen and their Families to ensure readiness and resilience.

Major objectives:

- Orchestrate talent management and develop Airmen ready to compete, deter, and win.
- Deliberately strengthen AMC's warfighting culture by reinforcing Airmen's readiness, discipline, ethical leadership, professionalism, and Warrior Heart.
- Promote and recognize the value of tactical experts (for example, Weapons Officer) and special experiences.

The Strategy says AMC must take full advantage of existing capabilities in mobility and Joint Forces while investing in cutting-edge warfighting capabilities that are integral to winning today and in the future.

Gen Mike Minihan, Air Mobility Command Commander, speaks to Team Dover Airmen during an all call at Dover AFB, DE, May 5, 2022.

USAF photo by SrA Faith Schaefer

- Advance a culture of care, support, and connectedness to strengthen Airmen and family resilience.
- Develop roadmaps for operational employment of multi-capable Airmen.

2. Advance Warfighting Capabilities

The Strategy says AMC must take full advantage of existing capabilities in mobility and Joint Forces while investing in cutting-edge warfighting capabilities that are integral to winning today and in the future.

Major objectives:

- Develop roadmaps to sustain, modernize, and recapitalize MAF weapon systems, the 618th Air Operations Center (618 AOC), and the Global Air Mobility Support System (GAMSS) for connected, survivable, and agile RGM operations anywhere, anytime.
- Increase GAMSS' (both fixed and expeditionary) connectivity, agility, and resiliency to generate and sustain combat power to meet pacing threats.
- Improve command, control, and communication capabilities of MAF weapon systems, including 618 AOC and GAMSS, to achieve information and decision advantage.

3. Project and Connect the Joint Force

AMC projects, connects, maneuvers, and sustains the Joint Force in and through increasingly contested environments and domains. To achieve this objective, AMC will identify, generate, employ, and command and control MAF combat capabilities at the speed and scale required across all mission areas so the Joint Force can compete, deter, and win.

Major objectives:

- Increase the resiliency of MAF global operations to bolster Joint All Domain Operations (JADO) synergy and enable assured joint power projection.
- Advance Joint Force strategic and operational agility through flexible, scalable, and resilient MAF support of Adaptive Operations in Contested Environments.
- Develop and implement a MAF Force Generation Model that allows Total Force airlift, air refueling, aeromedical evacuation, and GAMSS units to support global requirements and achieve full-spectrum readiness objectives.

4. Ensure Strategic Advantage

RGM enables the United States to project, connect, maneuver, and sustain combat power for strategic advantage. Strategic deterrence plus global posture and reach enabled by allies and partners ensure strategic advantage.

Major objectives:

- Build capacity and strengthen enduring relationships with allies and partners to gain competitive advantage and deter adversaries.
- Improve readiness and agility of RGM forces and weapon systems to support strategic deterrence and nuclear response missions.
- Execute and provide command and control to presidential and national senior leader support missions.
- Develop, maintain, and expand GAMSS network access through allies and partners to sustain combat power projection for strategic advantage.

Minihan said he intends to win by providing unrivaled Rapid Global Mobility so the United States can fight anytime, anywhere despite restrictive fiscal challenges and tone-deaf processes and policies. Read the full Strategy at **https://www.amc.af.mil/Portals/12/AMC Strategy cao March 2022/AMC Strategy 2022.pdf**.

Rethinking the Commander Directed Downgrade (Q3/1) in a Just Culture World

BY MR. SEAN A. BORDENAVE, AMC HQ

Recently, I heard of a Commander Directed Downgrade in which a crew member missed a single checklist item. The missed item did not result in injuries or aircraft damage, but it did represent complacency and a breach of flight discipline. Although the Q3/1 did not result in any retraining action, the commander's action reinforced that we are accountable when operating a multi-million dollar weapon system in which our actions or inactions could jeopardize the safety of fellow crew members. As a former squadron commander, I had also issued Commander Directed Downgrades, so I understood the commander's intent and decision.

As a safety analyst, I wondered how often that particular checklist item had been missed in our C-130 and KC-135 fleets. If that checklist step is critical, why do we have only one crew member check it? It was a universal technique for other crew members to back each other up and verify that the checklist item was properly completed, so why not make it procedure?

The proactive Aviation Safety Action Program (ASAP)'s Just Culture enables us to look at crew member errors in a new light, allowing crew members to voluntarily report honest mistakes without fear of retribution. At first, the Just Culture concept clashed with my need for military accountability. Proactive safety provides insights into the strengths and weaknesses of our flight operations, but are we allowing people to walk away from accountability to gain access to the data? It became an ethical dilemma for me.

ACCOUNTABILITY

Holding your Airmen accountable for the safe operation of aircraft in executing a mission is a primary responsibility of a flying squadron commander. When Airmen fail to meet specific standards, disciplinary action is a necessary part of a commander's responsibility to remind Airmen that we risk lives and equipment when we fail to properly operate a weapon system. Accountability is essential in military flying.

One way commanders emphasize accountability is through the Commander Directed Downgrade. Air Force Manual Instruction 11-202 V2 states that a squadron commander may direct a Commander Directed Downgrade on an aircrew member without administering an evaluation for flight discipline and flight safety breaches. Those breaches of flight discipline and flight safety were further defined by commanders, such as pilots exceeding aircraft limits (overspeed, over G), missed critical checklist items, and Air Traffic Control (ATC) deviations Although these deviations might have been honest mistakes, the Commander Directed Downgrade reinforces our culture of disciplined flying.

Although the Commander Directed Downgrade instilled accountability, the practice also created a counter-culture in which pilots were not allowed to make honest mistakes or did not voluntarily report mistakes. My first personal introduction to that counter-culture was in pilot training as I flew my T-37 500 feet past my assigned ATC altitude. My instructor pilot (IP) quickly turned off the Mode C of the transponder, then took the jet from me. Shortly thereafter, ATC called, stating, "It appears we lost your altitude readout." After we were level at our assigned altitude, my IP responded, "We will recycle our transponder."

Although not reported, there were indeed times when we made "monumental" honest mistakes leading us to kiss the ground when we landed and proclaimed, "Boy, I will never do that again!" After those

memorable flights, we did not walk into the Director of Operations' (DO's) office and say, "Let me tell you about my near-death experience!" Those self-critiquing moments became valuable lessons, which made us better aviators; however, we were unwilling to share those stories with our squadron leadership for fear of retribution.

Although there was accountability with Commander Directed Downgrades, there were more mistakes than reported, creating weaknesses in our procedures and training that were never exposed or corrected until a Class A mishap occurred. Unfortunately, we saw those weaknesses at the cost of lives and aircraft.

As we learn from safety investigations, Class A mishaps are often a series of honest mistakes or failures that were not resolved prior to impact. The subsequent safety investigation may not show how often those errors or mishap factors occur in everyday flying.

PROACTIVE SAFETY AND JUST CULTURE

In the 1990s, the U.S. civilian airline industry underwent a transformational safety change of analyzing safety data before a mishap occurred. This change included Flight Operations Quality Assurance (FOQA) analysis, where Digital Flight Data Recorder data is analyzed regularly; using the Line Operations Safety Audit (LOSA) and Threat and Error Management to look for pilot error on daily flights; and ASAP, a pilot self-reporting system in which they shared their mistakes. These safety programs needed voluntary pilot involvement to get maximum participation.

The Just Culture Concept acknowledges that pilots make honest mistakes in performing their duties. Professional aviators are human and likely to commit errors, so organizations need to identify and analyze these errors before mishaps occur. Thus, the airlines used the concept to allow pilots to acknowledge and report honest mistakes without fear of disciplinary action that would jeopardize their professional license.

Just Culture slowly took root in the U.S. civilian airline industry. Although the Just Culture concept is codified in legal terms and processes, the core concept remains intact—it is better to acknowledge and report mistakes than to hide them. As a result, the civilian airline industry has a robust safety database in which errors are identified, analyzed, and rectified. Proactive safety programs have dramatically improved the airline safety record.

CLASH OF CULTURE—ACCOUNTABILITY VS. JUST CULTURE

The Air Force has embraced the Just Culture, as it is beneficial to acknowledge aircrew errors; however, there are concerns that Just Culture lacks accountability or is a "get out of jail free card." Our military culture demands that a commander take corrective actions, equating to a Commander Direct Downgrade.

I believe Just Culture does instill accountability and is not a "get out of jail free card." Merriam-Webster defines accountability as "an obligation or willingness to accept responsibility or to account for one's actions." Although commanders want to verbally hear the Airman acknowledge responsibility, when a crew member files an ASAP, they acknowledge that "This is what I did wrong and what I learned." I believe the written ASAP is accountability for honest mistakes.

If Just Culture had existed when I was a squadron commander, I would have championed it and ASAP rather than Commander Directed Downgrades as accountability for honest mistakes.

The Just Culture concept is a valuable tool to report honest mistakes and uphold accountability.

In two cases, however, I still would have opted for the Commander Directed Downgrades because the aircrew members willfully disregarded procedures, deliberately chose and executed a risky course of action, and did not communicate their intentions to the crew. These two cases were not honest mistakes; thus, I would not change my decision on disciplinary action. The Commander Directed Downgrade is still a viable tool for commanders when crew members willfully disregard standards and operate an aircraft unprofessionally, but not for honest and unintentional deviation from standards.

The Just Culture concept is a valuable tool to report honest mistakes and uphold accountability. As commanders, we sometimes need to remind ourselves that most of our aircrew members are true warriors. They are critical of their own mistakes, have a strong desire to improve their skills, are genuinely disappointed when they fail, and have already critiqued themselves.

Most importantly, a Just Culture enables proactive safety programs to provide insights into the flaws within our flying operation without learning those lessons through a Class A mishap. I would rather read an ASAP, LOSA Report, or review a military FOQA analysis than read a Class A mishap report. There is nothing worse than discovering that a mishap in which crew members lost their lives was preventable.

AIR MOBILITY COMMAND

WELL DONE AWARD

Presented to

THE CREW OF REACH ZERO-THREE-ONE

Left to right: Capt Brooks Hardy, Copilot; A1C Savannah Mann, Boom; and Capt James Villeponteaux, Aircraft Commander, all from 93rd Air Refueling Squadron, Fairchild Air Force Base, WA.

USAF photo

The Air Force Chief of Safety Well Done Award is presented to the crew of REACH Zero-Three-One in recognition of time-critical actions performed to ensure the safe recovery of their KC-135R aircraft. The aircraft launched out of a European airfield heading to the West oceanic. Three hours into their mission, the crew noticed a rapid fuel level decrease in their forward body fuel tank. A flying crew chief went aft to determine the source of the fuel leak. They observed a significant amount of fuel pooling over the boom sighting window and exiting the aircraft. The crew immediately decided to divert to an island recovery field and initiated emergency checklists. In order to prevent a catastrophic explosion, the crew began turning off all nonessential electronics and radios. They declared an emergency and used a radio relay through a commercial airliner to notify other traffic of their intentions. They utilized non-standard fuel drains and burns to counter the aircraft's increasingly aft center of gravity. The crew encountered high crosswinds as they safely recovered their stricken aircraft at the divert airfield and egressed on the active runway. The safety awareness and risk management these Airmen exhibited reflect great credit on themselves, Air Mobility Command, and the United States Air Force.

The DoD Safety Privilege: A Powerful Tool with an Interesting History

BY MR. DANIEL M. VADNAIS, SENIOR ATTORNEY ADVISOR, AIR FORCE SAFETY CENTER, AND LT COL ADAM KING, AMC FLIGHT SAFETY

The national security of the United States is dependent on the efficient operation of weapon systems such as Air Force aircraft, missiles, space satellites, and nuclear weapon systems. When mishaps occur, commands operating these systems must be able to quickly obtain candid, complete, and accurate information to find and correct, or rule out, systemwide defects. To do this, commands must be free to deliberate confidentially and to exchange information without fear of repercussion, a privilege that was born in the early days of flight and has progressed up to modern times.

The U.S. military has been investigating military airplane crashes since 1908, when Orville Wright, flying a Wright Flyer III, crashed during a demonstration flight at Fort Myer, Virginia, killing 1st Lt Thomas Selfridge. The military produced an investigation report in response that was not privileged, but was classified, meaning exempt from public disclosure. Department of Defense (DoD) classification criteria changed in the mid-1950s to the standards we are familiar with now, i.e., information that could seriously damage national security if disclosed in an unauthorized manner.

Following the Wright incident, the DoD recognized the effectiveness of mishap investigations in reducing the number and severity of mishaps, and it noticed the direct correlation between reduced injury, death, damage, and mission readiness and combat capability to the United States' national security. The Department created the limited-use Safety Investigation and declared that this type of report would be for the exclusive purpose of preventing mishaps, and would not be available for other aims including public release or disciplinary action. For reference, DoDI 6055.07 describes the specific justification and the limited use of this type of report.

The common-law recognition of the limited-use Safety Investigation and the concept of safety privilege was shaped in a 1963 federal court decision, *Machin v. Zuckert*, and affirmed by the United States Supreme Court in *United States v. Weber Aircraft Corp.* in 1984.

Machin v. Zuckert was the first formal recognition of the "military safety privilege" and is still used by the DoD today. In 1956, a B-25 bomber crashed shortly after takeoff, leaving one survivor, Lt Jack Machin. After his recovery, Lt Machin sued the manufacturer of the aircraft propeller assemblies and requested to use the safety investigation report as evidence. A notable point of discussion was that safety investigators, lacking the power to compel legal testimony, encouraged frank and full cooperation by means of promises that the witnesses' testimony would be used solely for the purposes of flight safety. The Inspector General of the Air Force in 1961 stated, "… if investigators were unable to give such assurances, testimony in many instances would be less than fully factual and the determination of the exact causative factors would be jeopardized, thus seriously hindering the accomplishment of prompt corrective action designed to preclude recurrences of similar accidents."

The *Machin* court partially denied the Lt's request, holding that confidential statements of private parties made to investigators of an Air Force accident were privileged when disclosure would hamper the efficient operation of an important government program. The court also held that the military safety privilege extended to any conclusions that might be based on such privileged information. In conclusion to the case of *Machin v. Zuckert*, "the court held that the military safety privilege attached to any portions of the investigative report,

The DoD's efforts to protect and use privileged safety information are critical to mishap prevention and combat readiness.

reflecting military deliberations or recommendations as to policies, should be pursued." However, the court also found that certain portions of the investigative report—specifically, the factual findings of Air Force mechanics who provided technical assistance—were not privileged.

In 1984, the U.S. Supreme Court stated in *United States v. Weber Aircraft Corp.* that the so-called *Machin* privilege was a "well-recognized" judicial privilege and was protected from disclosure under the Freedom of Information Act, affirming its use in the safety reporting process until the present day.

The mishap investigation process has matured over the course of history. Courts have confirmed that the portions of a safety report that reflect the investigators' analysis, including its findings, factors, causes, and recommendations, were properly privileged because releasing them could stifle the candor of the investigators, and statements taken under a promise of confidentiality were properly privileged, for the same reason. The courts recognized that regardless of the specific harm in a case, the loss of that blunt and frank honesty would not only take away a valuable tool for commands, but would detract from the confidence of operators and other military personnel in the safety investigation process, which would further erode the candor of all parties.

Meanwhile, non-confidential information gathered by a safety investigation is generally not privileged and may be publicly released, subject to appropriate classification and Privacy Act and Freedom of Information Act restrictions. Those non-privileged materials may also be used by other investigations, such as those performed by an Accident Investigation Board (AIB).

Unlike Air Force Safety Investigation Boards (SIBs), AIBs obtain and preserve evidence for all other purposes, including public disclosure, claims, litigation, administrative actions, and even disciplinary action. The AIB president must provide the public a statement of opinion to include the cause or substantially contributing factors, if supported by a preponderance of evidence.

The AIB report is not privileged and is fully releasable. A copy is provided and briefed to the next of kin of military and civilians killed and to individuals seriously injured in the accident. The AIB report is important because it fulfills these and other needs for information after a mishap, including public release and any litigation requirements.

The DoD's efforts to protect and use privileged safety information are critical to mishap prevention and combat readiness. When confidential witnesses and investigators doubt that SIBs are being used only for those purposes, witnesses are likely to stop providing complete and candid statements, and investigators are likely to dilute hard-hitting recommendations. In short, the whole enterprise falls apart.

The next time you are completing your annual training, remember that safety privilege has nearly six decades of legal history, and that protecting limited-use SIB reports requires the consistent demonstration of intent and practice not to release them outside the Air Force safety community. Safety privilege is a powerful tool that can be lost through the lack of vigilance. Routine use of safety information must be in strict accordance with DAFI 91-204, *Safety Investigations and Reports*.

618th Air Operations Center:

Using 2020 Reorg as Launchpad for New Deployment Model

U.S. Air Force Airmen and Army Soldiers unload pallets of bottled water, Feb. 21, 2021, at Joint Base San Antonio-Kelly Field, TX. Joint Base San Antonio provided emergency response assistance to local officials and agencies in order to ensure the safety and security of the community during and after the severe winter storm.

USAF photo by Sarayuth Pinthong

BY MS. KATHY ALWARD, STAFF WRITER

The 618th Air Operations Center (AOC) brings together more than 800 active duty, Reserve, National Guard, civilian, and contractor personnel as the Department of Defense's largest AOC. It serves as an expert resource while maintaining America's global reach when planning, tasking, executing, and assessing mobility missions.

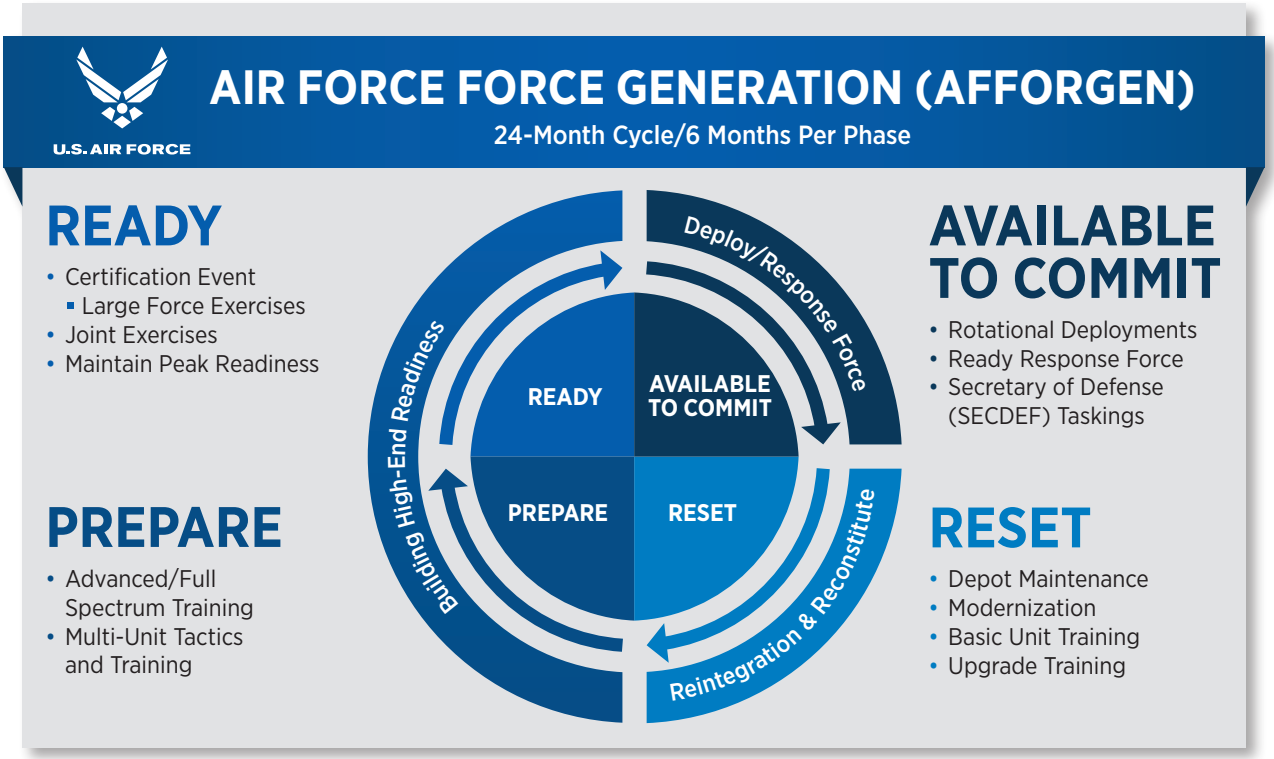
618 AOC, Scott Air Force Base, IL, operates 24/7. It has ensured global delivery for more than 30 years and is always ready to support mobility operations, wherever and whenever needed.

It will be following the U.S. Air Force's (USAF's) new deployment model, which entails the realignment of directorates and the establishment of new positions through its largest, full-scale organizational transformation in nearly 30 years. Airlift, air refueling, aeromedical evacuation, and global air mobility are recognized as Air Mobility Command's four core competencies and will be greatly enhanced due to this transformation.

The 2020 reorganization of the 618 AOC will act as a launchpad for these goals because of its push toward efficient, rapid mobility. This reorganization incorporates the concepts of Agile Combat Employment (ACE) and multi-capable Airmen (MCA). The Air Force introduced ACE as a proactive and reactive operational scheme of maneuver executed within threat timelines to increase survivability while generating combat power throughout the integrated deterrence continuum. The Air Force defines MCA as "Airmen capable of accomplishing tasks outside of their core Air Force specialty. Specifically, these personnel are often trained as a cross-functional team to provide combat support and combat service support to ACE force elements."

ABOUT THE MODEL

Air Force Chief of Staff Gen Charles Q. Brown Jr. stated in an exclusive interview with *Air Force Magazine* in 2021 that the new Air Force Force Generation (AFFORGEN) model will be "better aligned with how we present Airmen and airpower to



support the joint operations, while at the same time, it actually preserves some of that readiness, not only for today, but for the future."

The Air Force expects to reach initial operational capability in fiscal year 2023 through a model identified by four "bins" that last 6 months each for a 24-month cycle. These four bins are as follows:

- "Available to Commit" is when a unit is ready to mobilize on very short notice for such taskings as dynamic force employment deployments or short-notice task force deployments.

- "Reset" is when Airmen return home for 6 months and take a break after the "Available to Commit" phase. According to Brown, this break should give Airmen the opportunity to reset and reconnect with family and review the basic skill sets they need for their commitments, whether deployed or not.

- "Prepare" is when "you start to up your level of training and expanding beyond just your unit and start to work with others," according to Brown. After focusing on the basics and 6 months' rest, Airmen will have an opportunity to increase their preparation for a possible future deployment when they move into the next 6-month phase.

- "Ready" is when Airmen will focus on more intense, multi-unit training in which the focus is on the high-end fight environment. Included are participation in a certification exercise with multiple wings; capstone exercises such as Red Flat, Red Flat-Alaska; or the USAF Weapons School. This phase is when it is time to ensure that Airmen are at peak readiness to move back to the deployment or "Commit" phase.

Some units started to implement AFFORGEN in 2020, although the goal was to reach initial operating capability in fiscal year 2023. According to Brown, the Air Force cannot just "flip the switch and go, 'OK, … so we're starting today.'" He said our USAF is in high demand and that AFFORGEN will provide discipline when communicating with the Joint Force about its availability and readiness.

"We've been going to the same bases for the past 30 years, and things are already established," according to Brown. He said Airmen must look at these things differently now as they may be deployed to a base that is not fully operational.

The Air Force continues to be ready to support mobility operations in contested environments at any time and in any place. This readiness is accomplished through multidomain, world-class command and control. Even when commanding a fleet of nearly 1,100 mobility aircraft, the 618 AOC must provide mobility support to our warfighters downrange to ensure mission success.

Operating Like Clockwork:

How the 521st Air Mobility Operations Wing Bolstered NATO Support of Ukrainian Conflict

BY MS. LAUREN SCHATZ, STAFF WRITER

A Propulsion Craftsman assigned to the 726th Air Mobility Squadron based at Spangdahlem Air Base, Germany, prepares to marshal a C-17 Globemaster III at Rzeszów-Jasionka Airport, Poland. U.S. personnel and equipment arrived to support NATO Allies and partners in order to improve collective readiness, interoperability, and relationships.

USAF photo by SrA Taylor Slater

> **"Recent events underscore the importance of working together to strengthen our strategic partnerships in order to meet our shared security requirements."**
>
> *– U.S. Air Force Chief of Staff, Gen Charles Brown*

On February 24, 2022, Russia launched an unprovoked, unjustified, full-scale invasion of Ukraine. The neighboring country's capital city, Kyiv, a mere 236 miles from the Russian border, was subject to the first attack. The world stopped and watched in horror as footage of fiery attacks flooded social media. Hearts ached, knowing, as U.S. National Security Advisor Jake Sullivan stated, that this attack could be the beginning of an invasion that would "come at an enormous human cost."

Exactly 1 month later, on March 24, 2022, U.S. President Joe Biden released a statement following a meeting with North Atlantic Treaty Organization (NATO) leaders. A summary of President Biden's brief, "NATO is as strong and united as it has ever been," reflects the numerous actions involved in its response, many of which have been led by the USAF Air Mobility Command (AMC).

With the strong support of AMC, NATO has been instrumental in providing aid to Ukraine, expeditiously sending supplies and support per Ukraine's requests. The timeliness of this response has played a significant role in Ukraine's defense against Russia. The Command augmented NATO's support for a strong Ukrainian defense by providing the rapid mobility central to the mission. With Russia advancing farther into Ukraine, AMC Airmen recognized that speedy, clockwork-like operations were critical in this matter of life and death. Many of the operational tasks involved in this mission centered on downloading and uploading cargo from aircraft.

We spoke with 1st Lt Kathleen Kohler, who recently returned to Ramstein Air Base, Germany, from a deployment to Jasionka, a small Polish village near the Ukrainian border. Kohler dove into her experience on the front lines of the mobility efforts at the Rzeszów–Jasionka Airport, which she refers to as a main hub for aid from donation countries into Ukraine.

Whereas AMC was a major player in terms of mobility, Kohler credits the 435th Air Ground Operations Wing (AGOW) for laying the mission groundwork.[1] Prior to the invasion, tensions between Russia and Ukraine were high and swiftly rising. Thus, the United States sent troops to NATO allies Poland and Romania to prepare a response to the potential conflict. Kohler remarked that the 435 AGOW "made it hospitable for others to come in."

With the preparatory wing blazing the path, one of the first groups to arrive was the 82nd Airborne Division, an active airborne infantry division of the U.S. Army specializing in joint forcible entry operations.

[1] The 521 AMOW deployed alongside the 435 AGOW from the very beginning; the distinction is that 521 AMOW Airmen have no role in building and operating the base because this is a service that contingency response (CR) forces offer. The 521 AMOW Airmen added muscle and manpower to the nodal functions while the CR forces handled base operating support infrastructure.

"Dozens and dozens of C-17s arrived in preparation for their support," Kohler explained. "…and that's how the mission really started, by catching the Army coming in."

The mission soon transformed into something more: downloading needed aid, which remained the central objective at the Rzeszów–Jasionka Airport. Kohler said the Airmen downloaded aid from multiple military and civilian aircraft, including those from the United States and other foreign allies.

Kohler witnessed the effective, rapid response on every level—from leadership down. Logistics were formed quickly, with leaders from more than a dozen allied countries discussing what their countries would be contributing based on Ukraine's prioritized needs. Then, there was a smooth implementation by all those involved. AMC led this implementation by placing "the right people into the right place at the right time" as AMC was responsible for providing aerial porters who download the aircraft.

The 435 AGOW's contingency response squadron had only 26 aerial porters, and the unit was tasked with loading and unloading four planes simultaneously each hour over a 24-hour period. "They need well over 26 porters to carry out this mission," Kohler emphasized. "Not only that, but they needed aircraft maintainers who could conduct checks as well as troubleshoot and make repairs when needed." This assistance would be critical to safe mission execution.

Kohler's team, the 521st Air Mobility Operations Wing (AMOW), offered the needed support of aerial porters and aircraft maintainers (for the C-17 Globemaster III, C-5 Galaxy, and C-130 Hercules), as well as logistic officers and maintenance officers. With the 521 AMOW and the Polish Air Force supplying the equipment on the ground, Kohler said everyone came together to support the mission and worked together seamlessly.

Kohler said that in Operation ALLIES REFUGE, Operation ALLIES WELCOME, and now with the recent support to NATO partners and allies, the aerial port has been the center of the mission and that downloading planes has been the success of these missions. "There are many videos of Ukrainian President Volodymyr Zelenskyy asking for different support and aid," Kohler said. "And it's being answered. The porters are making it happen."

Kohler said that safety was always at the forefront of these missions. Safety is critical both in training and in real-life missions; unsafe procedures could hinder a mission, especially one in which every second counts.

Kohler wants other Airmen to know how impressive the efficiency of the mission was; it took 12 hours to download the cargo, break it down, upload it into trucks, and then ready it for use in Ukraine. "This [schedule] is an incredible turnaround time," Kohler stated. "That's why it matters; it matters that we're efficient, safe, and good at our jobs."

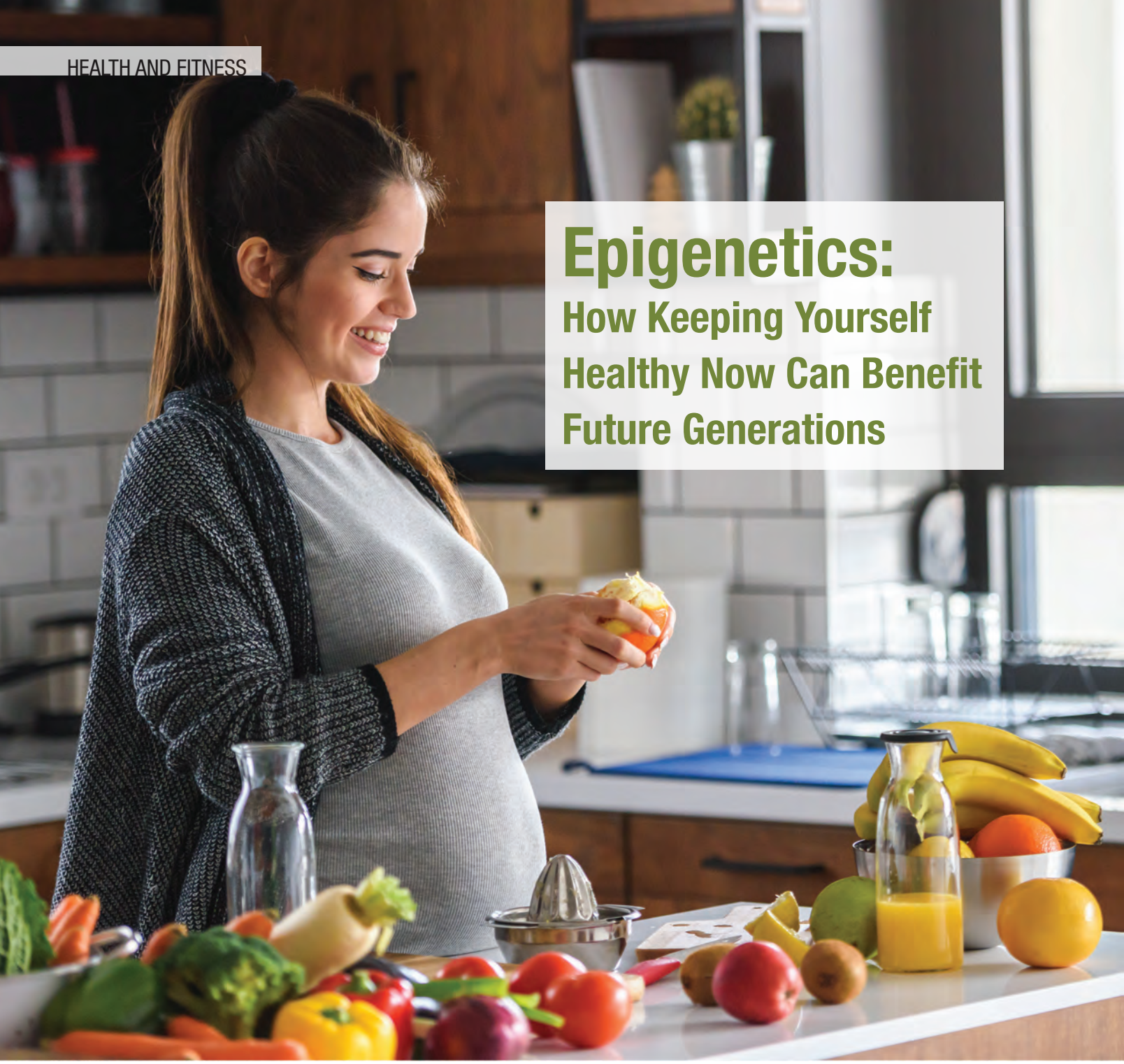
The 521 AMOW is a prime example of "being ready to go tomorrow." The wing demonstrated the flexibility and reliability needed to support NATO and for which all Airmen should strive. This mission had its challenges, such as operating out of an unfamiliar civilian airfield. However, the teams were able to navigate this situation, finding the right people to get permission and make operations happen.

Solving these kinds of challenges quickly is part of the concept of Agile Combat Employment (ACE), which the Air Force believes is essential to the future fight. The training involved is needed now and will certainly be needed in the future. ACE and the concept of multi-capable Airmen, in which Airmen can perform tasks outside their core Air Force specialty codes, are essential to contingency response. In this case, everyone was helping the porter mission. "Everyone out there was a multi-capable Airman," Kohler said.

The 521 AMOW and all U.S. Airmen stepped up to the plate and applied concepts still being developed. This proficiency is not only because of the initial training but also because of the values instilled in today's Airmen. Airmen live and serve with a commitment to three core values: "Integrity first, service before self, and excellence in all we do." These values were apparent in the efforts to help Ukraine.

Thanks to this commitment, the USAF's aid to Ukraine provided much-needed support. AMC has made a huge impact. "The equipment being sent to Ukraine is having an effect on the battlefield," Pentagon Press Secretary John F. Kirby said on April 27, 2022. The equipment is making a difference on the battle lines in the Donbas region—the site of the major Russian effort in Ukraine. "The United States and partner nations will continue to get the equipment and supplies the Ukrainians need to the country," Kirby said.

The 521 AMOW's response will be studied to identify the lessons learned so the wing can continue supporting missions that have a global impact. AMC will move forward knowing its Airmen can offer the support and hope needed in times of suffering and when rapid action is needed.



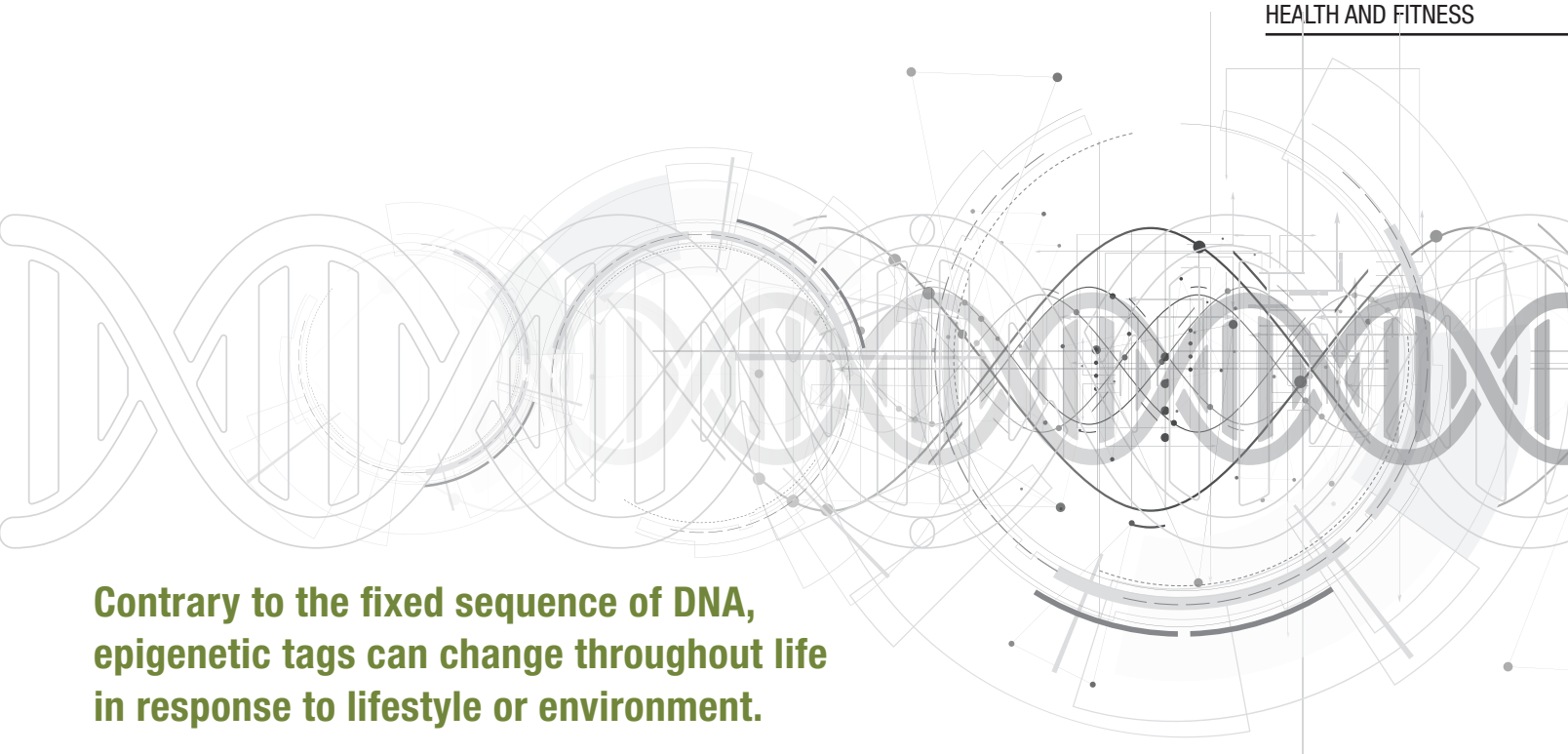
Epigenetics:
How Keeping Yourself Healthy Now Can Benefit Future Generations

BY MS. TIFFANY TOLBERT, STAFF WRITER

Healthy and lifestyle—these two words are often paired together and championed by health and wellness advocates everywhere, including physicians, other medical personnel, social workers, and exercise professionals. The concept of "lifestyle" refers to how someone lives and includes such factors as diet and exercise, stress, and work habits. Increasing evidence shows that lifestyle, as well as environmental factors, may influence epigenetic mechanisms.

The Centers for Disease Control and Prevention defines epigenetics as the study of how behaviors and the environment can cause changes that affect the way genes work. In contrast, genetics is the study of genes and centers on inherited traits. Epigenetics centers on whether those traits are expressed and its mechanisms are influenced by lifestyle and environmental cues, which play a significant role in switching genes on and off.

Epigenetic inheritance counteracts the idea that inheritance only happens through the DNA that passes from parent to offspring. It implies that a parent's experiences can be passed down to future generations in the



Contrary to the fixed sequence of DNA, epigenetic tags can change throughout life in response to lifestyle or environment.

form of epigenetic tags. For example, the diet or environment of a pregnant woman can potentially impact her developing fetus. As a fetus develops, it grows germ cells—cells that create reproductive cells—thus impacting another generation of offspring. This phenomenon means that the environmental influences experienced by a pregnant woman can potentially affect not only her own children but also her children's children. In other words, three generations are directly exposed to the same environmental conditions at the same time—the mother (first generation), the fetus (second generation), and the fetus' reproductive cells (third generation).

Alterations in epigenetic tags have been associated with a variety of health issues, including cancer, cardiovascular, and neurodegenerative diseases. For instance, the inhalation of tobacco smoke changes the epigenetic makeup of lung cells, which may eventually lead to cancer. Hence, smoking during pregnancy is associated with an increased risk of developing diseases during fetal development or later in adulthood through epigenetic mechanisms.

Also, contrary to the fixed sequence of DNA, epigenetic tags can change throughout life in response to lifestyle or environment. Researchers have delved into the role diet plays in modifying epigenetic mechanisms. Studies have shown diets rich in fruits and vegetables, which contain natural antioxidants, may generate anticancer protection.

Emerging evidence indicates that exercise may also positively affect epigenetic mechanisms. Physical activity reduces epigenetic mutations, increases expression levels of tumor-suppressing genes, and decreases expression levels of oncogenes—genes that cause cancer. Moderate, 30-minute sessions of physical activity may increase the number of cancer-fighting immune cells in the body. Less intense levels of exercise have also proven to be effective.

Besides foods and physical movements, environmental factors can also affect epigenetics and future generations. Research suggests that epigenetic mechanisms can rapidly change in response to signals from the environment, including stress and air pollution.

Although more research and studies are needed to provide additional confirmation on how the many lifestyle and environmental factors can impact present and upcoming generations, what seems to be clear to many scientists is that genes do not single-handedly control destiny. Through epigenetic inheritance, experiences, disease, and other physical conditions of the parents may pass to their offspring. At the same time, however, epigenetic mechanisms remain flexible and may allow an organism to continually adjust its gene expression to fit its environment. Although the genes that parents pass to their offspring cannot change, epigenetic modifications can feasibly improve the way our bodies use genes.

The bottom line—your environmental factors and stress levels can permanently alter your body. Learning to mitigate stress and making consistent healthy lifestyle choices is crucial for your own health and the health of your future offspring.

How Psychologists Helped Make Today's Planes Safer

BY MS. CHRISTINE WALSH, STAFF WRITER

Human performance cannot be disconnected from the design of work, machinery, and operating environment. The Air Force's history has been highlighted by the efforts of pioneers who recognized the value of designing for human performance—particularly the early psychologists who helped the Air Force adopt human-oriented design principles.

Alphonse Chapanis was one such pioneer. He was born March 17, 1917, in Meriden, Connecticut. He earned a Bachelor of Arts from Connecticut College in 1937, and his senior thesis work led him to an assistantship in prominent psychologist Walter Miles' laboratory at Yale University. Although originally drawn to mathematical and experimental work, Chapanis quickly learned about the usefulness of applied psychology. In 1942, Chapanis completed his Master of Arts, became a lieutenant in the U.S. Army Air Corps, and trained as an aviation physiologist. Soon after, Chapanis completed his PhD from Yale and became the first military research psychologist at the Army Air Force's Aero Medical Laboratory (AML) at Wright Field in Dayton, Ohio.

During World War II, Chapanis' aviation psychology work at AML addressed a variety of user interface designs, especially visual obstacles encountered when piloting aircraft. Chapanis assessed luminescent materials for cockpit displays, tested optical distortions in aircraft windscreens, and carried out important studies on night vision, dark adaptation, field-of-view, and depth perception. On a temporary assignment, Chapanis assisted the U.S. Army's Armored Medical Research Laboratory at Fort Knox, Kentucky, creating a night vision training program for armored ground forces. At AML, Chapanis' detailed investigation of aviation accidents identified that unsuitable design, not pilot error, actually caused many crashes attributed to pilots. His influential applied psychology work laid the foundation for systematic human engineering studies of human-machine interface design issues for advanced military system operators.

Among Chapanis' various projects related to flight, he studied displays appropriate for night flying, pilot blackouts under high g-forces, and high-altitude flying issues. During World War II, there was a mysteriously high frequency of plane accidents with P-47s, B-25s, and especially Boeing B-17 bombers crashing upon landing. The planes were operating as designed, and the pilots were exceptionally trained but made basic mistakes. Chapanis observed that the landing flaps and landing gear had nearly indistinguishable toggle switches or levers placed side-by-side and operated in sequence. In high-stress aviation situations, pilots often retracted the gear instead of the flaps, a problem that rarely occurred with pilots of other types of aircraft. He also observed that

According to Fitts and Jones, what had been deemed "pilot error" was, in fact, a discrepancy between assumptions that people had about how others' work should be done and how the work was actually done.

the corresponding controls on the C-47 were not in close proximity and that their activation methods were very different; therefore, C-47 pilots were not pulling up the wheels after landing. Chapanis introduced "shape coding," a system ensuring all knobs and levers were different shapes and sizes. As a solution, he attached a small rubber-tired wheel to the landing gear lever and a small wedge-shaped end to the flap lever. The confusion that had contributed to crashes while landing and taxiing the B-17 "Flying Fortresses" was virtually eliminated. When the war was over, the memory-aiding shape-coded wheel and flap controls were standardized globally, as were the power control lever heads that could be distinguished by touch, which are found in conventional airplanes today.

Building on Chapanis' accomplishments, Walter F. Grether II and Paul

Modern cockpits like the one in this C-17 Globemaster use Alphonse Chapanis' shape coding on knobs and levers so they can be recognized by touch, which prevents accidents.

M. Fitts arrived at Wright Field in July 1945 to form AML's psychology branch. The laboratory eventually became the U.S. Air Force's Human Engineering Division, a cutting-edge laboratory. It lives on at Wright-Patterson Air Force Base in Ohio today as the Airman Systems Directorate of the U.S. Air Force Research Laboratory.

In 1947, Fitts and Richard Jones studied details of 460 errors made in operating aircraft controls through interviews and written reports. They remarked, "It has been customary to assume that prevention of accidents due to materiel failure or poor maintenance is the responsibility of engineering personnel and that accidents due to errors of pilots or supervisory personnel are the responsibility of those in charge of selection, training, and operations." Fitts and Jones took a unique approach, basing their research on the proposition that "a great many accidents result directly from the manner in which equipment is designed and where it is placed in the cockpit." According to Fitts and Jones, what had been deemed "pilot error" was, in fact, a discrepancy between assumptions that people had about how others' work should be done and how the work was actually done.

Fitts and Jones studied an assortment of problems, including operating the wrong control, failing to adjust a control properly, forgetting to operate a control, and being unable to reach a control when necessary. They confirmed that the flap-gear substitution error and many other "pilot errors" were actually cockpit design problems. Fitts and Jones concluded, "Practically all pilots of present-day AAF [Army Air Force] aircraft, regardless of experience or skill, report that they sometimes make errors in using cockpit controls. The frequency of these errors, and therefore the incidence of aircraft accidents, can be reduced substantially by designing and locating controls in accordance with human requirements." They cite design adjustments for the most effective configuration of control knobs and displays, such as standardization, simplification, sequencing, interlocks, and other ways to fit controls to human needs.

Today we have ubiquitous designs on video game controllers, vehicle dials and knobs, and even the virtual buttons on smartphones. The differently shaped buttons and subtle texture differences help users distinguish between them, reducing errors. Thanks to the pioneers in human-oriented design principles, the idea of shape coding lives on today, not only in airplanes' landing gear and wing flaps but also in our everyday lives.

Saving a Life Starts with You

BY MS. SOFIA SCHATZ, STAFF WRITER

September is National Suicide Prevention Month, when mental health organizations and individuals emphasize raising awareness, supporting, and providing resources to those struggling with suicidal thoughts. Many are committed to give hope, ease pain, and reduce the number of individuals lost to suicide each year.

In 2020, approximately 46,000 people died by suicide: one death every 11 minutes. An estimated 12.2 million people thought about suicide, 3.2 million people made plans to commit suicide, and 1.2 million people attempted suicide, reflecting an approximately 33-percent increase in suicide deaths in the past two decades. Sadly, the actual numbers may be much higher.

These statistics are not just numbers in a report; they are friends, family, and colleagues. They are individuals who share in life's highs and lows, the joys and the pain. They are people who need support to get through their struggles and who need to know that they are not alone in this world.

Many of us know people who have struggled or continue to struggle with suicidal thoughts, and although we may want to help, those intentions may be hampered by a lack of resources or limited knowledge of the problem. To give meaningful help to

If you are struggling, reaching out to a friend, a family member, or a professional can help. You can also call the suicide hotline for help any time, day or night. If you or someone you know is struggling with suicidal thoughts, there are people who want to help.

Call 1-800-273-TALK (8255)

Online lifeline crisis chat: www.suicidepreventionlifeline.org

those in need, we must understand why people feel suicidal and then have viable solutions for them.

Some of the reasons people may consider taking their own lives include losing a loved one, experiencing or previously experiencing physical and sexual abuse, and struggling with sexual and gender identity. It is important to remember that mental illness is not visible and may not exhibit outward signs but can cause tremendous inward pain and turmoil for an individual. People with depression are at a higher risk of experiencing suicidal thoughts. Suicidal thoughts can stem from one or multiple factors, so it is essential to recognize there is no clear-cut cause for taking your own life; being alert to the signs in all situations is crucial.

The signs of someone contemplating suicide can be as varied as the risk factors. The signs include extreme sadness or mood swings; personality changes; withdrawal from others, especially loved ones; perceived dangerous or self-harmful behavior; and verbal communication of suicidal intentions.

People of all ages and backgrounds can experience suicidal thoughts throughout their lives; however, suicide rates vary by race or ethnicity, age, and other factors, such as location. The Centers for Disease Control and Prevention estimates that the groups with the highest rates of suicide are non-Hispanic American Indian/Alaska Native and non-Hispanic White populations. Other groups that show higher rates of suicide include veterans, people who live in rural areas, workers in industries such as mining and construction, and young people who identify as lesbian, gay, bisexual, transgender, questioning, or other.

Suicide can be prevented. We can support those with suicidal thoughts by learning the risk factors and warning signs as well as the symptoms of mental illnesses such as depression. Individuals who receive support from friends and family and have access to mental health services may be less likely to commit suicide than those who feel isolated.

Making it acceptable and normal to talk about mental health and checking in with others who may be struggling is key to saving lives. Having someone to talk to and knowing someone cares can make a difference in a person's well-being. Suicide prevention is a top priority for the U.S. Air Force and mental health organizations across the country. "One suicide is too many," said Brig Gen Claude Tudor, Air Force integrated resilience director. "Our forces and families, like most Americans, experienced many stressors related to the pandemic and loss of connections."

Stress and loss of connection are two of the many reasons the Air Force adheres to the suicide prevention strategy of "connect, detect, protect, and equip." Leaders are encouraged to recognize and address the signs of someone facing difficulties and struggles, along with empowering loved ones to do the same.

Suicide is a serious issue. The good news is that it is preventable, and there are steps we can take to comfort and strengthen those who are having suicidal thoughts. With the help of family, friends, and professionals, those struggling with mental health issues can recover and live rewarding, fulfilling lives.

Looking Back on ALLIES REFUGE

BY DR. ANDREW WACKERFUSS, 521 AMOW HISTORIAN

Air mobility is rarely the most glamorous mission in the Air Force. To most outside the field, it plays a role of background support, putting people and things in place so that a higher profile mission can later succeed. Once in a generation, however, air mobility itself becomes the high-profile mission.

One year ago, the global air mobility system performed the largest airlift Noncombatant Evacuation Operation (NEO) in the Department of Defense's (DoD) history: Operation ALLIES REFUGE (OAR) and ALLIES WELCOME, securing safe transport for nearly 124,000 travelers out of Afghanistan.

The story of the Afghanistan evacuation was told in real time across the world. Less well known are the mobility units that made it happen, such as the 521st Air Mobility Operations Wing (AMOW), which manages mobility nodes across 19 locations in U.S. Central Command (USCENTCOM), Europe, and Africa. One media article about the 521 AMOW's role in the evacuation proclaimed, "This Air Force unit you've never heard of made the Afghan airlift possible." The 18th Air Force commander, Maj Gen Kenneth T. Bibb Jr., said during a visit to 521 AMOW Airmen at Ramstein Air Base, Germany, "A lot of times as mobility Airmen we're the offensive linemen in football. We make the holes and grind it out, so someone else can make the play. OAR is one of those times where mobility made the play."

From its opening in mid-August until the close of major operations at the end of October, the 521 AMOW and its partners supported the rapid deployment of the Immediate Response Force to secure Hamid Karzai International Airport (HKIA). They evacuated 84,000 civilian travelers, recovered three disabled aircraft from HKIA, generated aircraft to sustain the mission across critical nodes and to execute the Joint Tactical Exfiltration from HKIA, and supported the re-deployment of all U.S. forces out of Afghanistan.

Airmen assigned to the 721st Aerial Port Squadron form a gate as evacuees from Afghanistan board a Delta Airlines flight at Ramstein Air Base, Germany, Aug. 30, 2021. Civil Reserve Air Fleet Aircraft were used for the onward movement of evacuees from temporary safe havens and interim staging bases.

USAF photo by TSgt Donald Barnec

Evacuation operations accounted for 2,080 airlift sorties spanning the DoD and the Department of State contracted airlift, aircraft donated by commercial and national partners, and the first activation of the Civil

An evacuee waits for her family after departing from a C-17 Globemaster III at Ramstein Air Base, Germany, Aug. 22, 2021.

USAF photo by SrA Jan K. Valle

An Airman performs security checks on luggage during outbound passenger processing. The Airman was assigned to the 726th Air Mobility Squadron at Spangdahlem Air Base, Germany, but was performing duty at the 721st Aerial Port Squadron, Ramstein Air Base, Germany, to assist with the operational surge brought about by the Afghan evacuations.

Courtesy photo by TSgt Aaron Luetzen

Reserve Air Fleet in 19 years. Some 85 percent of all DoD aircraft departing HKIA came through 521 AMOW stations. Because passengers traveled across multiple missions to reach their ultimate destinations, total passenger processing actions amounted to around 223,000. Units at staging bases caught missions, downloaded passengers and cargo, and worked with host installations to care for travelers. The numbers on the ground peaked at about 17,500 at Al Udeid Air Base, Qatar; 21,000 at Ramstein and Rhine Ordnance Barracks, Germany; 5,000 at Ali Al Salem Air Base, Kuwait City, Kuwait; 3,300 at Naval Air Station Sigonella, Italy; and 1,800 at Naval Station Rota, Spain.

Maintainers and controllers at Ramstein, Al Udeid, and Ali Al Salem worked nonstop to manage airflow at up to 400 percent of normal operations, with grueling conditions in Qatar and Kuwait. The 521 AMOW Airmen sanitized and restored to duty aircraft that had been soiled in unprecedented ways. Aeromedical crews at Ramstein doubled in size to conduct 28 Aeromedical Evacuation (AE) flights, delivering 14 babies. They created a new Passenger Medical Augmentation Personnel program (PMAP) that provided in-flight care for around 14,000 travelers. The 521 AMOW squadrons and stations across the theater took on passenger missions, assisted U.S. Navy partners at their stations, absorbed non-OAR airflow to clear space at key nodes, and provided resources to nodes that saw the most intense missions. By shifting 78 Airmen to crisis nodes, the 521 AMOW ensured that these stations gained the manpower they desperately needed until additional personnel could be sourced through traditional processes.

The 8th Expeditionary Air Mobility Squadron at Al Udeid, and the 5th Expeditionary Air Mobility Squadron in Kuwait, saw the worst of the initial rush of passengers and aircraft. "There were planes parked all over the entire airfield," said SSgt Thomas Shurdich, an Air Terminal Operations Center controller who shifted from his assigned 724th Air Mobility Squadron at Aviano Air Base, Italy, to Al Udeid. "Planes were just flying around in circles in the air because there wasn't enough room to park them on the ground. It was all over the hangars. They would operate out of pretty much any place they could park a plane and walk back to. Basically, the entire base."

"There were numerous medical emergencies where we had to dispatch 911," said SSgt Michael Do, a command and control specialist the wing sent to Al Udeid. "One of the loadmasters got heat exhaustion and started vomiting, and we had to dispatch medical services. And then we had to do it again because the medical services checked

SSgt Zachary Cozart, 721st Aerial Port Squadron Passenger Service Agent, gives a high-five to an evacuee child on a bus at Ramstein Air Base, Germany, Aug. 27, 2021.

USAF photo by TSgt Donald Barnec

Evacuees from Afghanistan board a Delta Airlines flight at Ramstein Air Base, Germany, Aug. 30, 2021.

USAF photo by TSgt Donald Barnec

him out, and he was all right, but then he turned worse again just because of the sheer heat and the amount of time that these aircrews were awake. They had the proper waivers to continue on, and they were being safe. But they were just so physically exhausted that they'd succumb to it. Calling 911 became too frequent and too easy. I hope never to have to be that comfortable calling 911 again."

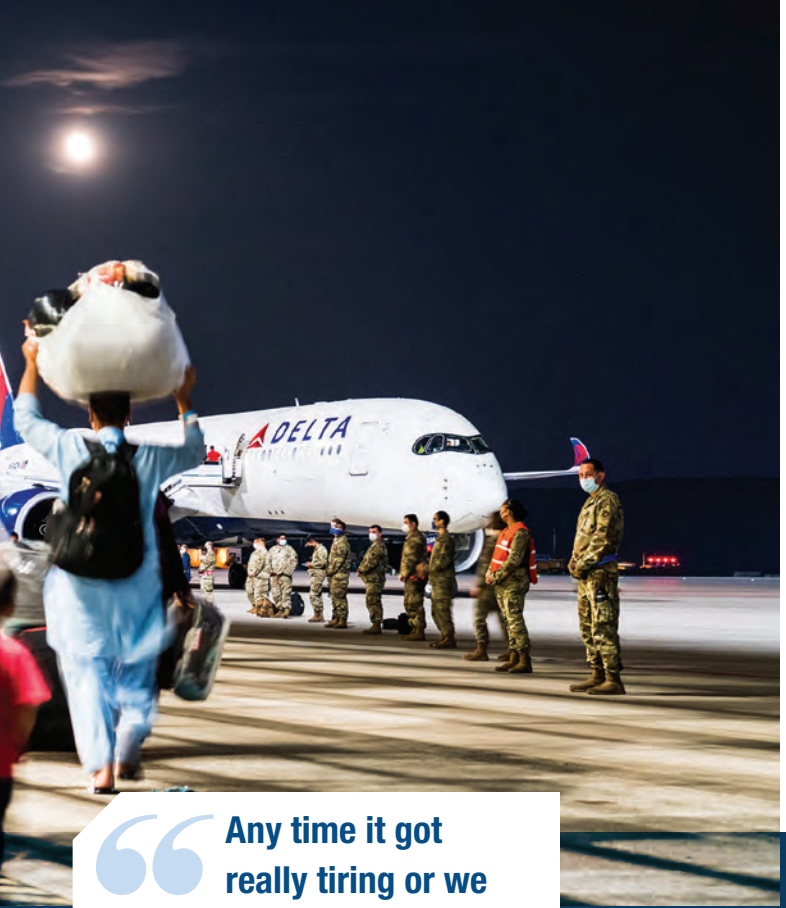
As passengers flowed from USCENTCOM to nodes in Europe, Ramstein became overwhelmed with more travelers than it had been told it would receive.

As described by Lt Col Matthew Bryan, director of operations for the 721st Mobility Support Squadron, "The first day when they opened the floodgates for us, I was using GDSS [Global Decision Support System], and I saw these missions populate, and I started calculating how many passengers were on there. It was like over 11,000 in one day. Our max capacity that we advertised was 2,000. I called the 618th Air Operations Center and said, 'We cannot handle this. This is way beyond anything we can handle.' And he said, 'This is SecDef orders. It's happening.' And that's when I realized, holy smokes, this is about to get real."

While the host 86th Airlift Wing at Ramstein cared for the thousands of arrivals, 521 AMOW Airmen created ways to speed them off base and to their next destination. They transformed a maintenance hangar into Germany's newest international airport, with a max through-put capacity of 5,000 per day. It was a huge effort to construct gates and screening stations, provide food and care items, and clean and service restrooms. As the commander at the time, Col Adrienne Williams, stated, "Every day our Airmen thought of something new to make this as comfortable as possible and to take care of our travelers as they were moving forward."

Some 34,000 passengers eventually left through this terminal. Hangar 5 was sometimes called "the happiest place on the base." As Bryan said, "I think the travelers knew that Hangar 5 was the last point, and the next step was getting on an airplane."

Capt John Burdick of the 721st Aerial Port Squadron (APS), who served as a 'hangar boss' for the new terminal, said that it always raised morale to be directly involved with helping the travelers to the aircraft. "That was always the best part of the job," he said. "Any time it got really tiring or we felt someone was getting cranky, we would put them on the flight line to walk the folks to the jet, and it would just fill their cup. Never was the 'why' of a mission so obvious when you were there high-fiving and waving, and it was awesome."



Airmen assigned to the 728th Air Mobility Squadron board a KC-135 Stratotanker at Incirlik Air Base, Turkey, before deploying to Southwest Asia in support of Operation Allies Refuge, Aug. 20, 2021.

Courtesy Photo

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Operation ALLIES REFUGE was a team effort across all 19 of the 521 AMOW locations. "Whether it was out at Al Udeid, whether it was here at Ramstein, whether it was in Sigonella, Rota, or [Royal Air Force] Mildenhall [England], the entire [521] AMOW community stepped up," said Burdick. "We came together as a family and as a team. A lot of the Airmen saw the smiles on the travelers' faces, and the waves and the fist bumps as everyone's boarding the plane for the United States. You just get that inner feeling of, 'Oh, my gosh, we're doing something huge, and we're saving lives, and it really matters.'"

TSgt Justin Deaton of the 721 APS told a reporter, "I know that for me, and for a lot of my people that I work with, we joined to do things like this."

SrA Zion Patterson, also of the 721 APS, agreed that, despite the often terrible interior conditions of the aircraft they serviced, "It was fun for us. Usually, in fleet, we just work on restrooms, and a lot of Airmen think we're just flushing the toilets or being a janitor. But here we got to interact with passengers. We got our hands dirty. It was stressful, but when you're working with people you care about, and you're going out there just jobbing, it was fun. It was interesting."

In the end, the 521 AMOW found itself under an unusual spotlight during this mission and together stepped up to ensure that the largest NEO airlift in history achieved its goals. As Williams said, "This event really highlights the importance of the node system for the USTRANSCOM [U.S. Transportation Command] Commander."

OAR showed that when regular operations suddenly become extreme, a well-maintained system with well-trained Airmen can handle a crisis as if it were routine. According to Williams:

"Our Airmen took those opportunities to succeed, and they won. They made it happen, moving all these children and families. Every opportunity that they faced to succeed, they did. Yes, there were some setbacks. Some situations where we had to work to get more water or get more food. But each time they took a step back, they took two steps forward. This is what we do in the Air Mobility Operations Wing. We move people, we take care of people, we take care of planes, we move cargo, we keep it moving through the system. And that's what we did in OAR."

725th Air Mobility Squadron Conducts First Local Multi-Capable Airman Training

BY 1ST LT EMMA C. QUIRK, 521ST AIR MOBILITY OPERATIONS WING, RAMSTEIN AB, GERMANY

TSgt Ozzie Slawnikowski, left, 725th Air Mobility Squadron (AMS) Crew Chief Non-Commissioned Officer in Charge teaches SSgt Reynaldo Guevarra, right, 725 AMS Aerospace Ground Equipment Craftsman, about tire changes on a C-17 Globemaster III during a multi-capable airman (MCA) exercise at Naval Station Rota, Spain, Feb. 11, 2022.

Courtesy photo

"Multi-capable Airmen (MCA) training maximizes the potential of our members and teams," said Lt Col Michael Slaughter, 725th Air Mobility Squadron (AMS) Commander.

Slaughter echoes the sentiments of many Air Mobility Command (AMC) leaders who have overseen the implementation of MCA training.

MCA is the process of exposing Airmen to tasks outside of their core Air Force specialty code. It is often used within a cross-functional team so Airmen can learn each other's strengths and expertise.

Slaughter explains this style of training prepares Airmen to execute a variety of tasks, which makes units more agile and versatile for the needs of the missions.

The Airmen of the 521st Air Mobility Operations Wing (an AMC unit headquartered at Ramstein Air Base, Germany) who are assigned to the 725 AMS, a tenant unit of Naval Station (NAVSTA) Rota, Spain, completed their first iteration of MCA training in early 2022.

Airmen across the 725 AMS participated in the weeklong familiarization of new tasks using real equipment as well as virtual reality training tools.

Several Airmen beta-tested the MCA training program, such as SSgt Reynaldo Guevarra, 725 AMS Aerospace Ground Equipment (AGE) Craftsman. Although Guevarra typically maintains generators, air conditioners, hydraulic pressuring units, nitrogen carts, and turbine compressors, the Airman was tasked with learning basic aircraft maintenance. Guevarra excelled in his performance of maintenance tasks such as marshaling aircraft, aircraft refueling, and aircraft tire serviceability inspections.

"Learning aircraft maintenance duties helped me grow as a maintainer and as an overall NCO [Noncommissioned Officer]." Guevarra added, "I now have the skills and dual qualifications to not only serve in my normal capacity but also augment aircraft generation."

As a result of the training, Guevarra better understands the impacts of other Air Force specialty codes as they work toward the common goal of "putting birds in the air."

Another beta-test trainee was SrA Howard Johnson, 725 AMS Crew Chief. His normal duties are to service the C-17 Globemaster III. This assignment includes performing scheduled and unscheduled aircraft maintenance, troubleshooting aircraft systems, and servicing and inspecting AMC aircraft transiting through European and African theaters.

During the training, Johnson learned standard AGE duties from TSgt William Zelaya, 725 AMS AGE Training Lead. He also performed service inspections on aircraft external power carts and flight line dispatch of various AGE equipment.

When asked about the impact of the training, Johnson said he better understands the duties of other maintenance career fields and how

they affect one another. Johnson added, "This training will allow the squadron to fill voids swiftly, knowing the job will be handled correctly."

The squadron's program was initiated by TSgt Ozzie Slawnikowski, 725 AMS Crew Chief Non-Commissioned Officer in Charge. As the lead developer of the program, Slawnikowski partnered with Zelaya to equip members with the expertise needed to fulfill taskings in the European, Central, and African theaters.

"I encourage my troops to 'do big things,'" Slawnikowski exclaimed. "My hopes are to inspire other Airmen to step up and not be afraid to get out of their comfort zone."

An important part of the early development of any new initiative is two-way feedback. Both Slawnikowski and Zelaya commented on the positive feedback and excitement of the trainees.

Moving forward, both are prepared to readdress the training and tailor it to meet the needs of each trainee in order to sharpen the program to use the members' time efficiently.

In the following months, the MCA trainees will spend several days within the aircraft maintenance unit and AGE flight environment to refine their competency.

"It was awesome watching Guevarra smile after launching his first jet, knowing he directly generated that mission," Slawnikowski shared as he reflected on the training. "I am proud to create a lasting program that connects our Airmen to Department of the Air Force-level efforts. This training offers them a chance to step out of their normal day-to-day duties and see a different side of operations."

Training to become an MCA is essential to the future fight. As Gen Minihan stated in the 2022 *Air Mobility Command Strategy*, a goal of the command is to develop roadmaps for operational employment of multi-capable Airmen. MCA training is critical to enabling Agile Combat Employment, which is a proactive and reactive operational scheme of a maneuver designed to address the challenges of projecting combat power around the world with a significantly reduced global footprint, increased risk from adversarial technological advances, and fiscal and political constraints.

The training of Airmen across the 725 AMS demonstrates the positive reactions to MCA and a promising evolution of training.

SSgt Reynaldo Guevarra, 725th Air Mobility Squadron Aerospace Ground Equipment Craftsman, learns the duties of a Crew Chief via virtual training during a multi-capable airman exercise at Naval Station Rota, Spain, Feb. 11, 2022.

Courtesy photo

SrA Howard Johnson, 725th Air Mobility Squadron Crew Chief, drives a truck hauling aerospace ground equipment during a multi-capable airman exercise at Naval Station Rota, Spain, Feb. 11, 2022.

Courtesy photo

What Is In Your Go Bag?

BY MS. LAUREN SCHATZ, STAFF WRITER

In recent years, the nation has experienced several unexpected adversities. One such ongoing example is the COVID-19 pandemic, which quickly swept across the country, leaving loss, suffering, and financial damage in its wake. It also left a valuable reminder: be prepared for the unpredictable. Although it is not encouraged to have a personal, Costco-level supply of toilet paper in your stockpile, it *is* wise to have a comprehensive emergency kit, also known as a disaster kit, in your home.

If you walked into an average U.S. citizen's home, there is a good chance you may not even find an emergency kit. A 2015 National Center for Disaster Preparedness survey indicated that only 35 percent of respondents had an adequate emergency plan and supplies. Many might have extra canned food on hand, but others lack this basic need and other items essential to survival.

Experts recommend keeping your entire emergency kit in one or two bags that are easy to carry. This precaution could be critical for emergencies in which you will need to evacuate your home—and do so quickly. Emergencies of this magnitude range from natural disasters (for example, hurricanes, wildfires, floods, or earthquakes) to national security threats (for example, potential attacks from U.S. adversaries). One disaster that could occur naturally or come from an adversary is an Electromagnetic Pulse (EMP). An EMP has the potential to disrupt, degrade, and damage technology and critical infrastructure systems. Although there are differing opinions about the threat of EMPs, just the thought of the country's power grid shutting down should be cause for reflection

Having a disaster plan can be equally as important as having a disaster kit.

and preparation. Additionally, it is essential to prepare for an emergency of a personal nature, one that affects you on an individual level.

With many possible threats, preparing to carry the right items that could keep you and your loved ones safe is critical. **For a basic kit, Ready.gov suggests storing the following:**

- Water (one gallon per person per day for several days for drinking and sanitation).
- Food (at least a several-day supply of non-perishable food).
- Battery-powered or hand-crank radio and a National Oceanic and Atmospheric Administration Weather Radio with tone alert.
- Flashlight.
- First aid kit.
- Batteries (for radios, flashlights, and other items).
- Whistle (to signal for help).
- Dust mask (to help filter contaminated air).
- Plastic sheeting and duct tape (to shelter in place).
- Moist towelettes, garbage bags, and plastic ties (for personal sanitation).
- Wrench or pliers (to turn off utilities).
- Manual can opener (for food).
- Local maps.
- Cell phone with chargers and a backup battery or portable power bank.
- Cash

THE SITE ALSO REMINDS US TO STORE ITEMS SPECIFIC TO PERSONAL CARE, SUCH AS:

- Prescription medications (an emergency can make it difficult to refill prescriptions or find an open pharmacy).
- Vitamins and other over-the-counter medicines.
- Prescription eyeglasses, contact lenses, and contact lens solution.
- Infant formula, bottles, diapers, wipes, and diaper rash cream.
- Important documents such as copies of insurance policies, identification, and bank account records, saved electronically or kept in a waterproof, portable container.
- Feminine hygiene products.
- Pet food and extra water for your pet.

STORING YOUR KIT

Having an emergency kit is not of much use if it is not accessible, if it is misplaced, or if it gets ruined from heat or moisture. Make sure to store your kit in a dry area out of direct sunlight. If it has been several years since you put your kit together, some items may have expired. The Federal Emergency Management Agency recommends checking and updating your emergency kit twice a year. When checking, review food items and batteries for expiration dates and replace them. Organizing your kit by expiration date can help make subsequent checks easy and effective. Also, assess your current situation to see if anything has changed and if additional items need to be incorporated.

PLANNING OUT LOUD

Having a disaster plan can be equally as important as having a disaster kit. This step means talking with loved ones about various scenarios ahead of time or thinking through them on your own. Do you have elderly relatives you will need to assist? What if the main highways are not usable? What if your GPS is not operational? Developing solutions for possible contingencies ahead of time will help you move more quickly and effectively when danger is imminent.

Hopefully, we will never need to grab our "go bags," but the minimal costs and effort involved in getting one ready is worth our peace of mind, knowing that we will be prepared should any disaster strike. Reviewing websites such as **Ready.gov** can help Americans prepare for more than natural disasters and national security threats, including vehicular emergencies, financial emergencies, medical emergencies, floods, and more. Knowing what to do ahead of time could save your life or the lives of vulnerable household members like pets, children, and seniors.

How to De-Escalate Risky Situations

BY MS. KATHY ALWARD, STAFF WRITER

Life is full of risky situations, and although they may come as surprises, it is beneficial to know the verbal and nonverbal cues that signal them. Some occupations are riskier than others. According to the Occupational Safety and Health Administration, employees who work alone (outside of the home), in high-crime areas, or late at night have a higher chance of being subjected to an act of violence. Understanding how to de-escalate risky situations is especially crucial for those serving in the military.

Preventing suicide is a critical reason for knowing how to de-escalate a risky situation.

In everyday, real-life situations, it is wise to be aware of verbal and nonverbal cues and be prepared for the escalation of risky situations, including the following behaviors:

- The person begins to pace or fidget.
- The person suddenly changes their body language or tone of voice during a conversation.
- The person's use of eye contact changes.
- The person's chest protrudes, and they hold their arms away from their body in a stance that resembles a rooster.
- The person exhibits disruptive behaviors such as defying rules or refusing to comply, yelling, or bullying.

Do not use physical force as your first response in a risky situation, especially if you do not have specialized training. Consider using the following options to de-escalate a conflict instead:

- Calm yourself before interacting with the person by taking a deep breath. If the person directs insults toward you, do not get defensive. Use a low, dull tone of voice.
- Become aware of your environment. Observe the space around you to note exits or openings. Determine whether you are blocking the person and making them feel trapped. Ascertain the location and demeanor of other people in the room. Note the objects in the room, including chairs, tables, and items on the tables.
- Even if you do not feel calm and self-confident, try to look as nonthreatening as possible by keeping a neutral facial expression. Do not point your fingers at the person. Avoid excessive pacing or fidgeting and shrugging your shoulders. Maintain a distance of 12 feet or more from the person.
- Ask a simple question such as, "What is your name?" This opening question can quickly diffuse a situation, make the dialogue more personal, and encourage the person to respond in a positive manner.
- Acknowledge the person's feelings and do not appear to judge them. You may disagree with the person's position, but it is important to show empathy during conflicts. Help the person discuss their anger instead of acting on their angry feelings. To help assure the person that you understand their frustration, use open-ended questions that do not lead to simple "yes" or "no" answers. Paraphrase their responses and ask them for ideas and solutions. You can even ask for permission to take notes.
- Use words such as "what" and "we" in the conversation to discuss the future and make yourself appear less threatening while creating hope.
- Make a statement that the person is likely to agree with by saying "yes," because it will make it harder for them to stay angry if they agree with you.

Preventing suicide is a critical reason for knowing how to de-escalate a risky situation. If you know an Airman who may be considering suicide, ask them about what is going on in their life. Warning signs include talking about immense guilt or shame, acting anxious and agitated, showing rage, and talking about seeking revenge. In addition, they might talk about feeling empty, hopeless, or having no reason to live. They may take risks such as driving extraordinarily fast. They may talk or think about death or exhibit mood swings, changing from very sad to very happy. They may give away important possessions, make a will, or say goodbye to friends and family.

Do not wait for things to escalate to a crisis level; all comments about suicide should be taken seriously and responded to immediately by taking the person to the nearest primary care office, mental health clinic, or emergency room. Remove anything that they can use to hurt themselves. Never leave an Airman alone if they have thoughts of suicide, not even long enough to go to the bathroom by themselves. You can also call the Military Crisis Line at 1-800-273-TALK (8255) or the deaf and hard-of-hearing Crisis Line via Teletypewriter (TTY) at 1-800-799-4889; both are open 24 hours a day, 7 days a week.

Some things are outside our control, and it is not always possible to effectively de-escalate a risky situation. Although it is important to stay calm, be patient, and maintain situational awareness if a risky situation occurs, it is equally important to have a plan to defend yourself, protect others, or escape if necessary if the situation deteriorates.

It Only Takes One Drink

BY MS. KATHY ALWARD, STAFF WRITER

History tells countless tales of the consequences of people driving under the influence of alcohol. Many of those stories involve someone who only had one drink. There are many good reasons to assign a designated driver before a night on the town. According to the U.S. Department of Transportation National Highway Traffic Safety Administration (NHTSA), in 2019, one person was killed in a drunk-driving crash in the United States every 52 minutes. Its dangers are punishable by law. Each state has different laws determining driving under the influence (DUI) fines, penalties, and jail time, but one thing is certain in every state: drinking and driving are a deadly combination.

Alcohol can affect everyone differently. A person's level of intoxication depends on various factors such as weight, metabolism, gender, and how much they have consumed in a given amount of time. Signs of alcohol impairment quickly emphasize why it is a bad idea to drink and drive. These signs include: a staggering walk, a sense of confusion, feelings of euphoria, declined inhibitions, a loss of balance, poor coordination, poor depth perception, forgetfulness, and blurred vision.

If you are driving and buzzed enough that it even slightly impairs your faculties, consider yourself a drunk driver—because by that point, you can be considered a drunk driver by law enforcement. This fact is reason enough not to get behind the wheel if you have been drinking.

According to NHTSA, it is illegal to drive with a blood alcohol concentration (BAC) of .08 or higher in

all 50 states, the District of Columbia, and Puerto Rico. A lower BAC can be just as deadly, however. Sadly, 1,775 drivers with a BAC of .01 to .07 died in alcohol-related crashes in 2019.

According to NHTSA, predictable effects of BAC on driving are as follows:

- **.02:** Visual function, such as the rapid tracking of a moving target, and the ability to perform two tasks simultaneously decline (divided attention).
- **.05:** Coordination, response to emergency driving situations, and the ability to track moving objects are reduced, and steering becomes difficult.
- **.08:** Information processing capabilities, such as signal detection and visual search, and concentration are reduced; perception is impaired; and there is a loss in short-term memory.
- **.10:** The ability to brake appropriately and maintain lane position is reduced.
- **.15:** Vehicle control, attention to the task of driving, and auditory and visual information processing are substantially impaired.

Thankfully, drunk driving deaths have declined since the 1980s due to the strict enforcement of drunk-driving laws. Charges can range from misdemeanors to felony offenses, with the revocation of your driver's license, fines, and jail time as consequences. A driver with a first-time offense can expect to pay upward of $10,000 in legal fees and fines.

Stricter penalties exist for drivers under the age of 21 who consumed alcohol before driving and are then stopped for an entirely different traffic violation, such as forgetting to use their turn signal or speeding. Because there is zero-tolerance extended to drinkers under 21, these common traffic violations can lead to a DUI conviction. It is important to realize that "buzzed" driving can lead to a DUI if you are under 21 or even if you are older when that "one drink" surpasses the legal BAC level to drive.

Important things to remember about how to stay safe while drinking alcohol include securing a ride with a designated driver, ride-hailing services, or a taxi; letting a family member or a friend know of your plans if you are going out and drinking alcohol; not drinking on an empty stomach (remember to eat, because food slows the absorption of alcohol); and alternating alcoholic beverages with glasses of water.

Before you go out to drink, be sure to fully charge your cell phone so you can make emergency calls or call a friend or family member if necessary. If you serve alcohol while hosting a party, all guests should leave with a sober driver. On a final note, remember to wear your seat belt because this precaution can be the best defense against impaired drivers.

Keep in mind that it only takes one drink, and if you have been drinking alcohol, you should not be driving. You can also help save lives by contacting local law enforcement if you see an impaired driver on the road. It is important to remember that our actions affect the safety of others, so please drink responsibly.

Winding Down Riding Season

BY MS. PAULA COLLINS, STAFF WRITER

Motorcycle enthusiasts are all about having fun. Summer is a great time to experience the thrill of the open road. However, the calendar does not lie, and unless you live in southern states, the window for great motorcycle rides is about to close until spring.

Squeezing that last bit of fun out of summer results in strategically packing schedules, spending time with friends at backyard barbecues, and gathering at the beach or the lake. The weather is amazing, and the scenery is breathtaking. It is a great time to take a bike ride!

A beautiful (and safe) ride starts with good preparation. Do the following before your outings:

- Be well rested. Fatigue slows the reaction time needed to stay safe on the road.
- Plan the route in advance so that there are no surprises. Road construction can make travel tedious for motorcycles.
- Check the road worthiness of your ride, including the condition of the tires. Make sure all lights work. Some bikes are notorious for developing shorts in their electrical system.
- Dress for the road. Wear a helmet that is approved by the Department of Transportation (DOT) and eye protection. Statistics from the National Highway Traffic Safety Administration (NHTSA) indicate that wearing a helmet is 37 percent effective in preventing fatalities for motorcycle riders and 41 percent effective for passengers. Also, wear gloves, appropriate footwear (sturdy boots with good traction), heavy jeans, and a jacket or vest that has reflective properties. A leather jacket and chaps provide even better protection, and they often come with reflective trim that improves rider visibility for other motorists. In the event of a fall or crash, this apparel could prevent significant skin abrasion and tissue damage.
- Pack plenty of water to stay hydrated—and avoid drinking alcohol. According to the NHTSA, in 2019, U.S. motorcycle drivers were impaired by alcohol in 29 percent of all fatal crashes. Impairment is defined as having a blood alcohol content (BAC) of .08 grams per deciliter or higher. In contrast, passenger car drivers were impaired in fatal crashes only 20 percent of the time, light truck drivers 19 percent, and large truck drivers 2 percent. Recognize that even one drink may impair your judgment.

- Never rush to get there. In 2019, speed was a factor in 33 percent of fatal motorcycle crashes. It is wise to obey speed limits and to adjust your driving pattern to road conditions and traffic volume. Be especially aware of vehicles that could crowd your lane. Always drive defensively and anticipate an escape strategy.

- Be critter aware. Although not a major cause of fatalities and injuries, it takes only one encounter. As summer winds down, animals' grazing patterns and other behaviors change. Wildlife may occasionally wander onto the roadway, especially late in the day or at night. Anticipate their movement. Scan both sides of the road for animals so you have time to slow down. At night, look for headlight reflection off of the eyes of animals on the side of the road.

- Factor in a nap before getting back on the bike to head home. A day on the lake or at the beach can cause extreme fatigue, making you less aware of your surroundings. However, a nap cannot erase alcohol impairment, as it takes hours for alcohol's effects to wear off. Absolutely do not ride after drinking alcohol.

MOTORCYCLE UNIT SAFETY TRACKING TOOL (MUSTT) RESPONSIBILITIES

The Motorcycle Unit Safety Tracking Tool (MUSTT) was designed to provide training data for the Department of the Air Force motorcycle riders and fill the requirements for monitoring both rider demographics and training outlined in AFI 91-207, *U.S. Air Force Traffic Safety Program*. With the data collected, the Department of the Air Force can make informed decisions on what guidance changes need to be made to keep Airmen and Guardians safe while driving a motorcycle, and what training each rider has received.

Riders

- Create and update their account in MUSTT.
- Upload training documentation.

Motorcycle Safety Representative (MSR)

- Ensure riders' accounts are created and updated.
- Validate and approve training submitted to MUSTT.
- Maintain accurate unit motorcycle rider MUSTT information.

- Stay vigilant. In 2019, rider fatalities involved a motorcycle colliding with a fixed object 23 percent of the time. The object could have been a stalled vehicle, a blown-out tire, an animal, a tree, a bridge railing, or a rock wall on a curve.

Riding with an alert mind helps you make the kind of decisions that keep the ride both safe and fun. Enjoy the nice weather on your bike until it is time to put it in the garage until the next riding season.

You Are Bleeding, What is Your Next Move?

BY MR. ANDREW HELLERSTEIN, STAFF WRITER

Cuts, scrapes, and bloody noses can happen at a moment's notice, and the accompanying sight of blood is enough to make most people panic. It is important not to freak out, however. Simple first aid is often enough to treat a minor bleeding injury, although you may need to seek medical assistance depending on the severity of the wound. Before we discuss applying first aid, let us see what to do in the most urgent cases.

YOU SHOULD CALL 911 IF ONE OF THE FOLLOWING IS PRESENT:

- The wound is more than a one-fourth-inch deep, has ragged edges, or will not stop bleeding after being bandaged.
- The cut is on the face, genitals, joints, or chest/abdomen. Face and genital wounds are prone to infection, and joint wounds can reopen very easily unless properly stitched.
- Abdominal wounds might involve damage to internal organs, which is extremely serious.
- The victim has other medical conditions (such as diabetes) that the injury may exacerbate.
- The victim has been bitten by an animal or human. Bite wounds can quickly become infected.
- Stepping on rusty nails and other unsanitary objects can also cause infection, especially if the victim has not had a tetanus shot in the past 10 years.

TREATING A BLEEDING WOUND

If you need to apply first aid before help arrives or need to bandage a minor cut, follow these steps:

Step 1. Have the injured person lie down if the wound is large or causing considerable bleeding.

Putting pressure on a wound helps the blood clot faster, which will stop the bleeding. Do not remove the covering to check the wound for 15–20 minutes because removing it can cause the bleeding to restart.

Apply a clean bandage or towel to the area and put moderate pressure on it with your hands. Putting pressure on a wound helps the blood clot faster, which will stop the bleeding. Do not remove the covering to check the wound for 15–20 minutes because removing it can cause the bleeding to restart. Also, do not remove the bandage if the wound bleeds through it. Apply another bandage on top of the first one and maintain pressure.

Step 2. If the cut is on the victim's arms or legs, lift the limb above the heart to slow the blood flow to the wound. If the bleeding continues after several minutes, you may need to apply a tourniquet at this stage.

Step 3. Once the bleeding has stopped, remove the bandage. Wash your hands, then clean the wound with soap and water (but *NOT* with hydrogen peroxide). Try to carefully remove all pieces of debris from the wound. Call a doctor if an object is lodged in the flesh or if it is difficult to remove the debris.

Step 4. Apply an antibiotic gel to the wound site; this step will help prevent scarring and infection.

Step 5. Put a new bandage on the wound, rewash your hands, and let the victim rest. Replace with a new bandage daily until the wound has fully healed. Pay attention to possible signs of infection such as inflammation, fever, and leakage. If you notice signs of infection, call a doctor immediately.

TREATING OTHER CAUSES OF BLEEDING

You might experience other types of bleeding from time to time. These injuries are usually less severe than a cut or puncture wound but can still be dangerous. Here is how to treat them and when to go to a doctor.

- Nose bleeds: Sit upright, lean slightly forward, and pinch your nostrils shut. Hold for 5 to 10 minutes or until the bleeding stops. If the bloody nose was caused by a hit to your nose, if it has lasted longer than 20 minutes, or if the bleeding makes it difficult to breathe, call a doctor.

- Gum bleeding: Gum bleeding, which can be caused by inflammation, can be relieved over time by practicing good dental hygiene, using an antibacterial mouthwash, and increasing your vitamin C intake. Call a doctor if the bleeding continues for multiple weeks or worsens quickly.

- Other types of bleeding: In more uncommon cases of bleeding such as from the eyes, ears, or anus, call a doctor immediately.

Nobody likes seeing blood but following these tips will help stop the problem from worsening and aid recovery. Otherwise, make sure your tetanus shot is up to date and keep a first aid kit on hand. Remember that if you are not sure about something, it is always best to call a doctor.

Staying Safe During HURRICANE SEASON

BY MS. ARYN KITCHELL, STAFF WRITER

One evening, just after putting my daughter to sleep, I received a phone call from a family member who was concerned because a tornado had just touched down near where I live. She had been watching the weather radar and realized a big storm was close to my home. When I opened my front door, I heard the loud tornado siren. I had not been looking at the weather, and tornado sirens do not always alert people indoors, so I was clueless about the severity of the storm. Several questions popped into my head, such as "Which room in my apartment is safest?" "Are we okay staying on the second floor?" "Do we need to go to a shelter?" "Is there a shelter nearby?" "Can we bring our pets?" "What does the tornado siren even mean?" However, the biggest question was, "Why had we not made an emergency plan before now?"

Extreme weather events are becoming more frequent and intense due to climate change. For those who live along the coast, or even 100 miles inland, that can mean more hurricanes. Hurricanes are large storm systems that form over warm ocean waters and move toward land. According to the National Climate Assessment, hurricanes in the North Atlantic have increased in intensity, frequency, and duration since the early 1980s. Hurricane season for the Atlantic and Central Pacific runs from June 1 to November 30, with the peak occurring between mid-August and late October. For the Eastern Pacific, hurricane season begins May 15 and ends November 30.

Hurricanes can pose a great risk to lives and property. In addition to the storm surge (the abnormal rise of water created by a storm's winds, which is the leading cause of hurricane-related deaths in the United States), the heavy rains can cause flooding hundreds of miles inland. The storm also brings high wind speeds that can destroy buildings and even carry loose items left outside at high speeds to create large projectiles.

It is especially important to know what the various alerts issued by the National Weather Service (NWS) mean during hurricane season. The term *advisory*—such as a tropical storm or hurricane advisory—is used when NWS expects conditions to cause significant problems that may be dangerous. Use caution to ensure the situation is not life-threatening. A tropical storm or hurricane *watch* is issued when a tropical storm or hurricane is possible within 48 hours. When under a watch, individuals should keep a close eye on the weather by tuning into the National Oceanic and Atmospheric Administration Weather Radio All Hazards, local radio, TV, or other trusted news sources. If a watch is issued, it is essential to check emergency supplies and gather items that may be needed in the event of power loss. Lastly, a tropical storm or hurricane *warning* is issued when a tropical storm or hurricane is likely within 36 hours. As soon as the warning is issued, people should complete any storm preparations and leave the area if directed to do so by officials.

Anyone who has not prepared for this storm season should start now.

An excellent place to begin is learning about the local community's evacuation plan. Once a hurricane is imminent, officials will issue

Families should develop a communication plan that establishes important phone numbers to memorize or have written down and a main contact point for everyone before, during, and after the storm to help reconnect if separated.

evacuation orders to those in areas that will be in danger. Take the time to research evacuation routes for the local community and find a nearby shelter. When planning for evacuation, it is important to account for road closures, so find a few different routes that can be taken to a safe location. If the local community is not told to evacuate, it is preferable to shelter in place, either at home or at the home of a friend or family member. The chosen location should be a sturdy building that is not in a flood-prone area. The best protection is a small, interior, windowless room on the lowest level that is not likely to flood.

Families should develop a communication plan that establishes important phone numbers to memorize or have written down and a main contact point for everyone before, during, and after the storm to help reconnect if separated. If a family member lives out of the area, ask them if they will be the main contact to call, text, or contact through social media. Because local phone lines can become jammed during emergencies, social media apps can be an effective way to reach each other. Each family's plan should also include meeting places for their household, keeping in mind that emergencies can happen while family members are at work or school.

When making an emergency plan and gathering supplies, consider any specific needs family members may have, such as medical needs, dietary restrictions, pets, and the various ages of members within the household. Another important thing to consider is how COVID-19 may affect emergency plans. Some emergency shelters may be closed due to the pandemic, so it may be wise to check again, even if a local shelter was previously open. Being vaccinated provides protection from severe illness and death, but wearing a mask in indoor public places is also recommended. If sheltering in a public shelter, each family should try to stay a safe distance from others outside their household and maintain good hygiene by frequently washing or disinfecting their hands.

Making emergency plans can ensure everyone stays safe during hurricanes and other extreme weather events. Having a plan can provide peace of mind if it is necessary to evacuate because of a hurricane. Children should be allowed to be a part of their family's discussion to understand what to do during an emergency. They can even help build an emergency kit and write down important phone numbers.

Luckily for my family, that tornado quickly moved away from us, and our area was taken off of the tornado warning, although the high winds, rain, and hail from the storm kept us up late into the night. After that, we made a concrete plan of where to go, whom to call, and what we needed to stay prepared for extreme weather. I was able to answer all those questions running through my mind during the storm, and now I know what to do the next time I hear the tornado siren.

MISHAP-FREE FLYING HOUR MILESTONES

5,000 HOURS

50 ARS, MacDill AFB, FL
Lt Col Keegan K. Maple

155 ARW, Lincoln, NE
Lt Col Hank Piening

349 ARS, McConnell AFB, KS
MSgt Cleigh M. Robbins
TSgt Logan T. Berry

3,500 HOURS

155 ARW, Lincoln, NE
Lt Col Karl Duerk
Maj Tyler Sandberg

349 ARS, McConnell AFB, KS
Maj Hugh T. Corbett
MSgt Brandon J. McAnally

2,500 HOURS

50 ARS, MacDill AFB, FL
Capt Kristian L. Ciampa
Maj Scott A. Brooks

155 ARW, Lincoln, NE
Lt Col John Sciuto
Maj Mitch Wilson

349 ARS, McConnell AFB, KS
Lt Col Maureen E. Tanner
Maj James A. Nussey
Maj John J. Shalekbriski
Capt Oleksandr Y. Slidenko
SMSgt Justin R. Thompson
MSgt Justin M. Miller
TSgt Jeremy Robinson

A C-130J Super Hercules flies over central Arkansas during a formation flight, June 1, 2022. The formation was led by the 61st Airlift Squadron, a flying squadron assigned to the world's largest C-130 unit, the 19th Airlift Wing, Lilttle Rock Air Force Base, AR.

USAF photo by 1 Lt Charles Rivezzo

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

Unreliable Airspeed Indications

BY MAJ TRAVIS CORD,
AMC FLIGHT SAFETY

It is a routine training flight on a winter morning with nothing out of the ordinary. Fortunately, there is no snow or ice to contend with on your departure. During climb-out, you notice your airspeed is increasing faster than you expected, and you respond with an increase in pitch. For a moment, you consider it odd; however, you quickly dismiss it with rationales of your aircraft being lightweight or the cold day increasing performance. Moments later, you notice your airspeed is fast again, to which you increase your pitch even more. It is only a few more moments before something else does not make sense. Now your altitude is decreasing despite an incredibly high airspeed. You could not be stalling, could you?

Aircrew response to an unreliable airspeed indication has persisted throughout history, often with unfavorable aircraft stalls. These situations are difficult as it seems the aircraft is flying perfectly well; unfortunately, the instruments are not telling the whole truth. Unreliable airspeed indications can result from blockage due to ice, insects in the system, or failure to turn on the pitot-static heat system. A thorough exterior inspection and good checklist discipline can help prevent these issues.

Despite best efforts, an unreliable airspeed situation can still occur. Once detected, the aircrew should perform their specific aircraft flight manual procedures if available, or use the following as a guide:

1. Disconnect auto-throttle, autopilot, and flight director.

2. Set a known pitch and power setting for the phase of flight (Aircraft Tactics, Techniques, and Procedure Manual may have information).

3. Attempt to acquire visual meteorological conditions (VMC).

Following these procedures can prevent damage to the aircraft and, more importantly, save lives.

A C-17 Globemaster III assigned to Joint Base Lewis-McChord, WA, starts its engines during Exercise Rainier War 22A at Joint Base Elmendorf-Richardson, AK, March 23, 2022.

USAF photo by A1C Charles Casner

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A DAY IN THE LIFE

SrA Taren Chism, 317th Aircraft Maintenance Squadron Aircraft Systems Fuels Apprentice, looks out the window of a 317th Airlift Wing C-130J Super Hercules at Dyess Air Force Base (AFB), TX, April 30, 2022. Members from around Dyess AFB were given the chance to fly in a C-130 to and from Avenger Field in Sweetwater, Texas, to take part in the Women Airforce Service Pilot Homecoming 80th Anniversary fly-in event.

USAF photo by SrA Reilly McGuire