

THE

MOBILITY FORUM

THE MAGAZINE OF AIR MOBILITY COMMAND | SPRING 2024

**The Dirty Dozen:
Common Human
Error Factors
in Aircraft
Maintenance
Mishaps**



**FY23 Air Mobility Command
Annual Safety Award Winners and
Department of the Air Force Nominees**

CONTENTS

THE MOBILITY FORUM

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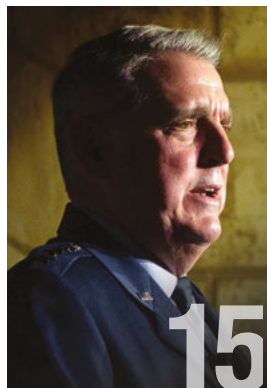
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4



15



18



39

FROM THE TOP

- 3 Just Culture, Proactive Safety, and Mishap Prevention
- 4 The USAF Expeditionary Center: Forging Warrior Hearts

AMC NEWS

- 6 Air Mobility Command Welcomes New Director of Safety, Col John B. Kelley
- 15 The 2023 A/TA Convention: Irreversible Momentum
- 17 FY23 Air Mobility Command Annual Safety Award Winners and Department of the Air Force Nominees

PROACTIVE SAFETY

- 7 The Dirty Dozen: Common Human Error Factors in Aircraft Maintenance Mishaps

FLIGHT SAFETY

- 13 Human Factors Analysis and Classification System 8.0

REGULAR FEATURES

- 38 Mishap-Free Flying Hour Milestones
- 39 Quickstoppers
- 40 A Day in the Life

ON THE COVER

The 305th and 514th Air Mobility Wings bid farewell to their last KC-10 Extender set for retirement during a ceremony at Joint Base McGuire-Dix-Lakehurst, NJ, June 21, 2023. The retirement of the final KC-10 Extender represents a transition toward a more modern and advanced Total Force tanker enterprise.

USAF photo by SrA Sergio Avalos

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Just Culture, Proactive Safety, and Mishap Prevention



DEPARTMENT OF THE AIR FORCE HEADQUARTERS AIR MOBILITY COMMAND

MEMORANDUM FOR 18 AF/CC
USAF EC/CC
AMC/SE
AMC WING COMMANDERS

FROM: AMC/CC
510 POW/MIA Drive
Scott AFB IL 62225-5310



SUBJECT: Just Culture, Proactive Safety, and Mishap Prevention

1. As we *Accelerate Change to Win*, I ask you and your Airmen to join me in committing to full integration of mishap prevention within every facet of our mobility enterprise. The ability to meet our Pacing Challenge depends on the trust, faith, and teamwork that is only fostered through a strong and authentic Just Culture.
2. *Just Culture* empowers our Airmen to identify hazards and errors that might otherwise go unnoticed. AFI 91-202 describes this as a foundation that "encourages personnel to provide safety-related information without fear of reprisal. Leaders establish a *Just Culture* environment by encouraging hazard and error reporting for safety analysis and mishap prevention purposes. At the same time, they must understand and promote the idea that more can be learned through full reporting and detailed investigation of safety issues than by assigning blame and punishment. Leaders must also establish clear guidelines on acceptable and unacceptable behavior." Errors are an inherently human occurrence. Regardless of our best intentions, experience, or training, we are all susceptible to unintentional mistakes. While maintaining accountability to standards, a *Just Culture* capitalizes on errors as an opportunity to understand and address vulnerabilities and transform those errors into powerful lessons learned that are accessible and beneficial to the entire organization.
3. Our *Just Culture* is the foundation of all of our proactive safety programs, to include the Aviation/Airman Safety Action Program (ASAP), Military Flight Operations Quality Assurance (MFOQA), and Line Operations Safety Audit (LOSA). The success of these programs relies upon the active participation of every Airman. This level of participation can only be achieved by an organization that exhibits mutual trust where Airmen are encouraged to report hazards and errors with the knowledge that leaders respect the difference between acceptable mistakes and unacceptable behavior.
4. I am very proud of what AMC Airmen do each and every day. I expect commanders and supervisors at all levels to internalize a *Just Culture* and encourage their subordinates to participate in our proactive safety programs so that risks to our operations can be identified, assessed, and mitigated.

MICHAEL A. MINIHAN
General, USAF
Commander

**AIR MOBILITY WARRIORS
PROJECTING DECISIVE STRENGTH AND DELIVERING HOPE... ALWAYS!**

The USAF Expeditionary Center: Forging Warrior Hearts

BY MRS. LAUREN FOSNOT, STAFF WRITER



U.S. Air Force Expeditionary Center Commander Maj Gen John Klein, attending a brief while visiting Yakumo Air Base, Japan, as part of Mobility Guardian 23, July 13, 2023.

USAF photo by TSgt Alexander Cook

THE USAFEC BY THE NUMBERS

With more than 14,000 Airmen, the center is comprised of the Air Force Expeditionary Operations School, five AMC wings and two stand-alone groups, including the 515th Air Mobility Operations Wing, the 521st Air Mobility Operations Wing, the 87th Air Base Wing, the 628th Air Base Wing, the 621st Contingency Response Wing, the 43d Air Mobility Operations Group, and the 627th Air Base Group.

The U.S. Air Force Expeditionary Center (USAFEC) at Joint Base McGuire-Dix-Lakehurst, NJ, plays a vital role in preparing Airmen for the challenges of modern warfare. As a critical component of Air Mobility Command (AMC), the USAFEC serves as the USAF’s Center of Excellence for Expeditionary Agile Combat Support and Rapid Global Mobility training and education.

Maj Gen John Klein, Commander of the USAFEC, explains that the center never ceases to strive to meet its mission of “Airpower ... from the Ground Up!”

The USAFEC embodies four core mission sets:

1. Expeditionary Warfare and Training: to help Airmen excel in complex, often challenging, environments worldwide.
2. Contingency Response (CR): to ensure Airmen can rapidly deploy to support contingencies and humanitarian crises around the globe.
3. Enroute Mobility Support: to provide the logistical support needed for effective missions.
4. Joint Basing Installation Support: to supply the infrastructure needed to optimize support.

According to Klein, the center recently released its fiscal year 2024 (FY24) USAFEC Strategy to strengthen its alignment with the 2023 National Defense Strategy. The FY24 USAFEC Strategy builds upon the previous years’ and focuses on five key lines

of effort “to drive the mission and be ready for the high-end FIGHT:”

1. Forge Warrior Hearts
2. Integrate Training and Certification
3. Global Air Mobility Support System (GAMSS) Command, Control, and Connectivity
4. Hone Next-Generation Capabilities
5. Transform USAFEC’s Enterprise Management

These components help set the FY24 Strategy’s primary focus on the need to sustain and strengthen U.S. deterrence against the pacing challenge as well as advance a focus on collaboration with a growing network of U.S. allies and partners on shared objectives, Klein stated.

This focus was especially evident in the USAFEC’s participation in Mobility Guardian 2023 (MG23), an AMC-hosted global exercise, in which the center was able to exercise the ability to explode into theater.

“Total Force CR units and newly validated Air Mobility Teams deployed to the first and second island chains, enabling this impressive display of Rapid Global Mobility in the Pacific,” Klein explained. “Our FY24 Strategy solidifies those lessons learned from MG23 and translates them into hard targets to make ourselves venerable and prepared institutionally to prevail in a high-end fight.”

Although consistently exceeding expectations and limits, the USAFEC never leaves safety behind. “We are



Maj Gen John Klein, U.S. Air Force Expeditionary Center Commander, prepares a pallet at Andersen Air Force Base, Guam, Dec. 2, 2023.

USAF photo by SrA Victoria Hommel

constantly reviewing our real-world operations and exercises to find ways to improve the safety of our missions," Klein said, having recently completed a case study from an exercise in September 2022.

The case study reviewed an exercise in which the center's CR forces were operating out of a bare-base airfield in rural Alaska. According to Klein, the terrain and weather were harsh and unforgiving, underpinning the paramount importance of safety. Overall, there was a period in which the forces could not be transported off a remote island due to weather, leaving them essentially stranded. Fortunately, this mission was an exercise, and the Air Operations Center was able to recover the Airmen without incident.

"What this vignette provides is the imperative to get GAMSS command,

control, and connectivity right, so we don't lose contact with our teams in an Area of Operations as vast as the Pacific," the Commander asserted.

Klein, who says he "grew up in AMC," has a background in the Pacific. "I cut my teeth as a pilot and as a young officer flying in and around Asia, and that experience has provided me with an appreciation of the vast expanse of the Pacific," he said. "And what does that have to do with commanding the USAF Expeditionary Center here in New Jersey? The Expeditionary Center plays an indispensable role in overseas mobility operations. We provide the footprint, structure, and manpower."

The Commander explains the center also manages GAMSS. GAMSS is the engine that lays the foundation for the logistics of any future conflict. The USAFEC accomplishes this objective by not only providing a footprint that spans 42 locations across 24 countries, but also by bringing to bear the nation's CR forces. These CR

forces can (and have!) quickly deploy anywhere around the globe in support of a contingency or humanitarian crisis. "As we like to say, 'There is no Air Mobility without Air Mobility Support,'" the Commander stated.

The USAFEC's mission, "Airpower ... from the Ground Up!" holds true as the center never stops aiming high.

"We are on the precipice of something great," Klein said. "Our team of Airmen have been running hard and fast. I have been out to visit the Airmen in their work centers, on the flightline, in the back of a Herk; I see them and value the work they are doing to harden themselves and prepare AMC for the future."

As the Commander emphasizes, the dedication of the center and its Airmen is unwavering. Their efforts are a testament to the ongoing commitment of the USAF to maintain readiness and adapt to meet the challenges of an ever-changing world. 🇺🇸


Air Mobility Command Welcomes New Director of Safety, Col John B. Kelley

Hello from lovely Scott Air Force Base, Illinois. I'm Col John Kelley, your new Air Mobility Command (AMC) Director of Safety. I am excited and honored to join the ranks of safety professionals at such a dynamic and pivotal time for our Air Force. My career has intersected with safety many times—as an aircrew member flying combat sorties over Afghanistan and Iraq, as a planner and strategist on staff, as a squadron and deputy wing commander leading Airmen, and as a “Senior” controlling missions on the 618th Air Operations Center operations floor. With each position and duty, I gained a more comprehensive appreciation of how foundational safety culture is to airpower’s success. I learned firsthand throughout my Air Force journey how a strong safety culture focused on mishap prevention and risk mitigation is a combat capability multiplier, enabling more lethality while protecting Airmen.

If your journey in the Air Force is anything like mine, you have been the recipient of many lectures on hazards and mishap prevention. From cold weather driving dangers to the 101 critical days of summer, few activities in the Air Force are as ubiquitous as a squadron safety briefing. Whether those briefings focus on flight crew safety, confined space safety, or weapons safety, we grow up in our respective fields with mishap prevention. Mishap prevention and proactive safety practices are the gifts our predecessors passed on to keep us safe. However, mishap prevention is one-half of the safety mandate. The concept of risk mitigation is equally important.

Risk mitigation is one of the four pillars of the Air Force Safety Management System but, often, one of the least understood. Risk management is the key to mishap prevention and integral to mission effectiveness and exploiting opportunities to increase warfighting capability with minimal cost of resources. Great Power Competition and the challenges of facing peer adversaries in conflict demand Airman warfighters understand not only the inherent risks involved in military operations but also when increased risk may be necessary or even beneficial. Identifying the situational risks, who can accept those risks, and how to use the available tools to mitigate the risks are skills we all need to hone.

Understanding risk identification, mitigation, and acceptance is a critical skill for the next challenges we face as AMC and as an Air Force. The demands on our Mobility Airmen will only go up as we train and prepare for Great Power Competition. During the next year, I will discuss different aspects of risk and how Airmen can use risk understanding to make better decisions both on and off duty and in training and combat.

Again, I am honored to be a part of our command safety team as we embrace Great Power Competition as only Mobility Airmen can. Fly, Fix, Support—Let's Go! 



Risk management is the key to mishap prevention and integral to mission effectiveness and exploiting opportunities to increase warfighting capability with minimal cost of resources.

We welcome your comments on Safety and Risk: AMC-SE@US.AF.MIL

THE DIRTY DOZEN:

Common Human Error Factors in Aircraft Maintenance Mishaps

BY THE AIR EDUCATION AND TRAINING COMMAND SAFETY DIRECTORATE

To better equip aircraft maintainers to combat the risks they encounter daily, Air Education and Training Command Safety (AETC) is leveraging what one safety expert termed “The Dirty Dozen.” This list identifies 12 of the most common human error factors leading to aircraft maintenance mishaps. This list is by no means all-inclusive, but it includes some of the most frequent elements that influence people in the maintenance community to make mistakes. Understanding these hazards enables maintainers to avoid costly and dangerous errors.

Whether maintaining a legacy airframe with decades of “lessons learned” or a fifth generation aircraft with advanced automated aircraft health management and troubleshooting systems, The Dirty Dozen affects everyone.

“When we choose to let these 12 human factors catalyze unnoticed, the probability and severity of mishaps increase,” said MSgt Clinton Gessler, AETC Safety Directorate Flight Safety Senior Noncommissioned Officer. “However, when we deliberately allocate time and energy toward accomplishing the basics of maintenance—tool accountability, FOD (foreign object damage) walks, cleaning up spills, following tech data, and paying attention to details—we reduce the likelihood of a mishap occurring.”



Drawing from SKYbrary (<https://www.skybrary.aero/>), an electronic repository of aviation safety knowledge, the following information identifies and defines The Dirty Dozen and provides suggested countermeasures to reduce risks posed by each of these hazards.

THE LIST

1. **Lack of Communication**
2. **Complacency**
3. **Lack of Knowledge**
4. **Distraction**

5. **Lack of Teamwork**
6. **Fatigue**
7. **Lack of Resources**
8. **Pressure**
9. **Lack of Assertiveness**
10. **Stress**
11. **Lack of Awareness**
12. **Norms**

LACK OF COMMUNICATION

Poor communication often appears at the top of contributing and causal factors in accident reports and is, therefore, one of the most critical human factor elements. Communication refers to transmitter and receiver, as well as the method of transmission. Transmitted instructions may be unclear or inaccessible. The receiver may make assumptions about the meaning of these instructions, and the transmitter may assume the message has been received and understood. With verbal communication, it is estimated only 30 percent of a message is received and understood.

Detailed information must be passed before, during, and after any task, and especially across the handover of shifts. Therefore, when messages are complex they should be written down. Organizations should encourage full use of logbooks,

worksheets, checklists, etc. Furthermore, for critical operations, such as towing or jacking an aircraft or conducting an engine run, ensure all team members understand their roles and expectations and what to do if things go wrong. This extra communication may add time to tasks, but even one mishap costs much more time to sort out and may result in loss of life.

COMPLACENCY

Complacency comes from familiarity with a task accompanied by loss of awareness of potential dangers. Such a feeling often arises when conducting routine activities that have become habitual and may be considered by an individual (sometimes by the whole organization) as easy and safe. With less vigilance, important warning signs can be missed.

Complacency can also occur following a highly intense activity, such as recovering from a possible disaster. The relief felt at the time can result in physical relaxation and reduced mental vigilance and awareness.

Although too much pressure and demand cause over-stress and reduced human performance, too little pressure results in under-stress, boredom, and complacency, which can also result in reduced human performance. Therefore, when conducting simple, routine, and habitual tasks, and when fatigued, it is important to maintain an adequate, or optimum, level of stress through different stimulation. Always assume you can make a mistake if not careful. Following written instructions and adhering to procedures that increase vigilance, such as inspection routines, can provide suitable stimulus. It is important to avoid

working from memory, assuming something is okay when you have not checked it, and signing off on work you are unsure has been completed. Teamwork and mutual cross-checking provide adequate stimulus when fatigued. If supervising, be actively involved in the activities of your subordinates in a positive, motivating way. Effective leadership means helping our Airmen stay actively engaged with their tasks by ensuring they perform with excellence, while also teaching them how to do so.

LACK OF KNOWLEDGE

The regulatory requirements for training and qualification can be comprehensive and organizations must enforce these requirements. Otherwise, lack of on-the-job experience and specific knowledge can lead workers into misjudging situations and making unsafe

decisions. Aircraft systems are so complex and integrated that it is nearly impossible to perform many tasks without substantial technical training, current relevant experience, and adequate reference documents. Furthermore, systems and procedures can change substantially and employees' knowledge can quickly become out-of-date.

It is important for employees to undertake continuing professional development and for the most experienced workers to share their knowledge with colleagues. Part of this learning process should include the latest knowledge on human error and performance. It should not be taken as a sign of weakness to ask someone for help or for information; in fact, this should be encouraged. Checklists

and publications should always be referred to and followed. Never make assumptions or work from memory.

Finally, good leaders help their subordinates see value in investing in their own expertise. Encourage intellectual curiosity and independent study of the more technical subjects associated with aircraft maintenance.

DISTRACTION

Distraction could be anything that draws a person's attention away from their task. Some workplace distractions are unavoidable, such as loud noises, requests for assistance or advice, and day-to-day safety problems requiring immediate solutions. Other distractions can be avoided or delayed until more appropriate times, such as messages from home, management decisions concerning non-immediate work

12 MAINTENANCE HAZARDS

DIRTY DOZEN

DISTRACTIONS

Where was I on this task again?

If interrupted, go three steps back on the checklist

If she looks focused, I should wait to ask a question

What else do I need to finish before I start the task to avoid interruption?

Would you like to know more?

Need to report a Hazard? Scan here to file an ASAP!

(e.g., shift patterns, leave entitlement, meeting dates, administrative tasks), and social conversations.

Psychologists say distraction is the number one cause of forgetting things, hence the need to avoid becoming distracted and to avoid distracting others. Humans tend to think ahead. Thus, when returning to a task following a distraction, we tend to think we are further ahead than we actually are.

To reduce errors from distraction, it is best to complete a task before responding. If the task cannot be completed without hurrying, then we can prominently mark (or “lock off”) the incomplete work as a reminder to ourselves and anyone else who may complete the work. When returning to work after being distracted, it is a good idea to commence at least three steps back, so we retrace some steps before picking up the task again. If necessary, having someone else double-check our work using a checklist may be appropriate and useful.

Management has a role to play in reducing the distractions placed on their employees. This may involve good workspace design, management of the environment, and procedures that create “safety zones,” “circles of safety,” or “do not disturb areas” around workers engaged in critical tasks.

Finally, when approached by a co-worker during a critical task, Airmen of all ranks are encouraged to respectfully communicate their need to complete the task before responding. If you need a minute to get to a logical pause in what you are doing, say so. “Can I get back to you in three minutes? I’m on step two of four on this checklist, and I don’t want to miss anything.”

LACK OF TEAMWORK

In aviation, many tasks and operations are team affairs. No single person (or organization) can be responsible for the

Humans tend to underestimate our level of fatigue and overestimate our ability to cope with it. Therefore, it is important that workers remain aware of the signs and symptoms of fatigue—in themselves and others.

safe outcomes of all tasks. However, if someone is not contributing to the team effort, this lack of effort can lead to unsafe outcomes. Workers must rely on colleagues and outside agencies, as well as give others their support. Teamwork consists of many skills each team member needs to prove competence.

Some key teamwork skills include leadership, followership, effective communication, trust building, motivation of self and others, and praise giving. To create an effective team, it is necessary that the following issues, as appropriate, are discussed, clarified, agreed on, and understood by all team members:

- Clearly defined and maintained aim(s) or goal(s)
- Each team member’s roles and responsibilities
- Communication messages and methods
- Limitations and boundaries
- Emergency procedures
- Individual expectations and concerns
- What defines a successful outcome
- Debriefing arrangements
- Team dismissal arrangements
- Opportunities for questions and clarification

A team’s effectiveness can also be improved through the selection of team members to reflect a broad range of experience and skill sets, as well as through practice and rehearsal.

Good team players ensure the team is all on the same page before any critical task.

FATIGUE

Fatigue is a natural physiological reaction to prolonged physical and/or mental stress. We can become fatigued following long periods of routine work and shorter periods of hard work. When fatigue becomes a chronic condition, it may require medical attention, but workers should never self-medicate! As we become more fatigued, our ability to concentrate, remember, and make decisions reduces. Therefore, we are more easily distracted, and we lose situational awareness. Fatigue can also negatively affect a person’s mood.

Humans tend to underestimate our level of fatigue and overestimate our ability to cope with it. Therefore, it is important that workers remain aware of the signs and symptoms of fatigue—in themselves and others. Fatigue self-management involves a three-sided program of regular sleep, healthy diet (including reduced use of alcohol), and exercise. Work of a critical and complex nature should not be programmed during the low point on the body’s circadian rhythm (usually 3 to 5 a.m.). In addition, when fatigued, always get someone else to check your work.

Moreover, it is estimated that 80 percent of the body's calories are burned by the brain as it processes the complex problems we encounter daily. Some maintenance tasks are physically challenging, but long hours of problem-solving and intense mental engagement can create fatigue as well.

Finally, if you feel tired but your mission demands you continue, communicate your fatigue to your team and supervisor. Your supervisor needs to know if your decision-making suffers or your fatigue otherwise makes your situation hazardous for you or your teammates.

LACK OF RESOURCES

If all parts are not available to complete a maintenance task, there may be pressure to complete the task using old or inappropriate parts. In addition, a lack of other resources—whether personnel, time, data, tools, skill, experience, or knowledge—can interfere with one's ability to complete a task. In some cases, the resources available, including support, are of low quality or inadequate for the task.

When the proper resources are available and at hand, there is a greater chance we will complete a task more effectively, correctly, and efficiently. Therefore, forward planning to acquire, store, and locate resources is essential. Properly maintaining the available resources, including the humans in the organization, is also key.

Ensure resource shortfalls are communicated to your supervisor, and if you are a supervisor, ensure they are passed up the chain of command. Commanders may have to assume risk to complete mission tasks without

sufficient resources, but they rely on you to ensure they are aware of where those gaps are. Do not assume someone else informed leadership about the problem, and guard against cutting corners to “make it happen” without the required resources to complete the mission.

PRESSURE

Pressure is to be expected when working in a dynamic environment, especially in combat. However, when pressure to meet a deadline interferes with our ability to complete tasks correctly, then it has become too much. It is the old argument of quantity versus quality, and in aviation, we should never knowingly reduce the quality of our work. Pressure can be created by lack of resources, especially time, and from our own inability to cope with a situation. We may come under direct

or indirect pressure from the organization/company, clients, and even our colleagues. However, one of the most common sources of pressure is within us. We put pressure on ourselves by taking on more work than we can handle, especially other people's problems, by trying to save face or positively promoting superpowers we do not possess. These poor judgments are often the result of making assumptions about what is expected of us.

Learning assertiveness skills allows a worker to say, “No! Stop!” and communicate concerns with colleagues, clients, and the organization. These skills are essential. When deadlines are critical, then extra resources and help should always be obtained to

ensure the task is completed to the required level of quality.

The bottom line is we need to generate airpower at the right time and place to achieve the desired effects in combat. However, a task done poorly may cause mission failure, and an on-time failure is still just that: failure.

LACK OF ASSERTIVENESS

Being unable to express our concerns and not allowing others to express theirs creates ineffective communications and damages teamwork. Unassertive team members can be forced to go with a majority decision, even when they believe it is wrong and dangerous to do so.

Assertiveness is a communication and behavioral style that allows us to express feelings, opinions, concerns, beliefs, and needs in a positive and

productive manner. When we are assertive, we also invite and allow others to assert themselves without feeling threatened or undermined. Speaking one's mind assertively is not to be confused with aggression. It is about communicating directly, honestly, and appropriately, giving respect to the opinions and needs of others without compromising our own standards.

Assertiveness techniques can be learned. They focus on keeping calm, being rational, using specific examples rather than generalizations, and inviting feedback. Most importantly, any criticisms should be directed at actions and their consequences rather than people and their personalities. This approach allows others to maintain their dignity and a productive conclusion to be reached.

Any Airman is empowered to call, "Knock it off!" before a mishap occurs. It is better to stop, take a breath, and ensure critical steps have not been overlooked before metal gets bent or people get hurt.

STRESS

There are many types of stress. Typically, there are two distinct types in the aviation environment—acute and chronic. Acute stress arises from real-time demands on our senses, mental processing, and physical body, such as dealing with an emergency or working under time pressure with inadequate resources. Chronic stress is accumulated and results from long-term demands on an individual's physiology by life's demands, such as family relations, finances, illness, bereavement, divorce, or even winning the lottery. When we suffer stress from these persistent and long-term life events, it can mean our threshold of reaction to demands and pressure at work can be lowered. Thus, at work we may overreact inappropriately, too often and too easily.

As with fatigue, sleep, diet, and exercise are all important factors in helping to reduce stress and build resilience to stressors. If stress is chronic, then definite lifestyle changes are required.

Some early visible signs of stress include changes in personality and moods, errors of judgment, lack of concentration, and poor memory. Individuals may notice difficulty in sleeping and an increase in fatigue, as well as digestive problems. Longer-term signs of stress include susceptibility to infections, increased use of stimulants and self-medication, absence from work, illness, and depression.

It is important to recognize the early signs of stress and to determine whether it is acute or chronic. Coping with daily demands at work can be achieved with simple breathing and relaxation techniques. Perhaps more effective is having channels of communication readily available through which to discuss the issue and help to rationalize perceptions. It is entirely appropriate some of these channels involve social interaction with peers. As with fatigue, sleep, diet, and exercise are all important factors in helping to reduce stress and build resilience to stressors. If stress is chronic, then definite lifestyle changes are required. These changes must be achieved with support from the organization. Organizations should, therefore, have employee assistance (or well-being) policies that include stress reduction programs.

As with many of these factors, communication is key. Let your supervisor know if your personal stressors are affecting you at work. They may not be aware of how factors external to what they see when you are at work may be adding to your total stress.

LACK OF AWARENESS

Working in isolation and only considering one's own responsibilities can lead to tunnel vision, a partial view, and a lack of awareness of how our actions can affect others and the wider task. This lack of awareness may also result from other human factors, such as stress, fatigue, pressure, and distraction.

One problem with "channelized" attention is it prevents you from noticing key events happening around you that may affect your task. If you are so focused on prepping for an engine run that you fail to notice someone else "borrowed" your fire bottle before the start, you may wish you had been aware of what was happening so you could intervene at the time, rather than delaying the engine run for 30 minutes to find the required fire suppression.

Additionally, you may lack awareness of how your task relates to everything that comes after it. Understanding the "why" helps you remember the "how" to do it correctly and "what" can result if you do not. It is important to build experience throughout our careers, especially concerning the roles and responsibilities of those we work with and our place in the wider team. Developing our foresight is essential in preempting the effects our actions may have on others. Furthermore, asking others to check our work and challenge our decisions helps us gain relevant experience and expands our awareness as well as theirs.

Combat lack of awareness through good communication and asking

Norms can be tough to challenge because they are often deeply entrenched in the culture of the organization. However, if a norm is creating a hazardous environment, do not accept it.

questions. If you do not know “why” you are doing something, ask! If your supervisor does not have time to explain it, hold on to your question and follow up with them once the task at hand is complete. If you are the supervisor, anticipate “why” questions and answer them as thoroughly as time/opportunity will allow. If you do not know the answer, admit it, find the answer, and follow up with your Airmen.

NORMS

Workplace practices develop over time, through experience, and often under the influence of a specific workplace culture. These practices can be good or bad, safe or unsafe. They are referred to as “the way we do things around here,” which become norms. Unfortunately, such practices follow unwritten rules or behaviors, which deviate from the required rules, procedures, and instructions. These norms can then be enforced through peer pressure and force of habit. It is important to understand most norms have not been designed to meet all circumstances and, therefore, are not adequately tested against potential threats. They also lack flexibility when the broader situation changes. Norms that were good enough on fourth generation fighters may not work for fifth generation aircraft, especially when every mistake costs much more to repair.

Compliance with regulatory guidance should be the first norm in any

12 MAINTENANCE HAZARDS

DIRTY DOZEN

NORMS

If it doesn't look right, it may not be right, even if "it's the way we always do it"

"Because" isn't good enough. Look it up in the T.O.!

Doing it the right way may challenge the culture

If the norms aren't right, set the new norm!

Would you like to know more?

Need to report a Hazard? Scan here to file an ASAP!

maintenance organization. Rules and procedures have been designed and tested and, therefore, ought to be enforced and followed rigorously. When workers feel pressure to deviate from a procedure or work around it, this information should be fed back so the procedure can be reviewed and amended, if necessary.

Norms can be tough to challenge because they are often deeply entrenched in the culture of the organization. However, if a norm is creating a hazardous environment, do not accept it. Study the written guidance and respectfully challenge

the norm using factual data whenever possible. This challenge will require assertiveness and good communication, but if you are new to the unit, you may be the only one who is still outside the culture enough to see the real risk the norm creates. This may mean you stay on the outside a little longer, which can be tough, but you may save a life. Change must start somewhere, with someone bold enough to ask tough questions.

Ultimately, if you have alerted your chain of command to unsafe norms without success, changing norms may require you to go outside of your unit. If necessary, consider talking to wing safety or the wing Inspector General rather than accept a hazardous situation.

NOTE: Following is a link to the Airman Safety App (ASAP), which allows Airmen to report safety-related risks and close calls using the Airman Safety Action Report. Anyone, anywhere, with almost any device, can quickly and easily report safety-related problems involving personnel, equipment, or property. Remain anonymous if you wish. Reporting is the first step to obtaining a solution for improvement. Reporting is simple and only takes between three and 10 minutes. Click on the following link to start your report. It is fast and easy!

<https://asap.safety.af.mil/#/>

Human Factors Analysis and Classification System 8.0

BY MR. KEVIN SLUSS, CSP, AMC FLIGHT SAFETY

The Human Factors Analysis and Classification System (HFACS) has been used by Department of Defense (DoD) safety investigators since 2011. Originally developed by Dr. Douglas Wiegmann and Dr. Scott Shappell for the Navy, the system was incorporated into the Air Force Safety Automated System (AFSAS) to provide a structured tool with a standardized set of definitions of human factors and system failures organized in a taxonomy. It focuses on analyzing flaws in the safety management system instead of individual failure. In this article, you will find updates to the latest version of HFACS, v8.0.

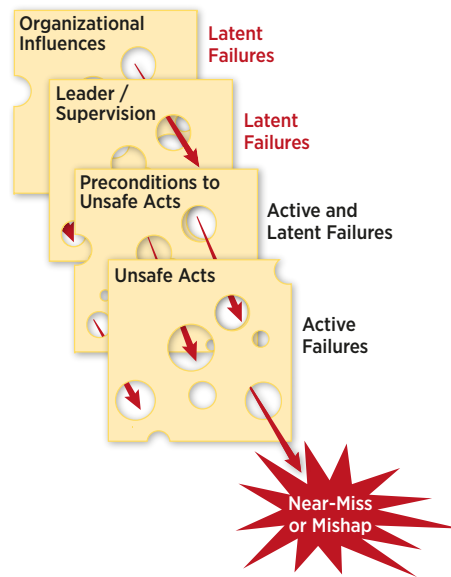


Figure 1. “Swiss Cheese” Model

HFACS was founded on the “Swiss Cheese” model, a common investigation tool developed by James Reason in 1990 (Figure 1). Most people look at an incident scene and see the most recent actions that led to the event. The model calls these “unsafe acts,” and describes them as active failures. To find the root cause, Reason argued, one must look deeper into the preconditions that led to the unsafe acts. These unsafe acts could be active failures but could also include some latent failures—failures existing in the mental or physical environment that may have contributed to the incident. One should also examine supervisory influences—latent failures created by the supervisory chain that led to the preconditions. Finally, one should review organizational influences to find the latent failures present in the culture or the organization, such as regulations or informal guidance. Finding solutions at the higher levels that would have prevented the event in question could then prevent a broader range of potential incidents.

What HFACS does is codify this model into specific terms, called “nanocodes.” A hierarchy was developed for each level, using standardized language, to define flaws in the safety management system instead of individual failure. This structure provides an easy-to-follow framework for analysis, helps investigators determine why something happened, aids in targeting the need for specific interventions, and can be useful in developing interview questions for mishap investigations and hazard inspections. Figure 2 shows an example of how HFACS is used.

Department of Defense Instruction (DoDI) 6055.07 requires the heads of the DoD components to “Collect, maintain, analyze, and report human error, human factors, and human performance data identified in safety investigations” and to use “a common human error categorization system that involves a human factors taxonomy accepted among the DoD Components.” Department of the

Air Force Instruction (DAFI) 91-204, *Safety Investigations and Reports*, cites DoD Human Factors Analysis and Classification System codes in several places to enable tracking of human factors in the AFSAS database.

So, why revise HFACS? The previous version was heavily aviation-based and thus required “creative interpretation” to use for nonaviation mishaps. Also, the system needed to move from exclusive use by human factors experts to the broader safety investigator audience. Further, emotion-laden language was edited to push the system to focus on system inadequacies and mishap prevention. Here is a specific example:

- In v7.0, the definition for code SP006 read as follows—

SP006 Performed Inadequate Risk Assessment—Formal: Is a factor when supervision does not adequately evaluate the risks associated with a task or when pre-mission risk assessment tools/programs are inadequate.

- In v8.0, the definition for code SP006 reads—

SP006 Ineffective Deliberate Risk Assessment: Is when supervision/leadership did not effectively apply DoD risk management procedures (*identify hazards, assess hazards, develop controls, implement controls, supervise and evaluate*) during pre-mission activity, event planning, or a job hazard analysis (JHA) which resulted in hazardous conditions and/or unsafe acts. This [code] includes assessment of all hazards such as crew/team composition, etc.

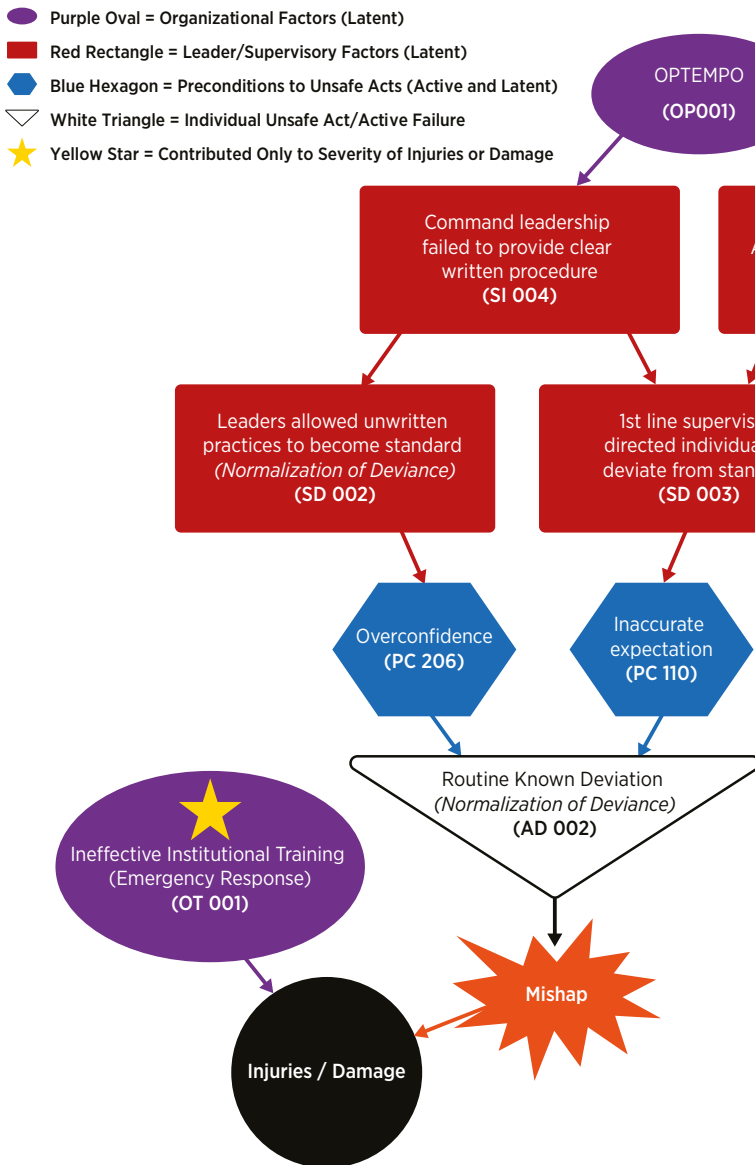


Figure 2. HFACS example

(Examples include: Did not have enough trained, licensed, certified, or qualified personnel to safely operate the amount of vehicles or equipment available, or not enough personnel with specific occupational specialties required for the task or mission.)

Next are examples of changes by tier. In each tier, many existing sub-tier codes were recoded, and some new codes were added. For Organizational Influences, a new sub-tier called "Training Program Issues (OT)" was added. HFACS experts recognized that training-related information (to include currency and proficiency) was

not being adequately captured, thus preventing implementation of more effective training practices (formal and informal). The new sub-tier reflects this new code.

For Supervision/Leadership, a new sub-tier was added called "Unit Safety Culture (SC)," which contains two new sub-codes: SC101 Unit Safety Culture and SC102 Pace of OPTEMPO (operations tempo)/Workload. Four new codes were added to the sub-tier Ineffective Planning and Coordination: SP008 Ineffective Pre-Mission Planning, SP009 Unit Failure to Provide Sufficient Operational

Information Resources, SP010 Unit Failure to Provide Sufficient Manning/Staffing, and SP011 Unit Failure to Provide Sufficient Equipment or Supplies.

For Preconditions, the Sensory Misperception sub-tier was deleted, and its codes were recoded or combined with other codes. Several other codes were likewise combined. A new sub-tier, "Training (PT)," was added with four new codes and one revised code.

Unsafe Acts are now categorized as either Errors (performance/skill-based errors or judgment and decision-making errors), or Known Deviations (compared with the previous category named "Violations").

For Air Force safety investigators, HFACS is built into AFSAS. Most reports will not allow submission of the final message unless an HFACS code is identified. More in-depth information can be located on the Air Force Safety Center public website at: <https://www.safety.af.mil/Divisions/Human-Performance-Division/HFACS/>.

My thanks go to my colleague Chris Acord at the U.S. Army Combat Readiness Center, who serves on the Joint Services Safety Chiefs (JSSC), Human Factors Working Group (HFWG), for most of the material in this article.

Source: Update to the Department of Defense Human Factors Analysis and Classification System

(DoD HFACS) version 8.0, Author: Mr. Christopher R. Acord, Directorate of Analysis and Prevention, U.S. Army Combat Readiness Center. Presented at the Joint Professional Development Seminar, April 2023.

References

Reason, J. 1990. *Human Error*. New York, NY: Cambridge University Press.

U.S. Department of Defense Instruction (DoDI) 6055.07, *Mishap Notification, Investigation, Reporting, and Record Keeping*. June 6, 2011.

U.S. Department of the Air Force Instruction (DAFI) 91-204, *Safety Investigations and Reports*. 10 March 2021.

Wiegmann, Douglas A., and Scott A. Shappell. 2003. *A Human Error Approach to Aviation Accident Analysis: The Human Factors Analysis and Classification System*. London, UK: Ashgate Publishing Company.



Gen Mike Minihan, Air Mobility Command Commander, and CMSgt of the Air Force JoAnne S. Bass deliver their keynote addresses during the 55th Annual Airlift/Tanker Association Convention, Nov. 9, 2023, in Grapevine, Texas. USAF photos by MSgt Jodi Martinez



The 2023 A/TA Convention: *Irreversible Momentum*

BY MRS. LAUREN FOSNOT, STAFF WRITER

The overall theme at the 55th Annual Airlift/Tanker Association (A/TA) Convention and the A/TA Air Mobility Symposium & Technology Exposition was clear: Air Mobility Command (AMC) is dedicated to ensuring the United States can meet the complex challenges posed by the rise of China as a global power.

The conference featured keynote speakers and seminars on shaping Mobility Warriors who effectively project the Joint Force and America's lethality. In an era marked by strategic competition, AMC's commitment to readiness is central to safeguarding American interests. The increasingly dynamic geopolitical environment means it is essential for AMC to maintain strong and agile forces.

That is why, at the 2023 A/TA convention, United States Air Force (USAF) leaders emphasized complacency is not an option; as AMC Command CMSgt Jamie L. Newman shared, Mobility Warriors can never be too ready.

A/TA is a cornerstone event that catalyzes collaboration, recognition, and education within the air mobility community. Event attendees included members from active duty, Reserve, National Guard, Department of Defense Civilians, retired military, and the aerospace industry. Among the guests were USAF leaders, including CMSgt of the Air Force JoAnne S. Bass; Gen Mike Minihan, Commander of AMC; Lt Gen Brian Robinson, Commander of Air Education and Training Command; Lt Gen Tony D. Bauernfeind, Commander of Air Force Special Operations Command; AMC Command CMSgt Jamie L. Newman; and many more great leaders.

This year's convention occurred at the Gaylord Texan Resort & Convention Center in Grapevine, TX, November 9-12.

For those who attended, it was evident that the time to prepare for anything is now, especially with the preminent threats in the Indo-Pacific area of operations (AOR). In recent exercises, such as Mobility Guardian

2023 (MG23) in the Indo-Pacific AOR, Mobility Airmen were challenged to operate in chaotic, contested environments. Exercises are important, as emphasized at the 2023 A/TA events, for pressure must be simulated within them to increase readiness.

According to Minihan, MG23 "was designed to make it hard so that we could get the insights that we need to get better. And you demonstrated to the Air Force ... and to the world that we can thrive when things weren't perfect." The general stressed that Airmen must embrace the opportunity to shape the environment—not just react to it.

The ability to rise to the occasion and grow stronger than any challenges faced is what Minihan refers to as "irreversible momentum." The concept is about driving forward with determination and resolve, setting ambitious goals, and achieving them with unwavering commitment. The General set an aggressive timeline to achieve this ambitious outcome—June 30, 2024—mentioning that AMC has



CMSgt Jamie Newman, Air Mobility Command Command Chief, delivers his keynote address during the 55th Annual Airlift/Tanker Association Convention, Nov. 11, 2023, in Grapevine, Texas.
 USAF photo by MSgt Jodi Martinez



Lt Gen. Randall Reed, Air Mobility Command Deputy Commander, speaks to industry partners for the Final Industry Preview during the 55th Annual Airlift/Tanker Association Convention, Nov. 8, 2023, in Grapevine, Texas.
 USAF photo by MSgt Jodi Martinez



Lt Gen John Healy, Chief of the Air Force Reserve and Commander of Air Force Reserve Command, delivers his keynote address during the 55th Annual Airlift/Tanker Association Convention, Nov. 11, 2023, in Grapevine, Texas.
 USAF photo by MSgt Jodi Martinez

For information about future A/TA conventions, please visit <https://www.atalink.org>.

ABOUT A/TA

A/TA is an organization with a noble mission: to ensure that the American military retains the air mobility capabilities necessary for implementing U.S. national security strategy. As a Section 501(c)(3)e tax-exempt organization, A/TA is committed to serving as a platform for professionals, both military and civilian, and industry supporters to come together and advance the vital field of air mobility. With its international scope and diverse membership, the A/TA plays a pivotal role in shaping the future of military aviation.

done the crawl, walk, and run, and now it is time for the sprint.

This sprint involves being more ready, integrated, and agile; this preparedness must aggressively close any gaps, for much is at stake. “Our prestige, our freedom, all the things we cherish are in jeopardy if we don’t do it right,” Minihan declared. “And there is nothing more powerful than an American team that believes in itself—and this team does! We’ve got this. We absolutely got this.”

The USAF, as a whole, is fighting to fill these gaps. Secretary of the Air Force Mr. Frank Kendall III, in a September 2023 memo, wrote that the USAF is not postured for great power competition. Still, its leaders across the board are focused on ensuring the Air Force is re-optimized to be the force the nation needs at any time and at any place.

Bass also spoke along these lines, stating that “sophisticated enemies” have been “moving out fast, and every one of our Airmen serving in today’s military has to understand that. What

I ask every single one of our Airmen is, I just ask you to make your service better. Make your career field better. Make your unit better.”

Airmen who notably displayed spirited service were celebrated in various award ceremonies throughout the convention. Awards for outstanding effort, leadership demonstrations, and unique accomplishments were distributed.

Airmen who demonstrated outstanding contributions to the mobility mission were also chosen for a panel discussion on their unique experiences in recent world events and to summarize what AMC needs. The themes addressed were to keep the momentum, improve training, and increase connection within teams—both wingman to wingman and through leadership.

During the convention, leaders remarked on the amazing accomplishments of the Air Mobility family. Airmen are becoming multi-capable and successfully navigating

in contested environments. With no shortage of recent global events, Airmen have shown their readiness. This momentum must keep going! Throughout the history of Air Mobility, Airmen have been spirited to rise to the top. Such determination will continue as, with sophisticated threats, Airmen can never be too ready.

Therefore, Minihan’s address at the annual A/TA convention served as a rallying cry for the Air Mobility community. The 2023 event showcased that Mobility Airmen will never settle for ready enough. 🇺🇸



FY23 AIR MOBILITY COMMAND Annual Safety Award Winners and Department of the Air Force Nominees

AMC Safety Office of the Year (AMC Level Award Only)

22 ARW Safety Office
McConnell AFB, KS

AMC Risk Management Achievement Award (AMC Level Award Only)

22 ARW Safety Office
McConnell AFB, KS

AMC Safety Special Achievement Award

Capt Wesley W. Crawford*
305 MXS, Joint Base McGuire-Dix-Lakehurst, NJ

AMC Safety Outstanding Achievement Award, Category II

436 AW/SE, Dover AFB, DE*

AMC Safety Outstanding Achievement Award, Category III:

6 ARW/SE, MacDill AFB, FL*

AMC Safety Outstanding Achievement Award, Category IV

62 AW/SE, Joint Base Lewis-McChord, WA*

AMC Safety Outstanding Achievement Award, Category V

8 EAMS, Al Udeid AB, Qatar*

AMC Safety Civilian Professional of the Year Award

Mr. David C. O'Neil*
6 ARW, MacDill AFB, FL

AMC Safety Noncommissioned Officer of the Year Award

TSgt Zachary K. Herick*
734 AMS, Andersen AFB, Guam

AMC Safety Senior Noncommissioned Officer of the Year Award

MSgt Madison G. Leonard*
6 ARW, MacDill AFB, FL

AMC Safety Officer of the Year Award

Captain Patrick L. French*
40 AS, Dyess AFB, TX

AMC Nominee, Koren Kolligian, Jr. Trophy

Captain Jacob H. Redito*
384 ARS, Fairchild AFB, WA

AMC Aircrew of Distinction Award

Crew of PICO 57*
50 ARS, MacDill AFB, FL

AMC Individual Aviation Maintenance Safety Award

SrA Robert J. Bourdo*
305 MXS, Joint Base McGuire-Dix-Lakehurst, NJ

AMC Team Aviation Maintenance Safety Award

Fuel Systems Repair, 305 MXS*
Joint Base McGuire-Dix-Lakehurst, NJ

AMC Flight Safety NCO of the Year Award (AMC Level Award Only)

MSgt Ezekiel Z. Dahlke
22 ARW, McConnell AFB, KS

AMC Aero Club Safety Certificate

Dover Air Force Base Aero Club*
Dover AFB, DE

AMC Occupational Safety Career Professional of the Year

TSgt Joseph D. Marsden*
628 ABW, Joint Base Charleston, SC

AMC Occupational Safety Civilian of the Year

Ms. Lorie A. Bellamy
436 AW, Dover AFB, DE*

AMC Individual Weapons Safety Award

TSgt Michael J. Rosende*
22 ARW, McConnell AFB, KS

AMC Team Weapons Safety Award

60 AMW Weapons Safety Office
Travis AFB, CA*

AMC RiderCoach of the Year Award

Mr Brian Donley
92 ARW, Fairchild AFB, WA

AMC Distinguished Motorcycle Safety Award

436 AW/SEG, Dover AFB, DE

**DAF nominee*





AMC SAFETY OFFICE OF THE YEAR and AMC RISK MANAGEMENT ACHIEVEMENT AWARD



22 ARW SAFETY OFFICE, MCCONNELL AFB, KS



THE 22d AIR REFUELING WING SAFETY OFFICE (22 ARW), McConnell Air Force Base (AFB), KS, led by Lt Col Rey Heron, has been announced as the winner of the Air Mobility Command (AMC) Risk Management Achievement Award and the AMC Safety Office of the Year.

In earning both, 22 ARW accomplished much in the name of safety. For example, the team secured two firsts for AMC in employing virtual technology to capture 22 confined space areas in the KC-46 aircraft and saving AMC an estimated \$220,000 and 138 work hours. Their use of technology pioneered safety classifications for the \$40 billion global fleet among three allied nations, ensuring global mission certification and bolstering the Commander's number one priority. Secondly, 22 ARW cemented McConnell AFB as the first wing in AMC's history to achieve the Air Force Safety Center's (AFSEC) milestone for 100 percent safety training for wing motorcycle riders. Their use of creativity propelled Air Force-wide enhancements that resolved shortfalls in the Department of Defense's motorcycle safety enterprise, garnering commendations from AFSEC and AMC Safety.

Additionally, 22 ARW led a cross-functional team with industry partners to analyze and correct a cargo loading procedure that caused \$90,000 in damages in four KC-46 mishaps. The procedure accelerated 936 configuration changes, mitigating five critical hazards that clinched a 100 percent mission certification for the \$40 billion global fleet. They also oversaw a \$2 million mass no-notice weather evacuation in a six-hour time frame, providing safety oversight that mitigated hazards for 5,000 Airmen and global operations. The team's quick actions ensured 100 percent on-time departures for 22 aircraft and six disabled aircraft were hangered, securing \$5.7 billion combat assets with zero mishaps.

AMC SAFETY SPECIAL ACHIEVEMENT AWARD

CAPT WESLEY W. CRAWFORD

305 MXS, JOINT BASE MCGUIRE-
DIX-LAKEHURST, NJ



CAPT WESLEY W. CRAWFORD, 305th Air Mobility Wing (AMW), Joint Base McGuire-Dix-Lakehurst (JB MDL), NJ, has been announced as the winner of the Air Mobility Command (AMC) Safety Special Achievement Award.

When Crawford was the Ground Operations Deputy Director for the 2023 Power in the Pines' Open House & Air, he earned a Meritorious Service Medal from the 87th Air Base Wing Commander when he ensured a successful event and the safety of 85,000 attendees.

Crawford's efforts in mentoring five personnel on the Air Force (AF) acquisition process resulted in the generation of new Crash, Disabled, or Damaged Aircraft Recovery capabilities for JB MDL by acquiring two new custom lifting pieces of equipment with a weight capacity of 250,000 lbs. that helped move downed aircraft safer and on time.

Crawford was coined for his forward thinking by the AMC Commander and 18 AF Commander when his team on-boarded the AF's first KC-46 "Smart" mobile inspection and maintenance trailer, allowing for KC-46 scheduled inspections to be conducted anywhere on the flightline safely while offering maintainers a mobile work center, internet access, air conditioned or heated area, and networked toolkits for Agile Combat Employment and Multi-Capable Airmen.

Crawford's team won the Wing's 2022 General Mark A. Welsh Award when he developed the Wing's first comprehensive heavy inspection workflow for the KC-46, where he spearheaded two-shift operations that cut overall timelines by 40 percent.

Response capabilities were increased when Crawford led the effort to acquire replacement 26-ton Crash, Disabled, or Damaged Aircraft Recovery lifting bags after defects were noticed.

Crosstalk between Wings and major commands increased and innovation efforts were promoted across two bases when Crawford hosted the 58th Maintenance Group Deputy Director. Crawford also ensured safety and operating procedures when he pioneered his Wing's first K-46 inspection Unit Type Code review.



Lt Col Derek Rodgerson,
Chief of Safety

Left to right: Maj Jordan Ward, Maj Joe Stephenson, and Capt Matthew Bohannon, all Flight Safety Officers; MSgt Jerrel Futrell, Safety Superintendent and Flight Safety Noncommissioned Officer in Charge (NCOIC); Ms. Lorie Bellamy, Occupational Safety Manager; MSgt Brittany Nowell, Occupational Safety NCOIC; TSgt Bryanna Dahl, Occupational Safety Craftsman; SSgt Rebekah Busch, Occupational Safety Apprentice; Mr. Tim Hahn, Occupational Safety Specialist, and Mr. Robert Brown, Weapons Safety Manager

USAF photo by Roland Baik

AMC SAFETY OUTSTANDING ACHIEVEMENT AWARD, CATEGORY II



436 AW/SE, DOVER AFB, DE

THE 436th AIRLIFT WING SAFETY OFFICE of Dover Air Force Base (AFB), DE, led by Col William C. McDonald, received this year's Air Mobility Command (AMC) Safety Outstanding Achievement Award, Category II.

The cohesive relationship within the Dover AFB Safety Offices is the epitome of Total Force Integration. The teams, consisting of active duty and reservists, have effectively benchmarked and fortified safety programs across two wings. They developed a highly effective Confined Space Program by publishing 3,068 map coordinates. This program allows Fire and Emergency Services to swiftly locate and render rescue services in an emergency and protects 750 entrants annually from catastrophic injury.

They benchmarked the pre-season kick-off campaign, "DAFRider" and created the "Be a Wingman" themed video that highlighted responsible motorcycle operation and training. The video reached more than 36,000 via Air Force Safety Center, AMC, and Dover AFB social media sites. The team hosted the Annual Delaware Motorcycle Safety Day, with 125 riders in attendance. Hard-hitting safety briefings were presented by guest speakers from the Department of Motor Vehicles Motorcycle Safety Foundation Training Director, Delaware State, and City of Dover Police agencies.

The team developed multiple explosive site plans for the permanent placement of secure munitions hold areas. This effort increased storage, which allowed explosive-loaded trailers a safe area to park. They specifically developed an explosive site plan for a new \$4 million facility. They thoroughly analyzed design drawings and were able to gain an additional 23,000 pounds in storage capability, which ensured Dover AFB met Transportation Command mission requirements. They paired multiple base agencies with Air Force Civil Engineering Center-funded EA Engineering to drill for groundwater samples at explosive ranges. This arrangement authorized more than 20 samples to be pulled and analyzed and ensured Dover AFB met environmental standards.

The efforts of Dover's top-notch team of safety professionals resulted in zero discrepancies during an intense four-day triennial AMC Program Evaluation Visit. Dover's Occupational team was one of 12 in AMC to accomplish this feat!



AMC SAFETY OUTSTANDING ACHIEVEMENT AWARD, CATEGORY III



6 ARW/SE, MACDILL AFB, FL



THE 6th AIR REFUELING WING SAFETY OFFICE, MacDill Air Force Base, FL, led by Col Adam D. Bingham, has been announced as the winner of the Air Mobility Command (AMC) Outstanding Achievement Award, Category III. The team identified a 95 percent increase in near mid-air collision reporting, led four conferences with five local airports, and briefed 250 pilots and nine controllers on real-time avoidance, reducing hazards to zero for more than 100 days in the U.S.'s 11th busiest airspace.

During INHERENT RESOLVE, the team filled the sole Flight Safety Officer billet, led 51 aircrew members for 432 flying hours, and validated the offload of more than 1 million pounds of fuel to 400 combat aircraft, ensuring the success of Area of Responsibility missions with zero flight-related mishaps.

The team drove a KC-135 56-hour endurance mission and VIOLENT STORM risk assessments, identified nine hazards, and investigated a heat exhaustion mishap. Three controls were implemented, and the air superiority of the 18-ship "elephant walk" was showcased.

The Tampa Bay Aviation Association president lauded the team for leading the first-ever Tampa Mid-Air Collision Avoidance conference at Tampa International Airport, raising Class B awareness for 45 local pilots and aviation professionals.

U.S. and North American Treaty Organization (NATO) explosives safety criteria were deconflicted, enabling 52 project designs worth \$3 billion, spanning 20 countries. Euro-Atlantic security and partnerships were cemented, and munitions operations capabilities were increased (50 million pounds Net Explosive Weight).

Strategic Joint planning for three U. S. Marine Corps assault helicopters was tackled, and Secretary of Defense priorities were fortified. Premier support was provided for European Deterrence Initiative, NATO, and United States Central Command, and precision strike/Intelligence, Surveillance, and Reconnaissance operations were enabled, allowing ground forces to prevent three violent extremist attacks.

The team provided key expertise during a real-world United States Coast Guard and Explosive Ordnance Disposal response that mitigated potential damage to a \$3.5 million vessel and safeguarded 20 personnel.

Other accomplishments include seeing the KC-46 hangar demo and apron/fuel pit construction projects; leading safety during the Nuclear Operational Readiness inspection; advising senior leadership on risk management for GLOBAL THUNDER; managing AMC's largest motorcycle population; and transmitting messages for Hurricane Idalia evacuation for the seamless return of 25 thousand workers and 24 aircraft.

AMC SAFETY OUTSTANDING ACHIEVEMENT AWARD, CATEGORY IV

62 AW/SE

JOINT BASE LEWIS-
MCCHORD, WA



Left to right: Mr. Evan Moran (USDA), Col Sergio Anaya (62 AW Commander), Mr. Brett Bassler (USDA), Maj Noah Hanks (Flight Safety), Mr. Kia Camarao (Weapons Safety), Mr. Tom Thompson (Nuclear Surety), SSgt Noah Delano (Occupational Safety), CMSgt Timothy Hodgkin (Command Chief), Mr. Ryan Meeks (Occupational Safety), Mr. Ken Heath (Occupational Safety), and Mr. David Tsitiridis (Flight Safety). Not pictured: Lt Col Bradly Willis (Chief of Safety), and MSgt Alex Holmes (Occupational Safety).

THE 62D AIRLIFT WING SAFETY OFFICE (62 AW/SE), Joint Base Lewis-McChord, WA, led by Col Sergio E. Anaya, has been announced as the winner of the Air Mobility Command Safety Outstanding Achievement Award, Category IV. The wing consistently championed a safety message of “Aggressive Safety,” supporting approximately 3,000 personnel and 40 C-17s worth \$8.6 billion, resulting in crucial contributions to the completion of 6,767 worldwide sorties and more than 24,946 flying hours.

Their benchmark occupational safety program demonstrates an exceptional safety record, having only one Class A mishap in 22 years, two Class B mishaps in 18 years, and maintaining a record of zero on-duty A and B incidents for 18 years. The leadership of the 62 AW/SE ensured due diligence with exemplary commanding officer involvement. Additionally, the wing promulgated a culture of safety, education, and awareness by directing 110 courses, training 225 supervisors, mentoring 47 Unit Safety Representatives and 35 Motorcycle Safety Representatives, and publishing a bimonthly safety newsletter.

The 62 AW/SE provided expert oversight of the nuclear surety mission by executing 11 missions that airlifted approximately 724,000 pounds of cargo, conducting nine annual and 88 spot inspections, fixing 66 deficiencies, and completing a Nuclear Surety Inspection lauded by the Inspector General. The wing spearheaded a training guide for a Risk-Based Explosive Safety Siting software that provides step-by-step instructions, improves proficiency, and expedites risk analysis by an estimated 20 percent for 24 Air Mobility Command Weapons Safety Managers. They also revamped the Additional Duty Weapons Safety Representative program by training 21 personnel across seven units, validating and issuing 10 explosive licenses, and conducting 26 inspections to ensure safety compliance for 113 airfield and munition storage sites. In collaboration with the Joint United States Air Force Expeditionary Center, the 62 AW/SE served as a safety ambassador for the 627th Air Base Group of 800 Airmen by meticulously reviewing 44 mishaps and evaluating unit programs to ensure compliance with Air Force safety standards.



AMC SAFETY OUTSTANDING ACHIEVEMENT AWARD, CATEGORY V



8 EAMS, AL UDEID AB, QATAR



THE 8th EXPEDITIONARY AIR MOBILITY SQUADRON, Al Udeid Air Base, Qatar, has been announced as the winner of the Air Mobility Command Safety Outstanding Achievement Award, Category V.

The team safely moved 29,000 passengers and 10,000 tons of cargo on 2,000 inter- and intratheater airlift missions without a single Class B or greater mishap. They liaised with foreign mission partners and the Air Transportability Test Loading Activity office during the first-ever air movement of 15 foreign tracked vehicles weighing more than 45 tons each, establishing airlift certification and aircraft shoring requirements and accelerating high-priority cargo into the European theater with zero incidents.

Various teams within this larger group have accomplished much. For example, six Contract Officer Representatives drove the completion of 334 compliance inspections across five career fields and more than 46 contractors, which validated \$1.9 billion in contracts by powering the movement of 64,000 passengers and 7,500 tons of cargo on 1,400 missions. The C-5 Maintenance section propelled Rapid Global Mobility, returning six aircraft to Fully Mission Capable status, enabling the redeployment of two combat search and rescue helicopters, and delivering a \$21 million missile detection system to Iraq with zero accidents.

Among a plethora of other achievements, the Passenger Services group teamed with deployed Aircrew Flight Equipment personnel to re-certify 160 passenger life preserver units, saving \$15,000 in replacement costs; Special Handling identified 89 discrepancies on a 48-ton shipment of explosives diverted to their station, eliminating the potential of mishandled ammunition and aircraft impoundments; and the 11-member C-5 Support Section built upon their Multi-Capable Airman skills, posturing themselves as ideal candidates to assist in response to an aircraft mishap.

Collectively, the 8th Expeditionary Air Mobility Squadron also created several key mishap prevention measures, including identifying a C-17 enroute to Syria that helped avoid a potential catastrophe for six crew members, 20 soldiers, and the loss of a \$340 million aircraft. Furthermore, the squadron identified 42 dangerously worn tires on key vehicles and scheduled replacements, eliminating blow-out hazards during routine off-base travel at Qatar.

AMC SAFETY CIVILIAN PROFESSIONAL OF THE YEAR

MR. DAVID C. O'NEIL

6 ARW, MACDILL AFB, FL



MR. DAVID C. O'NEIL of the 6th Air Refueling Wing (ARW), MacDill Air Force Base (AFB), FL, is the Air Mobility Command Safety Civilian Professional of the Year.

O'Neil managed Command and Control operations during Hurricane Idalia, where his innovation in a remote environment propelled strategic Risk Management (RM) planning. His commitment ensured a successful recovery response and was praised as a cornerstone by Wing and U.S. Central Command Commanders.

O'Neil was the driving force behind 97 comprehensive safety inspections. He discovered 17 hazards and deficiencies, providing units with succinct corrective recommendations to ensure 100 percent compliance with Occupational Safety and Health Administration and Air Force directives. He authored 22 publications and championed focused safety campaigns. He led three Wing events while encouraging leadership involvement and arming base personnel with mishap-prevention techniques.

As a member of the County Traffic Safety team, O'Neil coordinated with eight local agencies to support the "Arrive Alive" initiative that reduced crashes by 12 percent from the previous calendar year, identified 17 road hazards, and educated Airmen on safe driving. He displayed outstanding commitment while organizing the "101 Critical Days of Summer" campaign, and anti-drinking and driving messaging. His dedication safeguarded 19,000 base personnel. He cultivated awareness for pedestrian and child safety by working with the Traffic Safety Coordination Group to ensure road signs were acquired for schools and heavily trafficked areas, which decreased near-miss accidents by 78 percent and protected the base population of more than 30,000.

O'Neil solved an A-10 aircraft parking shortfall by identifying a new explosive loading spot and coordinating a waiver for 6 ARW Commander approval. In addition, he tackled the fall protection programs and six Professional Development Symposium sessions by validating two groups, identifying deficient training, and working with training sections and Unit Safety Representatives to provide specific rescue training for unit commanders. His dedication to improvement honed his leadership skills and strengthened community relations.

AMC SAFETY
NONCOMMISSIONED
OFFICER OF THE
YEAR AWARD

TSGT ZACHARY K. HERICK

734 AMS, ANDERSEN AFB, GUAM



TSGT ZACHARY K. HERICK, Noncommissioned Officer in Charge, Andersen Air Force Base, Guam, has been announced as the winner of the Air Mobility Command Safety Noncommissioned Officer of the Year Award for 2023.

As the Noncommissioned Officer in Charge, he directed a Wing \$250 million Category 4 typhoon recovery operation. He led 30 Airmen through clean-up operations to support airfield recovery and the removal of 10,000 pounds of debris, expediting the reopening of the airfield less than 34 hours after impact to usher in \$7 million in aid. He identified risk to 204 personnel following the Category 4 typhoon and directed a \$76,000 protective equipment purchase for 866 items for recovery.

Additionally, Herick drove a \$1.2 million Class B Safety Investigation Board, preserving 70 pieces of evidence, coordinating 14 interviews, and supporting investigation team needs. Such actions propelled \$168 million in asset return plus two local policy and two Technical Order change recommendations.

Herick protected 140 transient aircraft, 38 Bomber Task Force missions, and one Global Large-Scale Exercise, hosting six allies and 30 different platforms that executed 4,000 missions. He aced 120 credit hours of an Occupational Safety Bachelor's degree program, garnering a 3.8 GPA. Similarly, he coached two first-term Airmen through advanced academic degree initiations and the financial assistance process. He led 35 incoming personnel through local indoctrination briefings covering environment, water, heat-related, and living condition hazards. His personalized briefs boosted unit cohesion, driving a zero heat and water mishap rate for a 204-member squadron.

Herick also worked with 12 Navy personnel in pioneering the Air Force's first Multi-Function "Purple Port." He increased the unit's safety program oversight by 67 percent, conducted 48 spot inspections, and mitigated eight hazards. Additionally, he investigated 17 potential mishaps with six validated reportable mishaps totaling \$104,000 and 31 man-days lost.

AMC SAFETY SENIOR NONCOMMISSIONED OFFICER OF THE YEAR AWARD

MSGT MADISON G. LEONARD

6 ARW, MACDILL AFB, FL



MSGT MADISON G. LEONARD of the 6th Air Refueling Wing, MacDill Air Force Base (AFB), FL, has been announced as the winner of the Air Mobility Command (AMC) Safety Senior Noncommissioned Officer of the Year Award for 2023.

Among his many accomplishments, Leonard developed a motorcycle safety event for 187 riders throughout four commands, coordinating with local vendors and police agencies and briefing riders on techniques that led to an 80 percent reduction in overdue rider statuses.

Leonard also budgeted office funding to procure tablets for his work center. In doing so, he promoted an Air Force Safety Center (AFSEC) objective to conduct annual inspections digitally and helped shorten inspection reporting times by 50 percent. Additionally, he led joint operations with 12 support agencies for the Hurricane Idalia evacuation, assisting in the seamless return of 25,000 personnel and 18 aircraft. He also authored base instructions in conjunction with two agencies; redesigned the Medical Group parking lot and orchestrated the removal of unwarranted traffic signs; overhauled and improved base traffic safety while evaluating a U.S. Army Corp of Engineers project (worth \$1.2 million); and completed two courses to fuse respiratory hazard analysis with confined space objectives, meeting the mission goals.

Throughout 2023, Leonard developed a July 4th risk assessment for a \$2 million AFB event where he helped mitigate fire hazards for 28 units, trained 22 Airmen, and coordinated a firework display (worth \$700,000). Lauded by the mayor of Tampa, FL, Leonard ensured the safety of 6,000 patrons. Moreover, he advanced the Wing's mishap inspection program in support of the National Defense Strategy and earned an Occupational Safety and Health Administration certification.

AMC hand-selected Leonard for the Hazardous Energy Control team. As a member, he identified 83 crucial shortfalls and streamlined the team's annual inspection lockout/tagout start-up and shut-down procedures. His work garnered a letter of achievement from the AFSEC Chief of Safety, and he was hand-picked by the Chief of Safety to serve as interim Operational Safety Manager for four months. His contributions led to a "Superior Team" title for an AMC unit effectiveness inspection.

AMC SAFETY OFFICER OF THE YEAR

CAPT PATRICK L. FRENCH

40 AS, DYESS AFB, TX



CAPT PATRICK L. FRENCH, 40th Airlift Squadron, Dyess Air Force Base, TX, has been announced as the winner of the Air Mobility Command Safety Officer of the Year Award. French led his team to win the U.S. Air Forces Central Command Flight Safety Award of the Quarter through exemplary attention to detail and fleet readiness standards. With a keen eye for identifying critical deficiencies and providing actionable solutions, French managed the revisions and applicable translation for multiple flight and flightline safety protocols and procedures for internal personnel, partner nations, and host airfield use.

French reestablished relations with senior Kuwaiti leaders to update an expired wildlife management agreement and foster coalition participation in proactive wing safety programs. He conducted wildlife management training for the Kuwaiti Chief of Safety, helping prepare a host nation base for operations and safeguarding sorties during Agile Combat Employment mission generation capabilities validation. French also developed and administered a wildlife strike remains collection training program that enabled a positive reporting culture and decreased bird strikes by 56 percent. After revamping the air strike program, he created long-term goals incorporating coalition partners and geographically separated units to obtain a four-year low in bird strikes across six bases. French also removed an aggressive feral canine population from the base, protecting 2,800 personnel from attack and disease through trapping and educational awareness campaigns.

French advocated for the procurement of three new liaison officer positions at a host nation air traffic control facility. Additionally, he helped reduce ground mishaps by 44 percent by completing 17 spot cargo-loading operations investigations in high-interest areas at geographically separated units during 40 combat missions in Iraq. His work on revamping the scope of quarterly flight safety briefs helped support a 23-percent decrease in flight mishaps.

His efforts with the Operational Support Squadron and airfield management created the first host nation airfield driving program and revitalized U.S. and coalition airfield driving programs through the creation of multiple test banks, practical exams, training opportunities, and Arabic airfield signs installation. Unit-specific training for flightline emergency response reduced controlled movement area violations by 57 percent, establishing the longest violation-free period in more than two years.

AMC NOMINEE, KOREN
KOLLIGIAN, JR. TROPHY

CAPT JACOB H. REDITO

384 ARS, FAIRCHILD AFB, WA



CAPT JACOB H. REDITO, Tactics Assistant Flight Commander, Fairchild Air Force Base (AFB), WA, was selected as the AMC nominee for the Koren Kolligian, Jr. Trophy, which recognizes outstanding feats of Airmanship by aircrew members who exhibit exceptional alertness, ingenuity, or proficiency, averted accidents, or minimized the seriousness of the accidents in terms of injury, loss of life, aircraft damage, or property damage.

On March 4, 2023, the crew of VINYL25, departing from Fairchild AFB, WA, encountered an unexpected challenge over the Pacific. The incident, mitigated by Redito, showcased the crew's adherence to safety protocols.

The routine flight took an unexpected turn when Redito observed a subdued flicker on the Number 3 Starter Valve Light. Recognizing the potential danger of an open starter valve or a false indication, Redito immediately engaged the other crew members and Flying Crew Chiefs to investigate the issue and initiated the UNCOMMANDED STARTER VALVE OPEN IN FLIGHT checklist.

In a coordinated effort with the crew, Redito took steps to close the Number 3 Bleed Air Valve and reduced the Number 3 Engine to idle, thoroughly discussing potential issues with the crew.

Redito was consulting with an on-duty instructor pilot at Fairchild AFB when he observed the Number 3 Starter Valve Light fully illuminating for two seconds.

Redito executed the PRECAUTIONARY/PRACTICE ENGINE SHUTDOWN checklist, and the crew successfully shut down the Number 3 Engine, reducing the potential for further damage.

Declaring an emergency with air traffic control, he orchestrated a safe return to Fairchild AFB. Redito's safety-minded leadership included preparing for a stable three-engine descent and approach, resulting in a flawless landing.

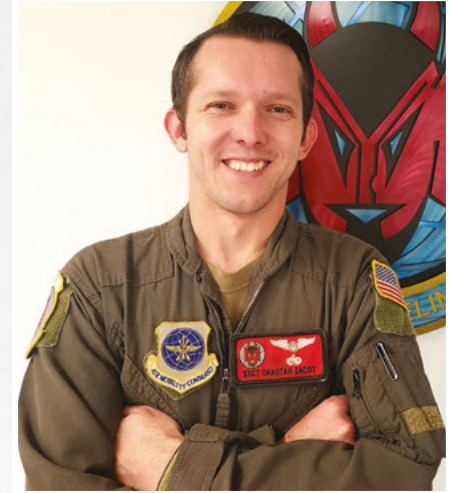
Thanks to Redito's safety consciousness and expertise, VINYL25 and its \$66 million aircraft were preserved, ensuring the safety of all seven people on board.



Maj Jaymes Trimble, Aircraft Commander



1st Lt Mike Todd, Copilot



SSgt Dakotah Zacot, Boom Operator

AMC AIRCREW OF DISTINCTION AWARD



CREW OF PICO 57,

50 ARS, MACDILL AFB, FL

THE CREW OF PICO 57, 50th AIR REFUELING SQUADRON, MacDill Air Force Base (AFB), FL, led by Lt Col Christopher Knaute, has been announced as the winner of the Air Mobility Command Aircrew of Distinction Award.

The KC-135R/T crew of PICO 57 were tasked with taking maintenance cargo and additional crew members to Yokota Air Base, Japan, for Exercise MOBILITY GUARDIAN 2023. Shortly after departing the mountainous area at Elmendorf AFB, AK, the flight crew experienced an equipment malfunction in the runway stabilizer trim, which became stuck in the nose-up condition.

Runway stabilizer trim in the nose-up condition is the most egregious type of trim failure any aircrew can face, and rapid and effective crew coordination is essential for survival. PICO 57 expeditiously and effectively restored trimming capabilities, stabilizing airspeed, pitch, bank, and thrust to safely land. The crew's situational awareness helped them avoid mountainous terrain and successfully coordinate with local air traffic control to declare an emergency early and help the tower crew to clear airspace around their path, avoiding the possibility of any mid-air collisions. The quick thinking and composure of the crew ensured a quick return to normal flight conditions and ensured a positive outcome. The outstanding Airmanship of PICO 57 under an extremely stressful, potentially deadly, and exceedingly rare situation ultimately saved the lives of eight crewmembers, 14 Army soldiers, and a \$55 million aircraft.

Not pictured: SSgt Rodolpho Mirabel, Boom Operator

AMC INDIVIDUAL AVIATION MAINTENANCE SAFETY AWARD

SRA ROBERT J. BOURDO

305 MXS, JOINT BASE MCGUIRE-DIX-LAKEHURST, NJ



SRA ROBERT J. BOURDO's proactive approach was vital in maintaining a safe working environment by ensuring serviceability and enforcing preventative protocols for hazardous chemical exposure. To avoid releasing toxic waste into the sewage system, he collaborated with the New Jersey Department of Environmental Protection to develop and implement a comprehensive plan for regular practices. His stewardship of spill kits prevented a catastrophe by containing 174 gallons of jet fuel during a C-17 fuel leak and averting any risk of ignition from the surrounding area.

Bourdo's innovative mindset has incorporated safety measures into his flight's corrosion control process by adding specialized anti-slip coatings to trafficked equipment surfaces that were applied to five material handling trailers, resulting in zero mishaps on the modified surfaces. He also orchestrated a safety awareness campaign within the Aerospace Ground Equipment flight, conducting 38 safety briefings and organizing hands-on training sessions for all personnel.



AMC TEAM AVIATION MAINTENANCE SAFETY AWARD

305th MXS FUEL SYSTEMS TEAM

JOINT BASE MCGUIRE-DIX-LAKEHURST, NJ



Front Row (Left to Right): SrA Madelyne Larson, SrA Alexander Sherrill, MSgt Sarah Eby, TSgt Jarred Whitbey, and TSgt Leonard Ventura. Middle Row (Left to Right): 2Lt Ethan Hernandez, SrA Ivan Quinanola, SMSgt Joseph Zawistowski, Mr. Robert Kuster, Mr. Michael Whitaker, SSgt Adam Farr, SrA Daniel Kooker, and TSgt Ryan Hanson. Back Row (2 people Left to Right): SSgt Danon Gaston, SSgt Chad Cromer

THE 305th MAINTENANCE SQUADRON, Joint Base McGuire-DIX-Lakehurst, NJ, Fuel Systems Repair Team (Fuels) applied risk management concepts when they identified a breathing air system deficiency causing respirator wearers to suddenly, and without warning, lose breathing air while in a confined space. To improve worker safety, confidence, and comfort, the team tenaciously rewrote respiratory protection program guidance in under three months with the 87th Air Base Wing's Bioenvironmental, Safety, and Fire Protection agencies. They were able to gain half-mask respirator approval for the first time in the installation's history.

Another example of Fuels applying risk management concepts is when they discovered multiple facility leaks where water was draining into the nose area of the hangar and onto the facility's electrical panels. The team pinpointed the leaks to an open condensation line and a leaking roof seam. Once they found the leaks, the Fuels team coordinated emergency work orders to eliminate the slipping and electrical fire hazards.

FLIGHT SAFETY NCO OF THE YEAR

MSGT EZEKIEL Z. DAHLKE

22 ARW, MCCONNELL AFB, KS



MSGT EZEKIEL Z. DAHLKE, 22d Airlift Wing, McConnell Air Force Base (AFB), KS, has been announced as Air Mobility Command (AMC) Flight Safety Noncommissioned Officer of the Year.

Dahlke coordinated an innovative initiative that utilized virtual technology to capture the 22 confined space areas in the KC-46, saving AMC \$220,000 and 138 work-hours. The assessment pioneered safety classifications for the \$40 billion global fleet amongst three allied nations, ensuring worldwide mission certification and bolstering the AMC Commander's number one priority.

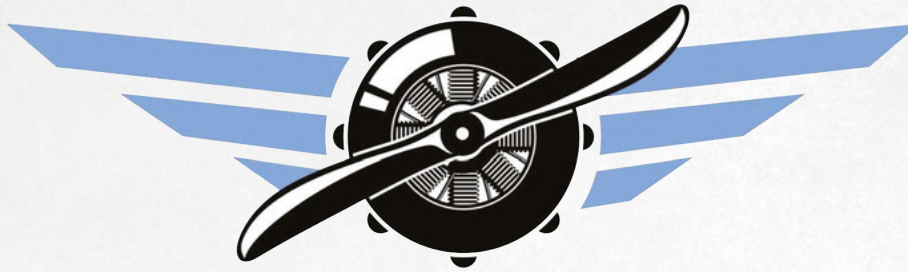
That is one of many accomplishments for Dahlke. He has implemented numerous innovative cost-saving measures and his leadership in mishap investigations and hazard mitigation has resulted in numerous Air Force (AF)-wide safety improvements. His efforts transformed maintenance training throughout the AF and resulted in Department of the Air Force training that exceeds Federal Aviation Administration standards.

With Dahlke's guidance, nine base and local partners rectified 23 airfield discrepancies; an insecticide project conserved \$300,000, a 92 percent cost reduction; and airfield ecosystem improvements reduced wildlife strikes on 6,400 pattern aircraft by 64 percent, resulting in annual savings of \$339,000. He also managed the wing's \$275,000 Bird/Wildlife Aircraft Strike Hazard program, integrating Artificial Intelligence and bird migration models to forecast future bird watch conditions and reduce damaging bird strikes at McConnell AFB, saving \$233,000 annually.

As the wing's lead investigator, Dahlke's role in mishap investigations and hazard mitigation exposed systemic industry and AF tracking errors and inspection criteria resulting in regulatory changes across the enterprise, including improved cargo loading procedures, revised operations and maintenance standards, and new aircraft taxi regulations. He authored a new process that accelerated 936 configuration changes and mitigated five critical hazards, leading to 100 percent mission certification for the \$40 billion K-46 global fleet operations.

In a three-month gap without a Chief of Safety, Dahlke cultivated 14 new partnerships with local airports, amplifying the wing's community scope 200 percent and culminating with zero hazardous traffic reports—a new AMC three-year quarterly low!

AIR FORCE



AERO CLUBS

AMC AERO CLUB SAFETY CERTIFICATE



DOVER AIR FORCE BASE AERO CLUB



DOVER AFB, DE

DOVER AIR FORCE BASE (AFB) AERO CLUB, Dover AFB, DE has won the Air Mobility Command Aero Club Safety Certificate. Extremely active with more than 1,800 hours of mishap-free flying in 2023, Dover Aero Club's flying members include eight flight instructors, one ground instructor, and 95 student pilots. Twelve students obtained new pilot certification while six gained certification above private pilot. Their safety record reflects professionalism and determination to serve the base and community. Multiple safety inspections of their flight safety program—twice by the 436th Airlift Wing, Dover AFB, DE, and twice by the Federal Aviation Administration (FAA)—resulted in zero findings.

The Club is intensely focused on safety in day-to-day operations. As a Part 141 Flight Training center, students are required to complete their in-depth training under an approved FAA syllabus with daily operations closely monitored by the FAA, resulting in quicker certifications and safer pilots.

Operational Risk Management (ORM) is used in daily operations and long-term strategic planning. For example, ORM was used to develop crosswind and heat index limitations for student pilots. The Advanced Aviation Training Device (Simulator) allows students to experience weather and system malfunctions that cannot be experienced safely in an aircraft. Instructors use assessment tools to determine the level of risk for students while flying.

The Chief Flight Instructor, who is also an FAA certified Aviation Safety Counselor, has responsibilities extending beyond the Aero Club into the community, including counseling pilots identified by the FAA for unsafe practices.

Aero Club Safety meetings are open to the public in conjunction with the FAA Safety Program.

AMC OCCUPATIONAL SAFETY CAREER PROFESSIONAL OF THE YEAR

TSGT JOSEPH D. MARSDEN

628 ABW, JOINT BASE CHARLESTON, SC



TSGT JOSEPH D. MARSDEN of the 628th Air Base Wing, Joint Base Charleston, SC, has been named Air Mobility Command Occupational Safety Career Professional of the Year.

Marsden crushed a senior enlisted position by dual-hatting Occupational Safety Manager and Senior Enlisted Leader duties to lead professionals at Prince Sultan Air Base, Saudi Arabia. He codified 32 unit programs, molded 46 Unit Safety Representatives, and advised 19 squadron commanders to power an \$8.4 billion defense apparatus, generating 1,562 combat sorties and netting his award of the Meritorious Service Medal.

Marsden established a dynamic safety coalition with the Royal Saudi Air Force, fostering a collaborative forum for women in the Maintenance, Fire, and Safety fields and showcasing female empowerment in the United States Armed Forces. This initiative enhanced cross-cultural inclusivity, fortified joint mishap prevention between the United States and the Kingdom of Saudi Arabia, and progressed Saudi Vision 2030: "Transformation." This achievement led to him being requested, by name, to be a keynote speaker for the Royal Saudi Air Force's Safety Conference for three wings. He championed Air Force (AF) Safety and Risk Management techniques to 183 participants, earning praise from the Saudi Brigadier General.

He accelerated Prince Sultan Air Base's first joint safety program between the AF and the Army, syncing collaboration and interservice agreements between 13 Army companies. His efforts bolstered \$5.5 billion in Integrated Air and Missile Defense capabilities and \$33 million in Command and Control architecture, shielding more than 3,000 coalition warfighters. He mitigated an extremely dangerous crane hazard involving two contracting companies, and he liaised with the Army and Air Force Exchange Service Regional Manager to identify the course of action for future and ongoing operations, preventing fatalities and \$1.3 million in destroyed property.

AMC OCCUPATIONAL SAFETY CIVILIAN OF THE YEAR

MS LORIE A. BELLAMY

436 AW, DOVER AFB, DE



MS. LORIE A. BELLAMY, Occupational Safety Manager of the 436th Airlift Wing, Dover Air Force Base, DE, has been announced as Air Mobility Command (AMC) Occupational Safety Civilian of the Year.

Bellamy is an elite safety manager and trusted leader who routinely fills the Chief of Safety position, successfully leading a team of 11 safety professionals. This year, she guided safety educational efforts and inspections and managed 55 mishap investigations, resulting in a 30 percent reduction in reportable mishaps.

Bellamy was integral in publishing 3,068 confined spaces by map coordinates, allowing Fire and Emergency Services to swiftly locate an emergency, render rescue services, and protect 750 entrants annually from catastrophic injury. In addition, she expeditiously resolved an Occupational Safety and Health Administration complaint and protected 500 workers from failing equipment while ensuring a \$41 million multi-mission hangar construction project would not be interrupted.

Bellamy guided her team through an in-depth checklist overhaul, posturing 46 Unit Safety Representatives with enhanced resources, accountability, and standardization and increasing productivity by 29 percent. She provided expert 24-hour safety oversight during readiness exercises, developing modified Mission Oriented Protective Posture-gear drills to reduce heat injuries, endorsing 31 risk assessments, and empowering tactical Total Force Integration experiences for wartime actions.

She established and managed the highly sought Dover's Safety First Awards program; launched a regional safety council consisting of Federal, Air Force (AF), Reserves, and Guard agencies; managed the Wing Hazard Abatement Program; and completed 18 risk assessments worth \$55 million that prioritized hazards and minimized risks for 2,400 workers. Following a fatality, Bellamy quickly identified motorcycle safety as a high-interest area, ensuring 100 percent of unit programs were inspected. Training statistics improved by 20 percent, and investigation results impacted programs AF-wide.

Bellamy's exceptional leadership and vast safety expertise resulted in zero discrepancies during an intense four-day triennial AMC Program Evaluation. Dover's occupational team was one of 12 in AMC to accomplish this feat. Bellamy is committed to the future leaders and Airmen of tomorrow. She instills an inclusive environment for her team and personnel, promotes collaboration, bolsters superior morale, and cultivates Citizen Airmen!

AMC INDIVIDUAL WEAPONS SAFETY AWARD

TSGT MICHAEL J. ROSENDE

22 ARW, MCCONNELL AFB, KS



TSGT MICHAEL J. ROSENDE of the 22d Air Refueling Wing (ARW), McConnell Air Force Base, KS, is this year's winner of the Air Mobility Command (AMC) Individual Weapons Safety Award.

Rosende authored the risk analysis for the Air Force's (AF) first KC-46 Agile Combat Employment exercise. His analysis mitigated 44 hazards, enabled a massive simultaneous tanker formation launch, supported a Major Weapon System "elephant walk," and aided in the longest KC-46 flight ever. His leadership, lauded by the AMC Commander, paved the way for 22 ARW's role in MOBILITY GUARDIAN 23.

While deployed as the sole Weapons Safety Manager to Prince Sultan Air Base (AB), Al Kharj, Saudi Arabia, Rosende led 42 Weapons Safety Representatives and 39 unit programs. He championed efforts to sustain 112 explosives site plans (ESP) that amplified U.S. Air Forces Central's explosives storage capabilities by 20 percent, garnering him an AF Commendation Medal. Rosende constructed Prince Sultan AB's first reduced-criteria magazine ESP. He identified two shortfalls, mitigated four critical hazards, and authored the guidance for the storage of Explosive Ordnance Disposal quick-response high explosives. This equipped four Electronically Initiated Device teams with rapid deployment capabilities that amplified their response time by more than 70 percent.

He forward-deployed and crafted the first ESP for King Fahd AB, Damman, Saudi Arabia, which enabled the storage of 90,000 pounds of explosives to support \$1.5 billion in combat assets. He also cultivated relationships with joint and allied agencies to mitigate future hazards and fortify multi-national partnerships.

Fusing efforts with joint personnel, Rosende assisted in the relocation of 21 high-explosive missiles and two launcher systems to a minimum quantity distance location. This relocation eliminated the explosive exposure to \$167 million of joint assets and rectified a negative trend impacting U.S. Central Command's personnel and equipment.

To cement the wing's success with zero mishaps, he accelerated actions to rectify five critical hazards during the wing's Nuclear Operational Readiness Exercise.

AMC TEAM WEAPONS SAFETY AWARD

60 AMW WEAPONS SAFETY OFFICE

TRAVIS AFB, CA



TSgt David Lowe, left, and MSgt Mark Kenyon.

Photo by TSgt Philip Bryant

THE WEAPONS SAFETY OFFICE OF THE 60th AIR MOBILITY WING, Travis Air Force Base (AFB), CA, is being presented with this year's Air Mobility Command (AMC) Team Weapons Safety Award.

Through base-wide outreach, the Weapons Safety Office identified novel opportunities to expand munitions support capability at Travis AFB without creating additional risk or violating the installation's easement. They subsequently submitted 19 Explosives Site Plans to surge munitions storage by 10 million pounds, supporting emergent U.S. Transportation Command requirements. They deployed a member to the largest expeditionary wing in the world, leading the Air Force's largest Force Protection Flight to provide seamless mission support to Operations ENDURING FREEDOM and SPARTAN SHIELD. Leveraging deployed lessons learned, the team revitalized wing-wide risk assessment programs to guide the resolution of 135 recommendations with 18 unit commanders, preventing \$458,000 in mishap costs.

The team reviewed \$195 billion in contracts to support the arrival of the KC-46 at Travis AFB. Their timely coordination and approval of new facility licenses, unit explosives safety programs, and programmatic oversight requirements assured the on-time delivery of AMC's newest major weapon system to the base.

During an installation design charette, the Weapons Safety Office identified numerous mission-critical considerations, clarified Department of Defense Explosive Safety Board requirements, eliminated wasteful lightning protection requests, and expedited approval of timely strategic missile support to the U.S. Indo-Pacific Command. The team identified a critical, maximum-credible-event shortfall affecting installation explosives handling, leading them to spearhead new pallet building operations with the Aerial Port. Their direction was vital to eliminating handling violations, bolstering safeguards and protective measures, and ensuring local populace safety.

The Wing Weapons Safety Managers, MSgt Mark M. Kenyon, Jr. and TSgt David J. Lowe, led coordination to secure Wing Commander approval of a 100,000-pound increase for net explosive weight allowances. Their technical precision, problem-solving, and inclusive staffing guaranteed seamless support from Travis AFB to project lethal effects into all theaters and areas of responsibility. Also, as the Wing's premier explosives team, the Weapons Safety Managers coordinated full installation support to 11 time-critical and President-directed munitions movements consisting of 84 airlift missions and 92,000 tons of war materiel. Their knowledge, insight, and leadership strengthened the North American Treaty Organization's eastern flank while resourcing Ukraine's fight for sovereignty.

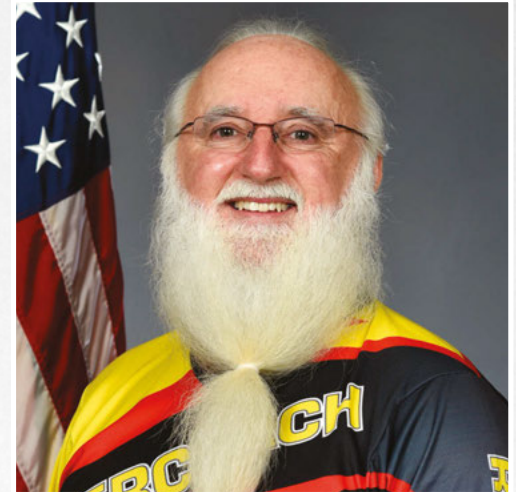
AMC RIDERCOACH OF THE YEAR AWARD

MR. BRIAN DONLEY

92 ARW, FAIRCHILD AFB, WA



MR. BRIAN DONLEY, retired Motorcycle Safety Foundation (MSF) RiderCoach for the 92d Air Refueling Wing, Fairchild Air Force Base, WA, led by Col Chesley L. Dycus, has been announced as the winner of the 2023 Air Mobility Command (AMC) RiderCoach of the Year Award.



Donley served as lead instructor for AMC's largest tanker base, supervising 12 MSF coaches, training 126 riders, and expanding AMC's top motorcycle program. Additionally, he revitalized the on-base Advanced Rider Course, positioning the wing for eight annual classes and \$15,000 in savings; optimized safety distribution procedures; and implemented proper Tires and Wheels, Controls, Lights and Electrical, Oil and Fluids, Chassis and Sidestand procedures, resulting in the successful inspection of 50 motorcycles with zero training mishaps, among other achievements.

AMC DISTINGUISHED MOTORCYCLE SAFETY AWARD

436 AW/SEG

DOVER AFB, DE



Left to right: Capt Rajan Dulamal, U.S. Army JPED, Senior Wing Mentor; TSgt Geoffrey Witt, 736th Aircraft Maintenance Squadron, Mentor- Briefer; Mr. Ken Shinn, Sgt of Arms, Green Knights Chapter 49; Mr. Larry Bortner, Vice President, Green Knights Chapter 49; Mr. Michael Ende, President, Green Knights Chapter 49; MSgt Fred Raffaelli (Retired), Senior Wing Mentor; Col Mathew Husemann, 436 AW Commander; Mr. Jim Ciolek, Delaware Department of Motor Vehicles (DMV); Mr. Robert Sylvania, Delaware DMV; CMSgt Jarrod Getz, 436th Security Forces Squadron; Cpl Jonathan Hummel, City of Dover Police Dept.; Master Corp Joseph Lane, Delaware State Police; Cpl Troy Maull, City of Dover Police Dept.; Tim Hahn, 436 AW Safety, Motorcycle Safety Program Manager; Lt Col John Gerlach, 436 AW Chief of Safety; and Lt Dewayne Ragland Jr, 436 AW Chaplain.

Photo by Roland Balik, Dover AFB Public Affairs

THE 436th AIRLIFT WING OCCUPATIONAL SAFETY SECTION, Dover Air Force Base, DE, led by Lt Col John Gerlach, has been announced as the winner of the 2023 Air Mobility Command Distinguished Motorcycle Safety Award.

Among other accomplishments, the section authored wing mentorship policies to pair novice riders with highly experienced mentors for a minimum of 90 days; hosted five mentorship poker run events, fulfilling the 5-year refresher training requirement for 77 riders; lobbied the Delaware Office of Highway Safety to conduct a safety review of a highway guardrail where two fatalities and one near-fatal Air Force mishap occurred during a 10-year period; and created a "Be a Wingman" themed video for the "DAFRider" Pre-Season Kickoff Campaign, highlighting responsible motorcycle operation and training. The video reached 36,100 views.



MISHAP-FREE FLYING HOUR MILESTONES

5,000 HOURS

164 AW, Memphis, TN

Col Garrett Gilmore

3,500 HOURS

155 ARW, Lincoln, NE

Maj Travis Carlson

Maj Tyler Piening

164 AW, Memphis, TN

Lt Col Andrew H. Black

Lt Col Joe P. Hoggin II

Lt Col Craig L. Kinkade

MSgt Dale P. Burkett

MSgt Dustin J. Carmack

MSgt Stephen Gast

2,500 HOURS

155 ARW, Lincoln, NE

Maj Bryan Pedersen

Capt Jason Smith

MSgt Adam Krotz

164 AW, Memphis, TN

Maj Michael J. Saeger

Capt David M. McNair

Capt Hashim A. Shawa



A C-17 Globemaster III participating in Exercise Golden Phoenix takes off on a dirt runway at Schoonover Airfield, CA, May 9, 2023. Golden Phoenix is a large-scale readiness exercise hosted by Travis Air Force Base with full-spectrum support from partner units.

USAF photo by Heide Couch



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).



Wearable Technology

BY DJ HERNANDEZ III,
AMC FLIGHT SAFETY

Wearable technology is the new “next big thing.” Wearable tech devices come in a variety of forms, including rings, watches, and wristbands, and can monitor our fitness levels, track our location using GPS, and relay text messages more quickly. The advantages of utilizing wearables—and their functionalities—include real-time monitoring, fitness and health awareness, improved communication, and enhanced safety and security.


What is real-time monitoring? It is the real-time transmission of continuously updated data about your physical activity, sleep patterns, and health metrics. For fitness and health awareness, the wearable tech devices provide data about how many steps you have taken, calories burned, nutrition, and pulse rate. The enhanced safety and security features are like a version of LoJack. While LoJack helps find a stolen car, some wearable tech have built-in fall detection sensors to automatically call for help if the user falls and cannot get up.

What are the disadvantages? Privacy and security concerns, data accuracy, interpretation, and limited battery life to name a few. Privacy and security are among the most significant concerns about wearable tech devices; the personal data collected and transmitted can be hacked, leading to identity theft. Also, wearable tech has the potential to collect large amounts of data. However, the data collected may or may not be accurate and useful. For example, user error or device calibration can affect data accuracy.

As technology advances around wearable technology, so will the Air Force.¹ Currently, Airmen use wearables to help prevent injury and ensure safety.² For example, the Flashing Indicator of Swimmer’s Health (FISH) is an underwater blood-oxygen monitor used to help Special Warfare Airmen from blacking out underwater.³ Developed by the Air Force Research Laboratory, the FISH

device has been prototyped in two forms—a swimming goggle attachment and an arm sleeve—and warns bystanders via a flashing LED when a swimmer’s blood oxygen saturation levels begin to drop.⁴

Other wearable tech devices are being developed, including the Survival Health Awareness Responders Kit (or SHARK), which collects an Airman’s temperature and other bioindicators—via sensors built into a shirt—during intense training exercises.⁵ Any testing in the Air Force is human subject research and governed by protocols to de-identify and aggregate the data before it is shared. Future operational use will require policy decisions by the Air Force on data use.

The Air Force’s use of wearable technology to increase safety margins for Airmen has only just begun, and it will be exciting to see how its use is expanded in the future. Things that make you go, hmmm ... 



Screenshot of a video of Air Force Research Laboratory engineers testing the Flashing Indicator of Swimmer’s Health (FISH) system at Wright State University, Dayton, OH, Nov. 27, 2019. FISH is a personal underwater blood-oxygen monitor that detects potential blackout conditions and alerts users.

USAF video by Christopher Decker

¹ <https://www.airforce.com/experience-the-air-force/airmen-stories/inside-air-force-innovation/wearable-tech>

² Ibid.

³ Ibid.

⁴ <https://techlinkcenter.org/technologies/flashing-indicator-of-swimmer-s-health/7ea68acf-0ec5-48e9-925b-11b5b226da28>

⁵ <https://www.airforce.com/experience-the-air-force/airmen-stories/inside-air-force-innovation/wearable-tech>

A DAY IN THE LIFE



Team McChord members, Air Mobility Command senior leaders, and members of the Airlift/Tanker Association (A/TA) hold a check for the 62d Airlift Wing's (AW's) Mission Execution Excellence Program (MEEP) \$1.9 million incentive award during the A/TA conference in Grapevine, TX, Nov. 9-11, 2023. The 62d AW's dedication to the MEEP program goals and their efficient flying practices earned them the first place award. The A/TA conference recognizes Air Mobility Command's top performers and encourages professional development.

USAF Courtesy Photo