

THE

MOBILITY

THE MAGAZINE OF AIR MOBILITY COMMAND | FALL 2014

FORUM

***FASTEN
YOUR SEAT
BELTS***

What Makes a
Great Actionable
ASAP Report?

**18th AIR FORCE
WELCOMES NEW COMMANDER**




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ON THE COVER



An Airman from the 22d Aircraft Maintenance Squadron monitors a KC-135 Stratotanker during an engine check at McConnell AFB, Kan. Maintenance Airmen work around the clock to provide mission-ready aircraft for mobility operations 24/7.

USAF PHOTO BY A1C VICTOR J. CAPUTO

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Passing the Torch

DIRECTOR'S CORNER



This will be my last Director's Corner as AMC Director of Safety. I am very proud to hand over the directorate helm to Col Mike Seiler, an absolutely outstanding mobility leader who will take the AMC Safety enterprise to the next level.

During the past two years, operations have continued against the backdrop of the AOR drawdown, and now resurgence of tensions in both Europe and the Middle East. However, for AMC operations, tempo has never really slowed. As a command, we saw a serious spike in on-duty mishaps in 2013, most tragically with the loss of Shell 77, but also with two ground industrial on-duty fatalities—our first in six years—and dozens of other incidents. Thankfully, and led by your full court efforts to turn the tide, we have now experienced a sharp and welcome decline. From commanders to our newest Airmen, you all have been pivotal in turning the tide by enhanced vigilance, better situational awareness, and renewed emphasis on personal and task risk analysis.

That specifically is the good work of the warriors in the field—not this functional staff from afar. During the last two years, we have been blessed by phenomenal commanders and front line leaders, at all levels, who have placed a laser focus on mishap prevention and fostered a climate of safety.

I would like to express personal thanks to the AMC commanders I have had the honor to work for and those I've served under, both Generals Paul Selva and Darren McDew. Gen Selva's CC intent was to instill and preserve a "spirit of innovation" in our Airmen—but to never have them confuse that with "inventiveness," the taking of unnecessary risks and shortcuts around sound and proven guidance and TTP. That spirit has paid off!

Gen McDew has long championed sound risk management as "inextricably linked to everything we do" as AMC and the Air Force. He recently encapsulated what he expects from AMC SE culture going forward: "AMC's greatest resource is bold, innovative Airmen willing to accept and understand reasonable risk and use creativity to get the job done ... [On Safety] The well-being of our Airmen and stewardship of our nation's precious assets are paramount as we aim to conduct operations safely."

Further, a very special thanks to AMC/CV Gen Brooks Bash—who is hands down the most proactive and safety conscious senior general officer in the Air Force today. His vision, begun when he was AMC/A3, was to perpetually champion and resource all viable proactive mishap prevention tools such as MFOQA, LOSA, Aviation ORM, and ASAP, and wrap them all under a functioning Ops RAMS umbrella with a specific battle rhythm. Under Mr. Tim Grosz and his A3TO team, AMC's operational and staff enterprise has enjoyed the agility to fuse information and to dynamically adjust fire and refine policy, guidance, and training methods to meet the needs of our extremely dynamic operations environment. No other MAJCOM can yet match AMC's Ops RAMS model.

Finally, it has been an absolute honor to serve inside the mighty AMC SE directorate. First and foremost, I would like to thank Mr. Dave Miller, Deputy Director, for his absolutely flawless proactive leadership 24/7/365. No finer or more capable safety professional exists in this Air Force. AMC as a command is indebted to his constant vigilance, oversight, and pure senior leader intuition in making all facets of the directorate work efficiently.

I have enjoyed firsthand the herculean effort of our AMC flight, ground, weapons, and en route divisions, led by a pack of outstanding functional leaders—Steve Panger (SEF), Joe Hughes (SEG), Harry Lasell (SEW), and Lt Col Pete Kelley (SEO)—and their teams of "quiet professionals." This also extends to our partners at Schatz Publishing Group who are responsible for making *The Mobility Forum* a world-class publication. A very special shout-out to our Mobility Forum editor, Ms. Kim Brumley, who has been simply instrumental over the last two years in transforming the original paper-based "MATS Flyer" of 1954 into the strategic messaging electronic "periodical of choice" for the AMC, 18 AF, and EC Commanders of 2014. To all these quiet safety professionals and those at our wings, our units, and our bases around the globe who are getting it done, my deepest thanks on behalf of all those who benefit.

Very respectfully,
Col Paul Murphy

"Mission Discipline and Safe Execution!"



18th Air Force Welcomes New Commander

18th Air Force Public Affairs

Lt Gen Carlton D. Everhart II assumed command of 18th Air Force during a ceremony officiated by Air Mobility Command Commander Gen Darren W. McDew at Scott AFB on June 20.

Addressing the Airmen in his new command for the first time, Everhart affirmed the command's heritage of excellence.

"18th Air Force's first commander, Colonel Earl Young, observed, 'the one thing that has never changed has been our leaders and our Airmen. We've always had the best.' I wholeheartedly agree," Everhart said.

In his previous assignment, Everhart commanded the 3rd Air Force and 17th Expeditionary Air Force, located at Ramstein Air Base, Germany. As commander of 3rd AF and 17th EAF he was responsible for planning, deploying, employing, sustaining, and redeploying Air Force forces supporting U.S. European and U.S. Africa

Command during contingency and wartime operations. Previous to his command at 3rd AF, Everhart served as commander of the 618th Air and Space Operations Center here.

During the ceremony, McDew expressed his confidence in Everhart's ability to shepherd 18th AF's global mobility mission.

"You won't find an officer more capable for this command than General Everhart. He has the energy, the enthusiasm, and just as important, the impeccable credentials that this unique organization demands," McDew said.

As 18th AF commander, Everhart is responsible for the command's worldwide operational mission of providing rapid global mobility and sustainment for America's armed forces. With more than 37,000 active-duty Airmen, Guardsmen, Reservists and civilians, and approximately 1,100 aircraft, 18th AF manages

global air mobility through the 618th AOC, 11 wings, and two stand-alone airlift groups.

Averaging an aircraft takeoff every two-and-a-half minutes, 18th AF sustains America's military operations worldwide, including combat operations in Afghanistan, through its airlift, aerial refueling and aeromedical evacuation capabilities. The command also responds to humanitarian crises at home and around the globe.


"We fuel the fight, deliver hope and save lives all with speed, safety, and success. We provide our nation the 'global' in global reach, global vigilance, and global power, giving us a prominent role in national security," Everhart said. 

Photo above: Lt Gen Carlton D. Everhart II assumes command of 18th Air Force from Gen Darren W. McDew, Air Mobility Command commander, at Scott AFB, Ill., June 20, 2014. CMSgt Thomas Burman (618 AOC) assisted during the ceremony.

USAF PHOTO BY SSGT JONATHAN FOWLER



18th Air Force Commander's Intent

The strength of our command has always been our Mobility Airmen and a strong family support structure. Take care of the mission, put others first, take care of those who work for you, and insist that they do the same. There is no doubt 18th Air Force is truly a world-class team ... an indispensable member of the world's finest military. Thank you for your leadership, your service, and support. I am honored to serve as your commander.



U.S. AIR FORCE



Our Mission

We have the most professional and combat-ready force doing the job every day. We fuel the fight, deliver hope, and save lives, all with speed, safety, and success. Our Combatant Commanders and joint partners rely on us for rapid global mobility.

No one else can do what we do!

Family

The tremendous service to our Nation made by the men and women of the 18th Air Force and the selfless dedication and commitment of their families are the force behind our heritage of excellence. Families are a vital part of the 18th Air Force's ability to remain strong. We nurture and strengthen them during peacetime so we can focus on the mission when our Nation calls. We recruit individuals and retain families. Families have never wavered in their support despite the many challenges they have faced.

Take care of the family!

My Expectation

We face an increasingly volatile world stage, and with declining budgets, we must continue to find efficiencies and prioritize the vital capabilities we maintain. Each of you are critical to the team. We need everyone on the field and engaged. Put others first, take care of those who work for you, and insist that they do the same. The work of our Nation is impossible without innovative Airmen like you to take us into the future. We must innovate and adapt to remain the best in the world.

Get on the field; be engaged!

CARLTON D. EVERHART II
Lieutenant General, USAF
Commander



EC Remains Focused on Expeditionary Combat Support After SF Training Consolidation

By CAPT MATTHEW CHISM
Air Force Expeditionary Center Public Affairs

Security Forces (SF) deployment training has transitioned away from the Air Force Expeditionary Center (EC), but expeditionary combat support remains a keystone for the EC.

The 421st Combat Training Squadron's (CTS) Phoenix Warrior course held its final graduation in conjunction with a ceremony to end the program's tenure on Joint Base McGuire-Dix-Lakehurst on June 27.

"This served as a sendoff for the graduates preparing to deploy and a thank you to the past and present instructors for their hard work," said Lt Col Brandon Casey, 421st CTS commander. "They poured their heart and soul into developing

this training because they care about the warfighter. They take pride in the safety of the men and women they serve."

Transitioning the deployment training course is due to the Air Force (AF) consolidation of SF regional training locations to Fort Bliss, Texas. Centralized training is expected to create manpower and fiscal efficiencies, maximize curriculum standardization, improve training quality, and ensure SF Airmen are given opportunities to complete varying training objectives.

"It also provides the career field the flexibility to quickly change required curricula to meet Combatant Commanders' training requirements and changing enemy tactics,

techniques, and procedures while still maintaining standardization and oversight of required training," said Michael Glunk, Air Force Security Forces Command Operations Division chief. "Once we complete our consolidation, SF can proudly claim they attended the Desert Defender Readiness Training Center

Photo, above left: Airmen from the 412th Security Forces Training Squadron, Edwards AFB, Calif., prepare to enter a compound during Phoenix Warrior Training.

Photo, above right: SSgt Cinderella James from the 412th Security Forces Squadron, Edwards AFB, Calif., conducts base security operations training during the final Phoenix Warrior course at the USAF Expeditionary Center, Joint Base McGuire-Dix-Lakehurst, N.J.

USAF PHOTOS BY BRAD CAMARA

and be confident they are ready for any worldwide deployment.”

The EC continues to provide expeditionary combat support (ECS) in three distinct venues. The 421st CTS maintains six courses dedicated to expeditionary skills. The 422nd Joint Tactics Squadron controls and refines all ECS TTPs for expeditionary ground forces and conducts training for deployed leadership of ECS Airmen. The EC-led Eagle Flag exercise is the testing ground for ECS training; it develops, tests, and rehearses the AF’s ECS library of capabilities.


“The EC transitioned the Phoenix Warrior course to Fort Bliss. We remain focused on the ECS training

of not just Airmen, but service members from all branches of the Department of Defense,” said Maj Gen Rick Martin, EC commander. “With programs like Eagle Flag, Phoenix Raven, Combat Airmen Skills Training, and our development of TTPs for the field, the EC will continue to enhance our force’s expeditionary capabilities.”

Instructors at the EC continuously seek ways to enhance their teaching skills and the information they provide. The 421st CTS instructors teach different courses throughout the year that increase their knowledge of different specialties and increase the overall quality of the training programs.

“This squadron operates on synergy,” Casey said. “Our instructors are exposed to broader skillsets so they can relate them across disciplines. Having experts move between different courses makes us more adaptable when customers have new requirements.”

MSgt Keith Tartaglia, 421st CTS CAST course director, said instructors embrace the adaptive nature of the instruction and are devoted to deliver up-to-date material.

“These instructors give 100 percent,” said Tartaglia. “There is a sense of personal leadership and responsibility to make sure we provide the best training, because we know it saves lives.” 

Airmen conduct Urban Operations during Combat Airmen Skills Training at the USAF Expeditionary Center, Joint Base McGuire-Dix-Lakehurst, N.J. CAST is one of the expeditionary combat support programs that remains at the EC after the Phoenix Warrior course was transitioned to Fort Bliss, Texas.

USAF PHOTO BY BRAD CAMARA



Just How “All Right” are “Two Red and Two White?”

By MAJ RYAN W. ADAMS, KYANG
123 GMS/DO

If you weren't taught how to use Vertical Glideslope Indicators (VGSI) for landing before your first night flight, I'm betting you heard about it soon thereafter: “Fly two red and two white, and you're alright ...” The point of this article isn't to counter that beginner's level “instruction” or old saying so much as pass along some additional information, backed by mishap findings, and discuss some countermeasures to what is a threat to safe AMC flight operations.

BACKGROUND

Pilots aren't exposed to the substance of FAA VGSI regulations, which specify that the setting of Precision Approach Path Indicators (PAPI) must allow for two specific outcomes to be achieved. The first, which is assumed, is the lowest possible on-path indication must clear a prescribed obstacle clearance surface (OCS)—hence that old saying. Second, the lowest on-path indication must cross the runway threshold at a height compatible with “the most demanding Height Group aircraft that uses the runway.”¹ The

threshold crossing height (TCH) requirement is intended to ensure an aircraft's wheels pass over the start of the runway with ample clearance.

Both requirements must be addressed in VGSI installation. Subsequently, given basic geometry, the latter results in an approach path that may provide significantly more vertical clearance (i.e., margin of safety) over obstacles/terrain *further out from the threshold* than the former.

What are Height Groups and how do I know what mine is (and the desired VGSI TCH for it)? In the United States, aircraft types are classified into one of four Height Groups based on the distance between

the cockpit or pilot's eyes and the aircraft wheels when on approach. Table 1 is consolidated from DoD and FAA VGSI publications.^{1,2}

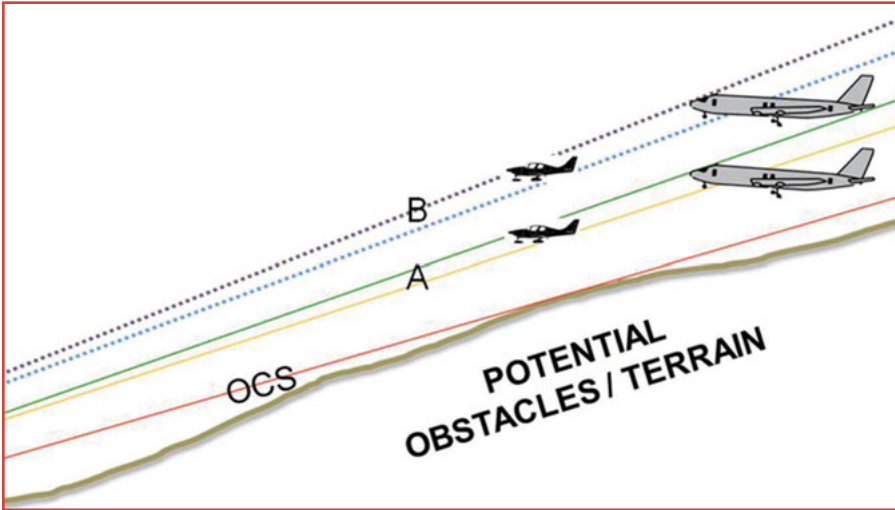
LESSONS (TO BE) LEARNED

After a mishap in 2007, the Canadian Transportation Safety Board (TSB) determined that the pilots knowingly deviated from VGSI guidance on final approach to maximize landing distance available.³ The pilots did not recognize they were deviating from a path incompatible (i.e., too low) with their aircraft eye-wheel height (EWH), despite (Canadian) regulatory guidance describing and approach chart symbols depicting VGSI EWH compatibility.³ The

TABLE 1. Classification of USAF Aircraft

Classification of types in bold currently under review

Height Group	Example Aircraft	Cockpit-to-Wheel Height	VGSI TCH
1	C-12, C-21, C-20, T-38, T-1, Fighter Aircraft	≤10 ft	20-45 ft
2	B-737, C-130, B-2	15 ft	25-50 ft
3	B-707/ 757 , KC-135, C-17 , B-52	20 ft	35-55 ft
4	B-747/767, KC-10, VC-25, C-5, B-1	>25 ft	60-80 ft



PAPI A: compatible for smaller Height Groups and compliant with the OCS; PAPI B: compatible for larger Height Groups (steeper angle and/or displaced further from threshold than A).

PRECISION APPROACH PATH INDICATOR (PAPI)

- P₁** PAPI for aircraft with eye-to-wheel height up to 10'. P₁ P₂
- P₂** PAPI for aircraft with eye-to-wheel height up to 25'.
- P₃** PAPI for aircraft with eye-to-wheel height up to 45'. P₃ A_p
- A_p** APAPI - Abbreviated PAPI for aircraft with eye-to-wheel height up to 10'.

Canadian published VGSI symbols/legend used for airport and instrument procedures charting

deviation contributed to Controlled Flight Into Terrain (CFIT).³ The TSB came to two conclusions, which seem applicable to *all* pilots:

1. Pilots must be aware of their aircraft EWH.³
2. Pilots must ensure they are aware of VGSI compatibility with aircraft EWH.³

The mishap occurred in day, Visual Meteorological Conditions, and on a runway that had no adverse obstacles or terrain nearby, so the TSB was concerned with the potential for this issue in less ideal conditions/locations where margins of safety are critical.³ They formulated a concise “Caution” to aircraft operators accounting for what could happen in

the presence of degraded visual acuity due to darkness and/or visual illusions (e.g., black hole approaches) with obstacles or terrain close to the final approach path.³ The following is published in the Canadian Aeronautical Information Manual (AIM):

“CAUTION – Failure to assess the EWH and approach slope indicator system compatibility could result in decreased terrain clearance margins and in some cases, even premature contact with terrain ...”⁴

CATCHING UP

We know VGSI are usually just one of several visual references

used for approach and landing. Normally they aren’t mandatory, and sometimes they’re out of service or not even installed. Regardless, the information described previously (substituting “Height Group” for “EWH”) can help any pilot determine when to rely more on other visual references, *in addition to* the VGSI. Absent a system of chart symbols like Canada’s, Height Group compatibility should be accounted for by referencing VGSI TCH and the substance of Table 1.

GOING FURTHER

U.S. TERPS procedures impose a unique restriction if there are unlit obstacles or terrain close to an approach’s vertical path. This “red flag” cue to aircrew is an annotation in suitability report TERPS reviews or on approach plates such as: “When RWY XX VGSI inop, procedure NA at night.”^{5,6} This feature encapsulates two of the conditions the Canadian TSB factored into the “Caution” cited previously: presence of adverse (and unlit) obstacles or terrain close to the final approach path and applicability during times of darkness. Given these conditions and *lack of an electronic glide slope*, the PAPI is the only



123 CRG Airfield Survey Team collaborate with airfield management personnel to develop TTPs for assessing VGSI for suitability reports when TERPS review mandates operability.

aid to help the pilot avoid a CFIT mishap—he/she cannot otherwise *see* what obstructions to *avoid*. In these instances, the compatibility of the system with aircraft Height Groups is absolutely critical.

REAL (BAD) ODDS

The only available instrument approaches to Birmingham, AL (KBHM) Runway 18 (both non-precision) require the PAPI to be operative at night. The PAPI has a TCH of 48 feet, meaning it is compatible with Height Group 3 aircraft and below. Comparing wheel height over the OCS (i.e., possible

obstacles or terrain) while flying the current PAPI on-path profile versus one compliant for Height Group 4 aircraft, **at a 1.5 nm final, a KC-10's margin of safety is degraded 28 percent – by .2 nm, it's degraded 58 percent.** This range is where obstacles/terrain, not visible to the naked eye at night, drive the TERPS VGSI requirement!

It's not that a margin of safety doesn't exist, so much as when you are perfectly on-path (as you are *all* of the time), your room for deviations (which *never* occur) is negligently non-standard. On short

final, if a KC-10 descends into the current PAPI “three red and one white” path (i.e., “slightly below”), **the wheel path actually penetrates the OCS!** This isn't just a Height Group 4 Mission Design Series (MDS) issue ... **this risk exists when any aircraft larger than Height Group 1 operates into runways lacking a precision approach and equipped with VGSI that are mandatory but calibrated for any notably smaller Height Groups.**

Couldn't pilots of larger Height Group aircraft descend above the PAPI path? This idea alone negates the Precise

The good news is this issue has been recognized and vetted, can be mitigated, and is being addressed with the key stakeholder ... **you**.

design and purpose of the PAPI, and begs two questions. How high above path does that aircraft need to be? And how is this indicated visually (i.e., how far into “three or four white”) given lack of other visual references? With respect to transitioning from an instrument procedure at low altitude, the idea counters the evolution towards instrument and visual path coincidence (vis-à-vis the stabilized approach concept).

These “bad odds” have been mitigated at one U.S. airport. The FAA has prohibited Height Group 4 aircraft from day *and* night landings on Portland, OR (KPDX) Runway 21 due to VGSI compatibility – despite approaches that don’t otherwise require VGSI operation.⁷ Outside of imposing similar restrictions and focusing on when this issue is most critical, the lack of other visual references mentioned previously is the risk factor to address. We can mitigate this with Heads Up Display (HUD) flight path angle and vector control (referencing PAPI position and descent angle) or, for non-HUD equipped MDS, Night Vision Device (NVD) approach procedures.

THE WAY AHEAD

Thanks to the ASAP safety program, where this concern was first raised, all USAF aircrew can expect to see general language addressing this issue. Information similar to the Canadian AIM and referencing some

form of Table 1 is expected in a forthcoming re-write of AFMAN 11-217. It’s not realistic to think this applies to all MDS that typically don’t operate into short runways or austere locations (i.e., fighters/bombers), but proposed courses of action addressing the issue are currently in coordination for AMC consideration. MDS subject matter and safety experts will more fully address specific guidance going forward and include such information in a standardized location within fleet source documents (e.g., 11-2MDS Vol. 3).

CONCLUSION

The mission oftentimes requires us to operate into locations that weren’t originally designed or equipped for AMC-size aircraft, so VGSI compatibility could be a critical issue at night. The good news is this issue has been recognized and vetted, can be mitigated, and is being addressed with the key stakeholder ... **you**. Cultivate your professional knowledge base and grow stronger by understanding more about all the tools we use in our trade. In this case, I think most would agree that additional general knowledge about VGSI and potential safety restrictions, conservatively applied and aimed at keeping you “out of the weeds,” are cheaper to impart than the value of your life and those of our teammates! 

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WHAT MAKES A GREAT ACTIONABLE ASAP REPORT?

Aviation Safety Action Program

By SMSGT MATT MUELLER, AMC Ops RAMS

You just finished your sortie and you think, "Wow, that was a challenging flight ... and others can learn from what just occurred. However, how can I get the information to them?" One outstanding way is to submit an Aviation Safety Action Program (ASAP) report. Now you may have a few questions:

- > What should I include in the report?
- > How detailed should the report be?
- > What kind of outcome do I expect ... policy change or crew awareness?
- > Should I include my frustration with the system?

The ASAP Scoreboard can be found at https://www.usaf-mfoqa.com/safety-asap/cac_html/index.html, and the information is taken directly from the ASAP submission. The Scoreboard has the submitter's description of the event and, if included, will have his/her suggestion to

correct the situation. The Resolution section is AMC's response to the reported ASAP and will include action taken, if any, or reiterate the "moral of the story" and "track for trends." AMC takes this seriously and makes every attempt to take action on any ASAP that presents an actionable event. Sometimes we get an ASAP that barely gives enough detail to understand the situation and/or gives little suggestion to the situation. This leaves us to guess or speculate on the situation ... and we won't.

So what is a well written ASAP? For starters, it has enough content and detail to understand fully the situation regardless of crew position or aircraft experience. It will also have supporting evidence and a suggestion of what needs to be done to correct the situation. The suggestions can vary from "As an instructor, I should have given more attention to the student's actions ..." or "The T.O. changed, and it put the checklist steps out of order, causing a safety concern ..."

As you can see, the first suggestion is to give awareness to fellow instructors to be aware of student actions, while the second suggestion is an actionable item, so AMC looks at the checklist steps within the new Tech Order. This is where we, as Ops RAMS, coordinate with the correct SMEs to ensure the suggested correction is given serious attention and change is made, if warranted. To alleviate confusion, consider the following when writing your report.

- > Include detailed information
- > Paint the picture of the situation
- > Make a suggestion to correct the issue (**you're the expert**, so let us know what needs to be done)
- > Say exactly what needs to be done—don't expect us to guess
- > Include facts and/or proven statistics
- > Don't include emotion and personal bias

Paint the picture of the situation and how it evolved, if needed. Here is

an example of a bad and good event description:

- The sun settled on the horizon and I flew fast.
- The sunlight beaming off the ocean water created a glare in the PF windshield, resulting in temporary blindness and the inadvertent increase in approach speed.

The second description clarifies that the issue can only be replicated with the sun in the correct position and that the pilot inadvertently increased the approach speed. The first scenario sounds as if the two are not connected. Sometimes ASAP reports lack the detail needed to fully understand the scenario. Details can include but aren't limited to altitudes, direction(s) of travel, aircraft settings, crew content, and checklist step. You must provide enough information when writing the ASAP so that there is no guess about what occurred. Detailed reports and suggestions have led to the correction of many procedures

within the MAF. Here are a few examples of incomplete reports:

ASAP #816 reads:

"Visually located other aircraft above our position, corrected down immediately, but visually confirmed clear of the other aircraft. Better CRM monitoring of aircraft on TCAS."

After reading this ASAP, some questions arose. How close was the other aircraft? How did the two aircraft get in this situation? Other questions may exist. This situation warranted some crew intervention, but I'm sure it has information and details that will help another aircrew. However, it lacks the details to fully understand what happened.

ASAP #874 reads:

"Climbed above assigned altitude of 160 by 400 ft."

Again, this screams of the need for additional information. Why did you climb too high? Were you task saturated? Was there a physiological issue that caused you to climb above the assigned altitude? I

assume the submitter meant FL160 or 16,000 ft., and not 160 ft., but it wasn't made clear. Take the time to give readers (fellow aircrew members) the necessary information that allows them to learn from the situation.

Now don't forget, the ASAP is shared with the SMEs within the HQ AMC staff only after it has been redacted to protect YOUR identity! Note: I didn't say it was anonymous. Don't be afraid to add your contact information; your identity will not be revealed. The ASAP Program office can use that information to gather additional information if needed, but your identity will NOT be shared with anyone! With that said, the ASAP program isn't a "blog" or "social media" area to post emotion or personal bias. Please consider the facts and not the emotion when writing an ASAP. A comment such as *"They don't know what they are doing"* (broadly referring to a career field) has no place in the ASAP report. The Air Force trains highly skilled Airmen in many career fields that know their jobs. A negative blanket statement will not help the situation. In fact, it can make it worse. We need a recommended solution that does not include emotion. If you discover a discrepancy in training or policy, please write an ASAP to identify the issue and then provide a solution, if able.

An ASAP report should provide information to other crews, or HQ SMEs, to help prevent accidents from occurring. Painting a complete picture of the situation helps everyone understand what happened. So don't forget the details of the ASAP report ... they are important and will help drive your point home! 🌐



Airman to Airman

Lucky to be Alive

By KIM BRUMLEY, Staff Writer

“On 20 April 2012, I was involved in a near fatal car accident. The decisions I made that night have forever changed my life and negatively impacted my career. It was a horrific experience that I am still dealing with to this day,” said SSgt Richard Mahan.

While going through a divorce and the rough times that followed, SSgt Mahan’s friends decided to take him out for a few drinks to blow off some steam that fateful night. “The Air Force has beaten into us to always have a plan and always have a designated driver (DD),” he said. Therefore, the group was prepared and had a DD in place before heading out to the bar.



Watching the Nuggets in the playoffs, the group sat at the bar drinking for a few hours before proceeding to a grand opening at a night club. After a few more hours of drinking, the DD grew tired and cut out early, so Mahan and his friend decided they would just call a taxi for a ride home. As Mahan stood in the parking lot, searching on his phone for a cab company to call, another friend came out of the bar and offered them a ride. "Reluctantly, we said, 'Yeah, that's a great idea. We'll just get a cab from your house because it's closer to base and it will be cheaper.' We regrettably got into his car, not knowing he was intoxicated."

Only a few miles down the road, the driver lost control going 70 miles an hour and the car struck a brick pillar. SSgt Mahan sustained severe head injuries and was rushed to a trauma center, where a tracheal tube was put down his throat and attached to a machine that artificially breathed for him. He was then given a CAT

It's hard to see the picture when you're inside the frame...

scan to see if he was brain dead. "When I awoke the next day, I had a catheter and staples and sutures all through the left side and back of my head," he said. Mahan had been sitting in the back seat, and his friend in the passenger seat had severe head injuries, broke his back and leg, and lost a finger. "It's a miracle that any of us are alive to tell this story," said Mahan.

In the days following the accident, SSgt Mahan was in and out of consciousness and could not remember


any part of the wreck. The next full year, he went through cognitive therapy "to learn how to get my memory back and how to utilize my brain again." Initially, he didn't realize how serious the injuries were. "Have you heard the expression: it's hard to see the picture when you're inside the frame?" he asked. "I didn't think anything was wrong with me." After retesting at the end of the year, he could see a remarkable improvement in his cognitive skills.

Through the entire ordeal, he was fortunate to have extremely supportive parents that stayed with him during his recovery process. As a newly single dad, Mahan could not have cared for his two-year-old son independently due to his injuries, but with his mother there to help, he was able to see his young son.

The accident also affected his Air Force career, as he lost his Aeronautical Orders indefinitely and is now unable to perform his duties as a C-17 Loadmaster. "I still haven't flown since the accident. With this ERB, I'm probably going to be a civilian next year—I'm stratted last in my squadron because I haven't flown," he said.

Although SSgt Mahan is unable to fly, he is making the most of the experience by sharing his story with other Airmen as a representative of the Airman-to-Airmen (A2A) Safety Advisory Council. The A2A council is a group of Airmen who have had an unfortunate experience or accident and are willing to brief peers in an effort to prevent similar mishaps.

"You sit through these briefings and you think this is never going to happen to you," he said. Mahan admits that he, too, thought it would never happen to him because he always had a plan. He now knows that because plans change, it could and did happen to him. He said the more variables that you introduce, the more your plan is improvised, so you can't always rely on the plan you made at the beginning of the night to work at the end of the night.

Mahan said that prior to the accident, "My thoughts were never toward safety. I was only concerned about getting in trouble. I didn't want to get into trouble, so I thought I just wouldn't drive. But that's completely changed. You might not get into trouble, but you could lose your life or hurt someone else. I'm lucky to even be alive." 

SrA Joseph Rimmacher, 435th Air Mobility Squadron crew chief, ensures his hearing is protected before working on the flight line.

USAF PHOTO BY A1C GROVERT FUENTES-CONTRERAS



If You Can't Turn it Down, Block it Out!

Preventing Hearing Loss

By MSGT JULIE MEINTEL
445th Airlift Wing, Wright-Patterson AFB, OH

If you are reading this article, chances are very good that you are involved in some way in the mobility world, the flying world, or both. All of us who live and work in and around these environments need to make sure we are protecting ourselves from their varied risks. One of those risks is damage to our hearing and hearing loss.

In 2001, the National Institute for Occupational Safety and Health and the occupational safety and health community in general named hearing loss one of the top priority areas for research heading into the new century. According to a paper published by the Centers for Disease Control (CDC), noise-related hearing loss is 100 percent preventable, but once acquired, it is irreversible and permanent. Among the professions at risk for work-related hearing damage and hearing loss are carpenters, plumbers, construction workers, agriculture workers, and yes, you guessed right, military.

So, what exactly is noise, and how does it affect what you do? The term itself is pretty subjective, but for our purposes here, it just means any unwanted or annoying

sounds. It can be of a very short duration, or it might last for your whole workday. Steady noise is just that; it might start out suddenly or gradually, and it tends to be at a lower intensity level, but it lasts for a long period. Impulse or blast noise tends to be much shorter and more intense. Think firing a gun, or a radio squelching feedback at high volume, or even breaking the sound barrier.

DECIBEL LEVELS OF COMMON SOUNDS

SOURCES	LEVEL (DB)
Whispered Voice	20-30
Urban Home, Average Office	40-60
Average Male Conversation	60-65
Noisy Office, Low Traffic Street	60-80
Jet Transport (Cabin Noise)	60-88
Small Single Plane (Cockpit)	70-90
Public Address System	90-100
Busy City Street	80-100
Single Rotor Helicopter (Cockpit)	80-102
Power Lawn Mower, Chain Saw	100-110
Snowmobile, Thunder	110-120
Rock Concert	115-120
Jet Engine (Proximity)	130-160

Source: http://www.faa.gov/pilots/safety/pilotsafetybrochures/media/hearing_brochure.pdf

Every vehicle that goes out to the flight line should always have a box of earplugs in it, and every time you step off the van and onto the flight line, you should stick those little foam plugs in your ears.

The flight line is often a noisy place to be, whether you are an aircrew member operating an aircraft, a mechanic or crew chief fixing an aircraft, or a passenger service representative delivering passengers to an aircraft. That is why every vehicle that goes out to the flight line should always have a box of earplugs in it, and every time you step off the van and onto the flight line, you should stick those little foam plugs in your

The Air Force Waiver Guide (www.wpafb.af.mil/shared/media/document/AFD-130118-045.pdf), updated in May of 2013, outlines in detail what constitutes different levels of hearing loss and profile levels for safe flying. The Air Force uses these decibel levels to categorize hearing loss.

- Normal hearing (0 to 25 dB HL)
- Mild hearing loss (26 to 40 dB HL)
- Moderate hearing loss (41 to 70 dB HL)
- Severe hearing loss (71 to 90 dB HL)
- Profound hearing loss (greater than 91 dB HL)

While hearing aids can be helpful, they can't replace a healthy and functional auditory system. Our hearing naturally degrades a bit as we age, and if we give the process a head start by not doing everything we can to protect our hearing, we can be setting ourselves up for bigger problems down the line.

ears. The constant whine of the engines, the external power carts, and other machinery will really take its toll on your hearing over the long term, and hearing is not something you can get back.

Ok, so now we know that we need to be careful with noise and our hearing, but how do we know what is a normal noise and what is potentially damaging? How is noise measured? Well, noise is measured in decibels. Measuring sound is a little bit tricky, since the human ear is so incredibly sensitive. The smallest audible sounds register at 0, so near total silence would be 0 decibels (dB), a normal conversation is about 60 dB, and a jet engine is around 130 dB. You can rupture an eardrum with blast noise at 140 decibels.


What do these numbers mean? Well, according to the same FAA pilot safety brochure, the number of decibels you are exposed to has a direct correlation to the damage you are inflicting upon your ears. Damage can range from simple ear discomfort for exposure of short duration, at around 120 decibels, all the way to permanent hearing impairment and even loss at sustained exposure for eight hours a day to loud noise above 90 decibels.

Think about your work environment and check the chart to see the approximate decibel range you work in most days. Here's another chart; this one reflects the maximum amount of exposure time to *protect* your hearing.

Noise Intensity (Db)	Exposure Limit In Hours Per Day
90	8
92	6
95	4
97	3
100	2
102	1.5
105	1
110	.5
115	.25

Source: http://www.faa.gov/pilots/safety/pilotsafetybrochures/media/hearing_brochure.pdf

Thankfully, hearing loss is 100 percent preventable, and it really doesn't take that much work or equipment to protect your ears. Keep those little foamy earplugs in your pockets or your toolkit; they muffle loud sounds significantly, and they are small and incredibly easy to use. Wear a headset on and around the airplane if you have one, and if you have the noise-canceling type of headset, that's even better. To maximize your hearing protection, wear the earplugs AND your headset all the time on the flight line and in flight.

What if you have already sustained some level of hearing loss? Is your flying career over? Not necessarily. Air Force flying physical standards for hearing include follow-up testing by an audiologist if your hearing falls outside of normal limits, or what is referred to as H-1 profile. H-2 profile does not automatically require a waiver, but it does require a more in-depth audiology workup. H-3 requires a waiver, and many times when a flyer is initially given H-3 profile, flying will be restricted until further testing and a waiver are accomplished. If you are diagnosed with hearing loss, talk to your flight surgeon about what further testing may be required and what you may need to do in order to keep flying. 

PUTTING OUT FIRES

By MSGT JULIE MEINTEL
445th Airlift Wing, WPAFB OH

Every year, often in the dry heat of summer, we see many stories in the news about wildfires that burn out of control, scorching millions of acres of land, destroying forests and wildlife, and putting thousands of people out of their homes. I remember being in Colorado Springs in the summer of 2012, just

after a wildfire had devastated the area. Vast swaths of mountainside, normally heavily blanketed with green trees, were burnt black, and only bare branches were left standing. Pictures of fires roaring just behind the arches of the Air Force Academy's chapel made the rounds on social media sites like Facebook and Instagram.

From 2004 to 2013 an average of 44,300 wildfires burned 3.7 million acres of land across the United States. Wildfires cause widespread destruction, personal injury—and sometimes death for those who don't or can't get out of the fire's path in time. Often those people are the same ones fighting to get the fire contained. While local and state agencies do their best to ensure that firefighting capability is strong, there are times when a little extra help really comes in handy.

In the early 1970s, Congress decided to combine the strength of the existing local resources with the flexibility and equipment the military possessed to add another weapon to the firefighting arsenal. They created the Modular Airborne Fire Fighting System (MAFFS) program in response to wildfires burning uncontrollably on Air Force

and privately owned property. It is a team effort between the U.S. Forest Service and the Department of Defense: the Forest Service owns the firefighting systems, and the military owns the C-130 aircraft that provide the transportation and has the aircrews and the maintenance and support personnel to move these missions.

MAFFS functions as an arm of the Forest Service, which contracts with private companies to provide air tankers to drop fire retardant as a part of wildfire suppression efforts. When wildfire season is in full swing and all other firefighting resources are already committed, that's where military C-130 H and J model aircraft come in. MAFFS are portable delivery systems inserted right into the aircraft without the need for a lot of structural modification. The C-130s are converted into air tankers when they get the call, usually from multi-agency emergency personnel or the governor of the affected state. MAFFS are an important component of the Forest Service, because they

A C-130 equipped with a MAFFS system sprays retardant over the Black Crater Fire in Oregon.

U.S. FOREST SERVICE PHOTO BY THOMAS IRACI



Over the last 10 years, military C-130s equipped with MAFFS have delivered a total of approximately 8.5 million gallons of retardant on wildfires, an average of about 850,000 gallons per year.

provide a means for the Forest Service to perform a sort of “surge” when fires are burning out of control and all other firefighting assets are already in use. Although authorities consider other factors when deciding to call in MAFFS, the main criteria is simply that all other assets are committed and help is needed quickly.

Standard agreement with the Forest Service is that MAFFS aircraft will be in position within 48 hours of callout, and prepared to execute within 72 hours, though MAFFS wings often beat that requirement. Eight MAFFS are ready for operational use, and four C-130 units are trained to fly the missions: the 153rd Airlift Wing (Wyoming Air National Guard), the 145th Airlift Wing (North Carolina National Guard), the 146th Airlift Wing (California Air National Guard), and the 302nd Airlift Wing (Air Force Reserve).

Given that MAFFS crews are almost exclusively Guard or Reserve crews, the majority of whom trained and flew on active duty, the experience level and number of flight hours is high, averaging 3,500 flight hours in each crew position. This is not the number of MAFFS-exclusive flight hours, but the crews that fly these missions are highly experienced and highly qualified. They receive annual classroom and flight training

specific to MAFFS procedures and equipment, in addition to the normal aircrew training for the C-130. Conditions for firefighting missions are challenging, requiring crews to fly the aircraft low, slow, and heavy near wildfires. Typically, MAFFS crews do not directly suppress or fight fires; air tankers reduce the intensity and slow the growth of wildfires so that firefighters on the ground can build containment lines around them. MAFFS systems are capable of discharging their entire 3,000-gallon load of fire retardant out the back of the airplane in less than five seconds, covering an area of a quarter-mile long by 100 feet wide. They can also divide the load to allow greater flexibility, depending on the situation, and crews can refill the systems in about 10-12 minutes once the load is completely discharged.

This versatile firefighting system has definitely proven its value. Over the last 10 years, military C-130s equipped with MAFFS have delivered a total of approximately 8.5 million gallons of retardant on wildfires, an average of about 850,000 gallons per year.


In 2011, the Forest Service switched from the original MAFFS systems, which were designed in the 1970s, to a newer, more advanced version. The old-style MAFFS are now known as

GALLONS OF FIRE RETARDANT DELIVERED BY MAFFS

2003	0 gallons
2004	870,000 gallons
2005	880,000 gallons
2006	1,415,000 gallons
2007	200,000 gallons
2008	1,325,000 gallons
2009	0 gallons
2010	0 gallons
2011	1,200,000 gallons
2012	2,450,000 gallons

10 Year TOTAL 8,340,000 gallons

“Legacy” systems and will be used mostly as spares until their service life expires. The newer MAFFS II systems rely less on specialized ground equipment and are their own self-contained units. This enables the MAFFS II to use existing tanker bases and reduce flight time to and from fires, making it more efficient and reducing overall costs at the same time. The fire retardant used in the MAFFS II is cleaner and more environmentally friendly; it also has a higher concentration and is more effective in drawing the fire containment lines than the Legacy version.

As long as wildfires burn, MAFFS will continue to work side by side with local firefighting resources to put them out as quickly as possible and minimize any damage. 

To see MAFFS in action, look on YouTube for videos depicting their mission.

**Safety
Focus:**

AIRCRAFT MISHAPS

FY 2009 - 2013 Stats

7 Fatal Injuries

**57 Major Mishaps
(Class A & Class B)**

**Over
\$366 Million in
Damages**

Poor Judgment

Cause

Willful Negligence



ent

Checklist Discipline

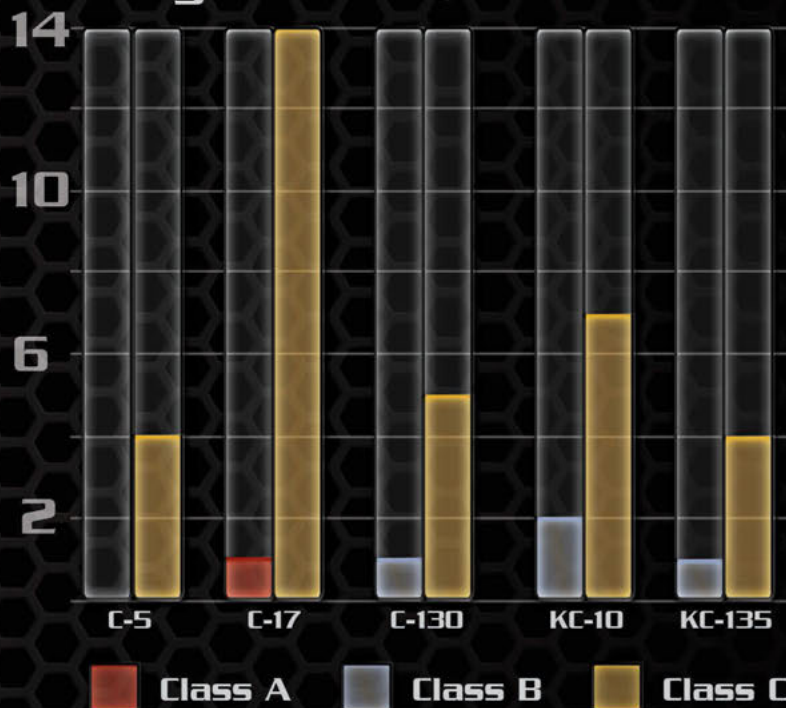
Unstable Approaches

Mishaps

Fatigue

Non-Compliance

FY 2014 Mishaps by Aircraft, Class A/B/C





America's Worst Bird Strike

By RITA HESS, Staff Writer

I was not quite three years old when the plane crashed. I don't remember the mishap, of course, and I don't recall hearing about it in all the years since. But then I began to research bird strikes and there it was: the story of the worst bird strike in American history. While it's a tragic tale, it spawned many positive changes in aviation—specifically, it changed the way we address bird strike hazards.

THE MISHAP

Just before six o'clock on a crisp October evening in 1960, Eastern Airlines flight 375—a propeller driven Lockheed L-188 Electra—left Logan Airport in Boston headed for Philadelphia and points south. Among the passengers were 15 Marine recruits bound for training camp at Parris Island, South Carolina.

Some of the recruits' families were watching from an observation deck as the plane departed.

Just six seconds after takeoff, a flock of starlings (estimates say it was 20,000 birds) suddenly flew into the aircraft's path. Birds ingested into the engines caused two engines to lose power and a third one to flame out.

At an altitude of only a few hundred feet, the plane rolled to the left and crashed almost vertically into the shallow water in Winthrop Bay, killing 62 people aboard the aircraft. Only 10 people survived, most of them critically injured.

Witnesses say the mishap scene was horrific. The plane broke apart on impact, and pieces of it were embedded into the mud. What was left of the fuselage was soon submerged just below the surface of the water.

The debris field was only several hundred yards offshore, and small watercraft in the area rushed to

search for survivors. Local residents from shore also made a valiant effort, wading into mud that was several feet deep and swimming out to retrieve bodies they found floating in the water—most still strapped into their seats. The seats and bodies were pulled to shore and lined up on the beach until a temporary morgue could be established.

One Boston woman vividly remembers the scene.

I was in the fourth grade at the time of the crash. My father was the Harbor Master in charge of the cleanup. My grandparents' house on Johnson Avenue had a large open yard on the water. It was used for bringing bodies up onto. Many [people] went into their houses to get towels, sheets, socks, and other items. I couldn't sleep in that house

without nightmares and visions of the crash. Debris scattered the shoreline for weeks.

THE AFTERMATH

A thorough investigation into the crash of Eastern Airlines flight 375 began quickly. Testing the reassembled wreckage revealed that structural failure was not to blame. Another test (one that would never be repeated today, for obvious reasons) involved tossing live birds into engines to measure the power loss. The starlings were even autopsied to determine their cause of death (more than 100 birds were found dead on the runway after the crash). Ultimately, post-mishap aircraft simulator tests concluded that, under identical conditions, pilots could not have saved the plane due to the number of birds involved.

An interesting finding—although not directly related to the bird strike—was that more people likely survived the impact but drowned because of a design flaw in the seat.

In 2009, US Airways flight 1549, captained by Chesley “Sully” Sullenberger, took off from New York’s LaGuardia Airport, struck a flock of Canada geese, and soon went down in the Hudson River. The incident made headlines around the world but for a very different reason: all 155 occupants survived.

The seats detached from the aircraft floor when the plane hit the water, causing the seats to hurl forward and land face down in the water with the victims still strapped in.

THE LESSONS

In the wake of the mishap, the Civil Aeronautics Board (the predecessor of the National Transportation Safety Board) recommended that steps be taken to reduce the damage caused by bird strikes to turbine engines, and that ways be found to reduce the populations of birds around airports. The results included minimum ingestion standards for propeller driven and later jet aircraft, plus the start of comprehensive, standardized airport wildlife management plans.

The loss of Eastern Airlines flight 375 still stands—54 years later—as the deadliest mishap in airline history caused by a bird strike. But thanks to what was learned in the crash investigation, many lives have been spared since. Today, professionals in military and civil aviation fields continue looking for ways to minimize the risks of bird strikes. Technology may ultimately play a role, as improvements to bird-detection radar show promise. However, until better solutions are developed, we will continue to rely on aircrews, tower controllers, airfield management, and wildlife management contractors who work hard every day to keep Airmen—and the public—safe. 🇺🇸

Photo of the crash of Eastern Air Lines Flight 375, a Lockheed L-188 Electra that was brought down by a bird strike in 1960. The photo was taken by the Civil Aeronautics Board (CAB) in the course of their investigation of the crash.





American Airlines Boeing 767

Study Shapes Future of Commercial Airlift Augmentation

By CAPT KATHLEEN FERRERO
AMC Public Affairs

The rules governing how airlines supplement U.S. military airlift are being revised, after years of consultation by the Air Force with the airline industry.

According to officials, upcoming changes to the management of the Civil Reserve Air Fleet (CRAF) are meant to ensure the nation's capability to rapidly airlift service members and military supplies around the world at a reasonable cost to taxpayers.

"We couldn't achieve rapid global mobility on a large scale without civilian airlines," said Merle Lyman, Air Mobility Command's Commercial Airlift Division chief. "We simply don't have the number of military aircraft we need when world events push us to an unexpected surge in activity."

A review of the CRAF was necessary, officials say, to meet future defense needs and changes in the commercial airlift business. Industry partners largely supported the program changes and were asked their concerns during the review, Lyman said.

"Industry spoke, and we listened," said Gen. Darren McDew, commander of Air Mobility Command. "The study highlighted the need for the right balance of organic and commercial capability and capacity to meet future requirements."



It was extremely important to us that we engage our CRAF partners through each phase of the study. Together, we came up with solutions that meet national defense requirements without incurring excess costs to the taxpayer or additional risk to the carriers.



“We value the commitment of our civilian carriers and their ability to provide the majority of commercial augmentation capacity for war-time airlift requirements,” McDew said. “Their flexibility and agility to respond to short-notice taskings and go anywhere in the world is a service that enables our country to respond rapidly when our national needs are greatest.”

Change is Coming

The 18-month CRAF review process was designed to address industry concerns, Lyman said.

“It was extremely important to us that we engage our CRAF partners through each phase of the study. Together, we came up with solutions that meet national defense requirements without incurring excess costs to the taxpayer or additional risk to the carriers,” Lyman said.

One concern of CRAF partners was the level of commitment required to participate in the program, he said. As participants in CRAF, airlines invest considerable resources to ensure aircraft are always available for use outside of their standard business.

To address industry concerns, the new requirement is that each airline

commit just one mandatory aircraft in the initial stage of the CRAF program. This allows the carriers to manage their risk as they can then decide if they want to devote more aircraft beyond that in order to have increased access to the DoD peacetime business, Lyman said.

“We require less up-front commitment from carriers in order to mitigate their risks, because our military-owned airlift fleet is more flexible than it used to be. We can now handle more capacity before we call upon the assistance of civilian carriers,” Lyman said.

Another change that reduces the impact of CRAF activation for Stage I on our commercial partners is the guarantee that activation will be for a minimum of seven days and at least seven days’ notice for de-activation. This will allow the carriers time to plan their aircraft back into the flow of their commercial business. In addition, commercial aircraft will be guaranteed at least 12 hours of use per day when activated.

While the review addressed concerns of all stakeholders, readiness was the main goal.

“The new CRAF program structure ensures our nation retains its unmatched surge capability,” Lyman said.


How CRAF Works

The CRAF includes aircraft from U.S. airlines contractually committed to augment Department of Defense airlift in emergencies.

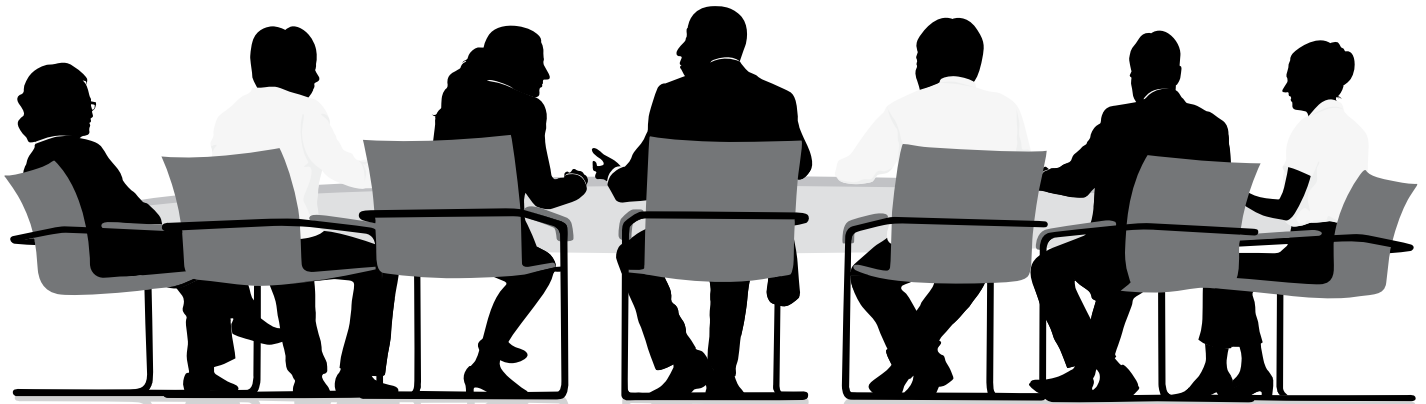
The airlines contractually pledge aircraft, ready for activation when needed. To provide incentives for carriers to commit aircraft to the program and assure the U.S. has adequate airlift reserves, the government makes peacetime DoD airlift business available to CRAF partners.

Civilian airlines are activated in three stages. Military planners can thus tailor airlift suitable for the contingency at hand. Stage I is for minor regional crises and humanitarian assistance/disaster relief efforts. Stage II would be used for major theater war, and Stage III for periods of national mobilization.

The CRAF has two main segments: international and national. The international segment is further divided into long-range and short-range sections, and the national segment satisfies domestic requirements. Assignment of aircraft to a segment depends on the nature of the requirement and the performance characteristics needed.

As of January 2014, 26 carriers and 552 aircraft are enrolled in CRAF. 

After the Board



By MR. MIKE WAHLER, AMC/SEF

Most mobility crew members are familiar with Air Mobility Command's (AMC's) actions immediately following an aviation mishap. The Wing Commander normally assigns a Single Investigating Officer (SIO) for the lower class mishaps (Class C, D, and E), or AMC convenes a Safety Investigation Board (SIB) for the Class A and B mishaps. Regardless of the mishap class, the actions taken by the SIB or SIO are the same. They investigate the mishap and formulate findings, causes, and recommendations.

According to Air Force Instruction (AFI) 91-204, *Safety Investigations Reports*, a **finding** is a single event or condition that is an essential step in the mishap sequence. A **cause**

is a deficiency that, if corrected, eliminated, or avoided, would have prevented or mitigated the damage or injury. **Recommendations** are feasible and effective solutions to eliminate identified hazards or to mitigate the hazard's potential consequences.

So far, this article should be a review, but here comes the new information. What happens after the SIB determines and documents their findings, causes, and recommendations? In AMC, the SIB normally comes to Scott Air Force Base to brief the Convening Authority (AMC Commander or Vice Commander for Class As and the 18 AF/CC for Class Bs) on the results of the investigation. The Convening Authority has two options: accept the investigation as reported *or* direct the SIB to conduct

additional investigation. The Convening Authority cannot change the report. He can only direct the SIB to investigate further.

Once the Convening Authority accepts the investigation, the AMC Safety staff releases the final message and coordinates it through the rest of the AMC staff (provides findings, recommendations and assigns an OPR for each). This is the staff's chance to comment on, but not change, the findings and recommendations of the final report. AMC Safety consolidates the staff's comments and forwards them to the Air Force Safety Center for incorporation into the Memorandum of Final Evaluation (MOFE). AMC Safety then publishes the SIB's recommendations to the Live Mishap Review Panel (MRP) SharePoint site and notifies the Offices of Primary

Responsibility (OPR). This gives them a chance to start implementing the recommendations almost immediately after publication.

The AMC staff is now responsible for updating the status of all recommendations on the MRP SharePoint site at least twice annually. AMC Safety transfers those updates to the Air Force Safety Automated System (AFSAS) upon receipt. The recommendation's OPRs have three primary options to close out the recommendation. The first, and preferred option, is to comply with the recommendation. The second option is to comply with the intent of the recommendation. For example, the SIB may recommend adding verbiage to a specific AFI, but the OPR determined it is more appropriate to put the verbiage in a technical order (T.O.). The final option is to close the recommendation without taking any action. The OPR must conduct a risk assessment in order to pursue this option, and the AMC Vice Commander must accept the risk of not implementing the recommendation.

AFI 91-204 mandates that each Major Command (MAJCOM) establish an MRP. The purpose of the MRP is to address Class A and B hazards throughout the command. This panel must meet a minimum of once every six months. The AMC Vice Commander chairs the MRP and is the AMC authority for closing Class A and B recommendations. The approval is normally automatic if the OPR complies with the recommendation and nearly automatic if the OPR complies with the intent of the recommendation. The Vice Commander spends the most time deliberating recommendations the

The AMC Vice
Commander
requires that the
OPRs document
realistic completion
dates, and he pays
close attention to
those dates.

OPR recommends closing without implementation.

Many recommendations are easy to close quickly, such as a change to an AFI or T.O. that can be completed in less than six months. Some recommendations take much longer. For instance, a modification to an airplane may take many years. When a board recommends modifying an airplane, we cannot immediately begin the modification. The recommendation must be approved by the engineers at the Program Office and then by the manufacturer. Once they concur that the modification is prudent, then the command must secure funding. We then begin modifying the aircraft after the recommendation gets past those hurdles. It can take 10 years or more to modify an entire fleet, depending on the complexity of the modification and the size of the fleet.

Because of this variability, the command does not track a specific metric with regard to time to close mishap recommendations. However, the OPRs must document an

estimated completion date. The AMC Vice Commander requires that the OPRs document realistic completion dates, and he pays close attention to those dates. He, along with the Commander, wants to minimize the time lapse from mishap board completion to recommendation closure. This is congruent with AFI 91-204's guidance stating the MRP process must identify all recommendations open for two years with rationale.

We in AMC actually exceed this requirement through our Live MRP process. In addition to briefing the Vice Commander semi-annually, we publish all open class A and B recommendations along with their status on a SharePoint site. This not only enables the OPRs to continuously update the status of their recommendations, but it also gives AMC leadership constant visibility on the status of all of these recommendations. This top-to-bottom visibility has increased our recommendation closure velocity in the first year of its existence, and we are hopeful that it will continue that improvement.

As you can see, AMC does not forget about our mishap lessons learned after the SIB makes its recommendations. There is, in fact, a robust process in place to ensure we carefully consider these recommendations and then implement them in a timely fashion. This process, although labor intensive, is imperative to the continued safety of AMC aircrews as they execute our global mission. Hopefully this "peek under the curtain" helped you understand what happens after the board. 🇺🇸



Fasten Your Seat Belts!

By MSGT JULIE MEINTEL
445th Airlift Wing
Wright-Patterson AFB, OH

We've all been there. It's a great day for flying: a perfectly bright and sunny sky, cruising at altitude, visibility is clear and a million, blue sky above and clouds below ... and then it comes out of nowhere. Turbulence. It probably won't ruin your day or your mission, but it could if you aren't paying attention.

Turbulence is defined by AFH 11-203, Vol II, *Weather for Aircrews*, as "a weather disturbance caused by abrupt, small-scale variations in wind speed and direction." Sounds pretty straightforward and easy to understand. But every person will likely experience turbulence a little bit differently based on many factors, and so the aviation community, military as well as civilian, has categorized it like this:

Light turbulence: Momentarily causes slight, erratic changes in altitude and/or attitude (pitch, roll, yaw).

Light chop: Slight, rapid, and somewhat rhythmic bumpiness without appreciable changes in altitude or attitude.

Moderate turbulence: Similar to light turbulence but of greater intensity. Changes in altitude and/or attitude occur, but the aircraft remains in positive control at all times. It usually causes variations in indicated airspeed.

Moderate chop: Turbulence similar to light chop but of greater intensity and which causes rapid bumps or jolts without appreciable change aircraft altitude or attitude.

Severe turbulence: Causes large abrupt changes in altitude and/or attitude. It usually causes large variation in indicated airspeed, and the aircraft becomes very hard to control.

Extreme turbulence: Aircraft is violently tossed about and crew is incapable of controlling it. Large sudden changes in altitude and/or attitude take place. Extreme turbulence can and often does cause structural damage to aircraft.

You can come across turbulence anytime, anywhere. There is a relationship between turbulence and wind variations in the jet streams, which are wide swaths of

concentrated winds at high speeds that encircle the earth. Jet streams tend to be more pronounced during the winter months when there are two, and sometimes three, major jet streams: the polar jet stream, the subtropical jet stream, and the arctic jet stream. It would be nice if it were possible to avoid the jet streams altogether when we are flying, but that is just not going to happen.

A significant percentage of the world's commercial and military flight traffic travels on flight paths that go right through the mid-latitudes, which is where the polar jet stream is. So since there really isn't a way to avoid turbulence, the best thing to do is know what it is, what it feels like and how to handle it. Always go back to your regs: AFH 11-203, Vol II, *Weather for Aircrews*, is your best bet for any weather-related information. The rules of weather phenomena don't really change that much, so it's easy to get comfortable with your knowledge of it. But it's a good thing to just refresh the ol' memory and make sure you are up on what you need to know for the conditions you can expect to find on your mission.

There are plenty of indicators and ways to know what the weather is like up ahead on your flight path. First, look at your surroundings. Are you near terrain? You may be encountering mechanical turbulence, caused by wind flowing over terrain or other irregular objects that cause disruptions in the airflow. Depending on things like roughness of the terrain or obstruction, wind speed, and stability of the air mass, the intensity of the turbulence is widely varied. Or it might be mountain wave turbulence, the result of wind blowing perpendicular to the

top of a mountain range. A fairly reliable indicator of mountain wave turbulence is the cloud formations in the area. Although turbulence can exist there with or without cloud formations, it most often happens when clouds are present. Try to avoid the cloud formations to the greatest extent possible, since they often contain severe and even extreme turbulence.

Maybe you are over open flatlands, nowhere near any kind of terrain. Then you might see convective turbulence, which is the result of alternating currents of warm and cool air at lower altitudes. The turbulence itself tends to be light to moderate, and you will generally find it beneath the clouds, with the air above the clouds being much smoother. You are most likely to encounter this condition on sunny, hot, dry days.


Another variety of turbulence—high altitude or clear air turbulence—comes from atmospheric pressure, the confluence of two jet streams, mountain waves, cold and warm fronts, and thunderstorms. You will most often find it above 15,000 feet and in conjunction with a major change in wind speed or temperature, like wind shear.

Finally, wake or vortex turbulence is created by the difference at each wingtip created by high-pressure air on the underside of the wing joining with the low-pressure air flowing over the top, resulting in a pair of vortices, rotating in opposite

directions. Wake turbulence is most severe behind a heavy aircraft, especially if configured with both gear and flaps retracted and flying slow.

Pilot Reports (PIREPs) are given by transiting pilots so that others coming through the same area within a given time frame will know what the weather conditions are. They are only useful if they are given regularly and are as accurate and detailed as possible, so do your part. Use these numerical codes from AFH 11-203, Vol II, to describe turbulence, if there is any, for crews coming behind you:

- 0 = trace**
- 1 = light turbulence**
- 2 = moderate turbulence in clear air occasional**
- 3 = moderate turbulence in clear air frequent**
- 4 = moderate turbulence in cloud occasional**
- 5 = moderate turbulence in cloud frequent**
- 6 = severe turbulence in clear air occasional**
- 7 = severe turbulence in clear air frequent**
- 8 = severe turbulence in cloud occasional**
- 9 = severe turbulence in cloud frequent**
- X = extreme turbulence**

Again, this information doesn't really change that much from year to year, and it is easy to become complacent and feel like you are experienced enough that you don't need to review the weather rules. Do yourself and your crew a favor, though, and take a few minutes to brush up while you are doing your mission planning. Make sure to give regular PIREPS along the way to help the other crews in your vicinity. Watch out for your wingman and fly safe! 



Connectedness:

An Expanded Approach to Suicide Prevention

By MAJ ALEXANDER F. MACDONALD, BSC
AMC Mental Health Consultant, HQ AMC/SGPS

The significance of suicide cannot be overstated. For example, according to DoD statistics, more active duty service members died by suicide in 2012 than in combat. Additionally, within the United States, more than twice as many people die by suicide than by homicide, and suicide is the leading cause of death among persons aged 15-24 and the second leading cause of death among persons aged 25-35.

With this increased significance has come an array of methods to address this important topic. Here at AMC, there have been increased efforts to identify not only symptoms that could lead to an increased risk for suicide, but also to identify root causes that would

cause an individual to make such a drastic decision. One root cause being explored is the concept of connectedness.

At present, the topic of suicide is being discussed at all levels of the United States Air Force (USAF). This focus on suicide and its prevention is the result of a current uptick in the numbers of completed suicides within the USAF. The intent of this article is to provide an expanded perspective on suicide prevention within the USAF. Specifically the objectives of this article include:

- › The recommended integration of the current USAF risk factor model of suicide prevention with Thomas Joiner's Interpersonal Psychological Model as

proposed in his 2005 text, *Why People Die by Suicide*.

- › The role of connectedness as a protective factor against suicide.
- › A challenge to increase connectedness both privately and professionally.

Currently, the USAF approach to suicide prevention focuses on a risk factor model. This model consists of identifying risk factors that may lead to an increased risk of harm to self and then developing means to minimize these factors. Identification of risk factors includes looking at both community and individual contributing factors. This community and individual risk factor model to suicide prevention is reflected in the current suicide prevention trainings,

wingman days, and tracking of risk factors within medical treatment facilities and community-based agencies such as the community action information board and integrated delivery system team.

Joiner's (2005) interpersonal psychological model to suicide prevention has three components: thwarted belongingness, perceived burdensomeness, and acquired capability to overcome the fear and pain associated with death. The first two components, thwarted belongingness and perceived burdensomeness, can lead the individual to have suicidal ideation, but the third component, acquired capability, is needed for one to consider suicide seriously as a viable option.


I recommend that suicide prevention within the USAF needs to include an integration of both the risk factor model and Joiner's interpersonal psychological model of suicide prevention. The need for this integration recognizes that risk factors alone do not equal an increased risk for suicidal behavior. Rather, risk factors can lead to increased distress and—when combined with the components of the interpersonal psychological model (thwarted belongingness, perceived burdensomeness, and acquired capability)—an individual can be at an increased risk for suicide. While all components of this integrated model are significant, this article focuses on the role of connectedness as a starting point to an expanded approach to suicide prevention within the USAF.

The significance of connectivity and its role in suicide prevention can be seen in both U.S. suicide prevention efforts and suicide prevention efforts within the USAF. Nationally, the

2012 suicide prevention strategy identifies connectivity as a protective factor, and nearly every protective factor identified in USAF suicide prevention efforts addresses the need for connectedness. This involves connection with self, others, and the environment. No matter the setting or level of prevention efforts, the United States and the USAF both recognize the increased need for connectedness of individuals as a protective factor against suicidal intent.

The ways and means to increased connectedness can be considered both strategically and tactically. Strategically, overall assessments could be made for communities and individuals that identify strengths or protective factors that could aid in preventing suicide. Along with these strengths assessments, opportunities and limitations for implementing the findings could be further assessed. Tactically speaking, individuals

can seek mentoring, emphasis can be given to balancing both internal and external needs, and—most importantly—individuals can recognize and implement a personal approach to connectedness.

In conclusion, a two-fold challenge is extended to those reading this article. First, we as individuals need to examine our own sense of connectedness and determine its personal meaning and implications. Second, we must use our individual strengths/skill sets to increase the sense of connectedness of the people with whom we interact. These challenges allow individuals and communities to connect with others to reduce the stress imposed by everyday risk factors and alleviate feelings of thwarted belongingness, perceived burdensomeness, and acquired capability. Connection is truly the key to meaningful and effective suicide prevention. 

PRACTICAL THINGS YOU CAN DO TO CONNECT WITH OTHERS

- Work out. Join a class through a local gym or community center or start a lunchtime group walk at work.
- Walk your dog. People who have a dog and walk it have an easy way to interact with others, especially other dog owners.
- Go outside and walk the neighborhood, sit out front, or stop to greet people who go by as you do yard work.
- Do lunch; invite someone out for lunch or coffee.
- Volunteer. Volunteering gives you an instant connection with other people who share an interest in the same cause.
- Take a class. If you've always wanted to start or finish a degree, one benefit is that you're almost sure to find friends at school. Or take a community college, extension, or parks and recreation course in a subject or hobby that interests you.
- Join a faith community. Researchers believe that people who are religious are happier in part because they have a strong social connection in their faith community.

Source: <http://www.pbs.org/thisemotionallife/topic/connecting/getting-connected>

A close-up photograph of a person's right arm and hand holding a silver laptop. The person is wearing a light-colored short-sleeved shirt and dark blue jeans. A black braided bracelet is visible on their wrist. The background is plain white.

Reducing the Odds of Campus Crime

By SANDRA JACKSON, Staff Writer

As part of Air Mobility Command, you live and breathe safety on the job. But going back to school, particularly when attending classes at a nearby college or university campus, brings a different set of safety considerations. Even if you are not a full-time student living on campus, basic rules of safety apply when you head off to your class or to the library.

It's easy to let your guard down when walking around a seemingly safe school environment. Every campus has security, but the secret to being safe on campus is taking preventative steps to reduce the odds that you will be a victim of a campus crime.

Keep an eye on your personal belongings. Campus thieves are fast and often opportunistic, taking advantage of that few seconds when you walk away from your laptop to go into the library stacks,

or to grab that wallet you only put down for a second. Never leave electronic devices unattended in the cafeteria, library, or anywhere they might be stolen. Lock any valuables you don't need for your class in your vehicle or locker; even better, leave them at home. Even items like prescription medications, jewelry, cash, electronic access keycards or security fobs, or passports or other pieces of personal identification can tempt campus thieves.

Be aware of your surroundings on campus and off. School campuses may look safe and orderly, but students get robbed or attacked every day on campuses across the country. Notice others around you. Notice potential hiding places like corners, doorways, alleys, or backs of buildings. This caution should extend beyond the campus gates as well. Be alert when using ATMs or when walking in parking lots. Lock

your vehicle, and make sure it is in good running order. If using public transportation, including campus shuttles, use your street sense.

Watch what you say or do online. Use caution when using public computers or Wi-Fi. Don't give thieves the opportunity to steal your information by conducting personal or job-related business on public computers in libraries or over coffee shop or library Wi-Fi connections. Also, be careful how much you share on campus and other social media sites, and never post personal or work-related information that should not be shared outside the workplace. Identification theft often stems from someone gaining access to information on a victim's computer, so make sure your devices have current antivirus protection.

If you see something, say something. If a situation seems questionable, contact campus

The secret to being safe on campus is taking preventative steps to reduce the odds that you will be a victim of a campus crime.

security or dial 911. By taking action, you can prevent a crime from being committed. Make sure campus security knows about the situation. Many campuses now have extensive video surveillance systems as part of their security measures; the criminal may have been caught in the act on camera.

Get school security alerts.

Sign up for campus alerts if your school provides them. Learn what your campus does in the case of an emergency—fire, flood, bad weather, lockdowns, or evacuations. Let loved ones know what is going on if you find yourself in a campus emergency situation.



Leave the questionable things at home. And learn your school's weapons policy before you bring firearms or other weapons on campus. Getting caught with them on campus can mean facing civil penalties and school disciplinary policies, too. In other words, you could be arrested and expelled at the same time.

Safeguard your health. Pace yourself, particularly if you work full-time or have family obligations

while you are a student. Fatigue can affect both your job and your classwork. Learn to manage your time for study, work, family, and even your commute to school.

Find out about crime rates on your campus. The Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act (or Clery Act, for short) is named after a Lehigh University freshman who was raped and murdered on her campus. It is a federal statute that requires all colleges and universities that participate in federal financial aid programs to keep and disclose information about crime on and near their respective campuses. The published annual reports, containing three years of crime statistics, must be made available to all students and employees. Compliance is monitored by the United States Department of Education. For crime statistics on your campus, check the institution's website or ask the Admission Department. 🏛️

CAMPUS CRIME IN THE UNITED STATES, 2010-2012

Type of Offense	2010	2011	2012
Motor Vehicle Theft	6,121	6,168	5,701
Aggravated Assaults	4,586	4,560	4,664
Robberies	4,468	4,269	4,396
Sex Offenses	3,682	4,287	4,911
Murders and Negligent Manslaughters	38	35	33

U.S. Department of Education, "Campus Crime Statistics Online." Crimes were reported as occurring on campus (including residence halls), off campus, and on public property by institutions ranging from less-than-two-year public and private schools to four-year-and-more public and private schools.

Sheltering in Place



By MICHAEL R. HACKLER
Command Emergency Manager,
HQ AMC/A7XR

The release of airborne hazardous materials (HAZMAT) is a real threat to our personnel. This threat may be accidental or intentional releases from transportation modes, storage facilities, day-to-day use, or terrorist use of weapons of mass destruction (WMD). The hazards we are most concerned with are those heavier than air. Lighter-than-air HAZMAT could pose a localized threat from release but dissipates quickly into the atmosphere.

As soon as a release occurs, an airborne plume will travel with the wind, following the contours of the landscape. We are racing the clock from the moment of release until it reaches your building. By the time it takes emergency responders to respond, check out the situation, and initiate warning and notification, the airborne hazard will probably be at your building. Once the hazard reaches your building, it may enter through doors, windows, and the building's heating, ventilation, and air conditioning (HVAC) system.

Our job as leaders is to protect our men and women and to continue or recover the mission. For years, the easiest and least expensive method to protect personnel was evacuation. It uses a basic principle of getting

away from the hazard. Concerns arise when there is an airborne hazard in the area as we try to evacuate because our personnel could walk into an airborne plume of HAZMAT. Use common sense and available information to assess the situation and determine if there is immediate danger. If you see large amounts of debris in the air, or if local authorities say the air is badly contaminated, you may want to shelter in place.

Sheltering in place (SIP) protects personnel by using a building's indoor atmosphere to temporarily separate people from an airborne hazard. Studies have found that facilities provide substantial protection if air entering the building is filtered, reduced, or temporarily interrupted. Interrupting the airflow is the basic principle applied with SIP. If done properly, SIP provides substantial short-term (two hours or less) protection from concentrations high enough to cause injury. Personnel are still in the danger area but are protected by the barrier created by the facility and its indoor atmosphere.

The amount of protection provided by SIP varies with the air tightness of the facility and the length of time the building is exposed to a hazardous plume. Modern energy efficient buildings are better candidates for SIP than older facilities. SIP should not be used when the building's structural integrity has been damaged, such as when part of the building has collapsed after an explosion.

Achilles Heel

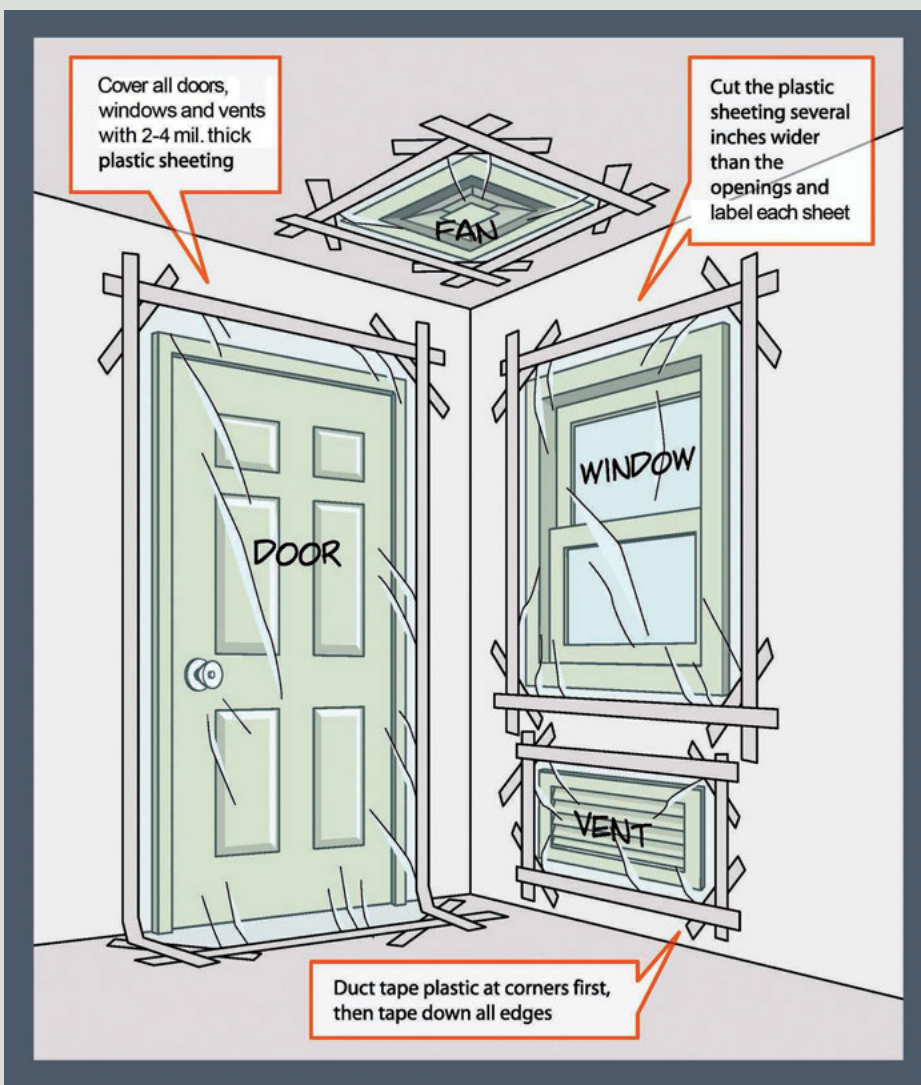
HVAC systems are the Achilles' heel of SIP. Outside air is drawn in and tempered to provide a comfortable indoor environment. When left in operation, HVAC systems will pull in air, equally distributing it throughout the building.

You must have the capability to turn off HVAC *immediately* whenever personnel are present in order to make SIP a viable option. These systems may be centrally managed or have individual controls for each system within a building. Larger buildings may have 10 or more individual systems, each requiring steps to shut down. Your facility manager or local civil engineers should be able to assist if you have questions.

Certain communications systems depend on air conditioning, and shutting down HVAC may cause damage or loss of mission capability. Commanders must decide if the mission must continue at a greater risk to occupants or if it will be transferred to an alternate location.

Identify SIP Rooms

Determine if SIP is feasible for the building. Modern energy efficient buildings provide the most protection once the HVAC systems are turned off. Older wooden or steel-sided buildings should be carefully checked. Smaller interior rooms may be best suited in these buildings.



Determine maximum number of personnel that require SIP protection—not only how many are assigned but also how many are routinely in the area. This number is used for planning a SIP room (or rooms).

Identify potential SIP rooms. Since no room will be ideal, units must make the best decision based on the building. Desired characteristics for SIP rooms are those on upper floors, away from outside walls with few or no windows, and in a central location for all occupants. Communications capabilities such as a telephone (minimum), computer with email access, and cable TV are highly useful.

Select interior rooms above the ground floor, with the fewest windows or vents. The rooms should

have adequate space for everyone to be able to sit. Avoid overcrowding by selecting several rooms if necessary. Large storage closets, utility rooms, pantries, copy and conference rooms without exterior windows will work well. Avoid selecting a room with mechanical equipment like ventilation blowers or pipes, because this equipment may not be able to be sealed from the outdoors.

Use 10 square feet per person to calculate the maximum occupancy of SIP rooms with a standard ceiling height. The breathable air in this type of room will easily last for two hours; however, buildup of heat and carbon dioxide may cause some people to experience headaches. People with poor health may become casualties to the heat

or carbon dioxide buildup—or just from the tight quarters. Consider adding SIP rooms if you're close to the maximum occupancy.

Put SIP Kits Together

SIP kits contain inexpensive and easy-to-use products to “seal” yourself inside, thereby keeping hazards outside. Suggested contents include:

- › Instructions on how to implement SIP in the room and whom to notify
- › Plastic sheeting (6 mil minimum) cut to cover HVAC supply and return vents
- › Duct tape (10 mil minimum) to seal doors and windows and to secure the plastic sheeting
- › Radio to listen for updates on the situation
- › Flashlights in case the power goes out
- › First aid kit
- › Shelter In Place door signs (one per exterior door)

Exercise SIP

Conduct SIP practices on a regular basis at different times of the year. Conduct some drills when people have opened windows and doors for ventilation. If the facility operates at night or on weekends, conduct drills at those times, too. Whenever possible, participate in installation-wide exercises. The most important thing is to get feedback from participants, and incorporate the lessons learned into your plan. 🇺🇸



Flying Hour MILESTONES

AIR MOBILITY COMMAND

10,000 HOURS

452 AES, March ARB, CA

Lt Col William C. Adelman
Lt Col Kurt A. Greenlee
Lt Col John M. Jost
Lt Col Jeffrey K. Richenberger
CMSgt James E. McGowan
SMSgt William J. Lamela
SMSgt Victor W. Velasquez
MSgt Robert R. Rodarte

8,500 HOURS

78 ARS, JB McGuire-Dix-Lakehurst, NJ

MSgt Anthony V. Cleaver

123 AW, Louisville, KY

MSgt David B. Riedley

136 AW, NAS Fort Worth JRB, TX

Lt Col John Buckler

452 AES, March ARB, CA

Lt Col Roy C. Elmore
Lt Col Keith P. Guillotte
Lt Col Neil K. Kishi
Lt Col Paul Shevlin
SMSgt Jose F. Grau

7,500 HOURS

16 AS, JB Charleston, SC

Col Robert S. Holba

78 ARS, JB McGuire-Dix-Lakehurst, NJ

CMSgt Robert M. Gozdur
MSgt Alan C. Crosby
MSgt Ramon N. Cruz

109 AW, Stratton ANGB, NY

SMSgt Brian R. Alix
SMSgt Michael A. Messineo

123 AW, Louisville, KY

MSgt Wayne Reeser

452 AES, March ARB, CA

Lt Col David J. Deniz
Lt Col Michael R. Fick
Lt Col Timothy J. Harris
Lt Col Daniel C. Nichols
Lt Col Thomas A. Noble
TSgt Jose A. Chaidez

6,500 HOURS

78 ARS, JB McGuire-Dix-Lakehurst, NJ

CMSgt Nathaniel A. Pierce
MSgt Ferdinand N. Aguilar
MSgt Stephen B. Fitzgerald

109 AW, Stratton ANGB, NY

CMSgt Michael S. Delgiacco

123 AW, Louisville, KY

SMSgt William Davis

136 AW, NAS Fort Worth JRB, TX

CMSgt Eric Kondracki

452 AES, March ARB, CA

Lt Col Ricky G. Adams
Lt Col Bradley L. Curtis
Lt Col Jeffrey E. Faley
Lt Col Scott A. Heidemann
Lt Col Thomas E. Larson
Lt Col Jeffrey F. Minton
Lt Col Paul D. Thompson
Lt Col Pete D. Vanderhyden
SMSgt Richard L. Farrow
MSgt Eric M. Brasch

5,000 HOURS

78 ARS, JB McGuire-Dix-Lakehurst, NJ

Lt Col Brian C. Alexander
Lt Col Craig A. Boswell
Lt Col Todd S. Brace
Lt Col Michael R. Coburn
Lt Col Paul J. Cover
Lt Col Andrew W. Dahlgren
Lt Col Donald G. Dipenta
Lt Col William E. Harkins
Lt Col Todd J. McDonald
Lt Col Robert A. Rogers
Lt Col Mark A. Slimko
Lt Col Mark H. Ustaszewski
Maj Thomas H. Boyle
SMSgt Victor G. Guzman
SMSgt Socrates N. Quintana
TSgt Matthew M. Yockey

109 AW, Stratton ANGB, NY

MSgt Carmelo Modesto

123 AW, Louisville, KY

Col Mark Heiniger
Lt Col Catherine Newell
Lt Col Ronald Whelan
CMSgt Daniel Fuller

126 ARS, ANG, Milwaukee, WI

Lt Col George Bacik
Lt Col Robert Rick
SMSgt Patrick Sosinski

136 AW, NAS Fort Worth JRB, TX

Lt Col David Compton
Lt Col Timothy Gibbons
Lt Col Keith Williams
MSgt Jim Moser

452 AES, March ARB, CA

Lt Col David R. Ackerson
Lt Col Antonio A. Astran
Lt Col Jason S. Ausdemore
Lt Col Forrest E. Brown

Lt Col Wayne H. Christensen

Lt Col James J. Daronco

Lt Col David M. Demarais

Lt Col Robert J. Dittus

Lt Col Kenneth H. Goode

Lt Col Michael P. Goyette

Lt Col Jose M. Hoffman

Lt Col Nick R. McKenzie

Lt Col William A. Ormiston

Lt Col William E. Quakenbush

Lt Col Stuart A. Rodriguez

Lt Col Thomas K. Stottman

Lt Col Joseph D. Sullivan

Lt Col Scott R. Trujillo

Maj Adam R. Burks

Maj Seth J. Ewalt

Maj Steve U. Greenspan

Maj Averie R. Payton

Maj Jacob E. Ramirez

Maj Ryan C. Van Scotter

Capt Atsushi J. Nitao

SMSgt Frederick Fowler

SMSgt Francis J. Gamache

SMSgt Kenneth A. Horner

MSgt John J. Irish

MSgt Geoffrey E. Parish

MSgt Yvonne M. Sell

TSgt Ryan D. Benson

TSgt John W. Bradbury

TSgt Andrew P. McLaughlin

3,500 HOURS

16 AS, JB Charleston, SC

Lt Col Cassius Bentley

SSgt Timothy Jaskot

78 ARS, JB McGuire-Dix-Lakehurst, NJ

Lt Col Timothy R. Biggs

Lt Col Joseph P. Blewitt

Lt Col Michael P. Cruff

Lt Col Scott L. Kadar

Lt Col Daniel A. Neff

Lt Col Corey C. Olsen

Lt Col Lenwood M. Page

Lt Col William G. Sherrod

Lt Col Ian D. Smith

Maj Michael F. Capodicasa

Maj Eric R. Delwiche

Maj Ralph D. Marshall

Maj Craig R. O'Dell

Maj Desmond A. Powell

Capt Thomas L. Conley

Capt Michael C. Hirata

Capt Matthew T. Thatcher

SMSgt Joseph R. Fenick

MSgt John C. Harkinson

MSgt Ted N. Morales

MSgt Robert B. Pavlovec
TSgt Angel T. Gomez
TSgt William E. Saltzman

109 AW, Stratton ANGB, NY

Lt Col Peter Thalheimer
Maj Matthew B. Johnson
Maj Marc E. Mckeen
Maj Eric D. Wood
MSgt Jean K. Booth
TSgt Jason R. Bull
TSgt Ugo Mascolo

123 AW, Louisville, KY

Col Robert Hamm
Lt Col Jerry Bancroft
Lt Col David Flynn
Lt Col David Lalonde
Capt Jennifer Nash
MSgt Mark Atkins
MSgt Mark Crane

126 ARS, ANG, Milwaukee, WI

Maj Steven Rosborough

136 AW, NAS Fort Worth JRB, TX

Lt Col Chad Countess
Maj William Allbright
Maj Mark LaDrew
Maj Jeff Mull
Maj Josh Ritzmann
Maj Gabriel Salazar

452 AES, March ARB, CA

Col Russell A. Muncy
Lt Col Hal D. Bradley
Lt Col Jay L. Clark
Lt Col Thomas J. Espiscopio
Lt Col Andreas S. Hau
Lt Col Richard M. Heaslip
Lt Col Michael P. Heinz
Lt Col Bradley D. Herrick
Lt Col Michael R. Hiddessen
Lt Col Brian K. Kobashigawa
Lt Col Kristopher E. Kraiger
Lt Col Jason A. Lief
Lt Col Shane D. Lohman
Lt Col Donald S. Macintyre
Lt Col Gary A. Miller
Lt Col Richard B. Neitz
Lt Col Danforth C. Nguyen
Lt Col Shane W. Ostler
Lt Col Gregory W. Potts
Lt Col Peter C. Vehlow
Lt Col Stephen R. Walmsley
Lt Col David J. Weinberg
Lt Col Mark R. Wittemann
Maj Clifford E. Atherton
Maj Lucas E. Bindreiff
Maj Nathan J. Childers
Maj Mathew J. Cunningham
Maj Douglas R. Ferrette
Maj Shelly D. Funk
Maj Creighton A. Goodman

Maj Jengi A. Martinez
Maj Scott A. Meyer
Maj William G. Padgett
Maj Brian P. Peters
Maj Joel D. Prozio
Maj Stephanie M. Soltis
Maj Scott J. Stell
Maj David B. Weber
Capt Charles E. Conder
Capt Michael C. Costas
Capt Brad R. Myers
Capt Eric G. Ozols
Capt John R. Rocher
Capt Andrew K. Vandertoorn
CMSgt Deborah M. Mcguane
SMSgt Philip L. Apodaca
SMSgt Nicole C. Canada
SMSgt Aaron K. Scott
MSgt Dennis J. Cordova
MSgt Elvis Velez
TSgt Michael W. Carrier
TSgt Jon Pierre Castech
TSgt Randy C. Green
TSgt Robert A. Haberlein
TSgt Robert W. Long
TSgt Andrew A. Lucas
TSgt William J. Parker
TSgt Michael S. Smith

2,500 HOURS

16 AS, JB Charleston, SC

Capt Nathan Bubonic
SSgt Mitchell Thompson

78 ARS, JB McGuire-Dix-Lakehurst, NJ

Lt Col Matthew D. Tondini
Maj Jermaine D. Boyd
Maj Allison R. Dentice
Maj Brian J. Huster
Maj Robert M. Latka
Maj Scott L. Roy
Capt Terry L. Dowell
Capt Kevin W. Fowler
Capt Michael K. Petruska
Capt Christopher D. Sampson
Capt Brad D. Tobias
SMSgt Joseph J. McGann
MSgt Christopher S. Baez
MSgt Eugene M. Kretkowski
MSgt Robert Rodriguez
MSgt Kingsley A. Rose
TSgt Shawn P. Moran
TSgt Nicholas A. Stolley
TSgt Richard R. Taylor

109 AW, Stratton ANGB, NY

Capt Mark J. Jacobson

123 AW, Louisville, KY

Brig Gen Mark Kraus
Col Robert Macke

Lt Col Marc Hall
Lt Col Charles Hans
Lt Col Scott Ledford
Lt Col Scott Wilson
Maj Ryan Adams
Maj Steven Campbell
Maj Todd Franks
Maj Cheryl Murphy
Maj Brian Story
Maj Carl Watkins
Cpt Casey Clark
MSgt Danny Gregory
MSgt Bradley Simms
MSgt Clinton Stinnett
TSgt Eric Anderson

136 AW, NAS Fort Worth JRB, TX

Lt Col Wayne Vaughn
Maj Kurt Anderson
Maj Brandon Cruce
Maj Justin Davis
Maj Markus Gonser
Maj Scott Hammond
Maj Phil Pine
TSgt Michael Kelly

452 AES, March ARB, CA

Lt Col Roland C. Tsui
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Maj Brian M. Cernok
Maj Roberta C. Frantal
Maj Cullen T. Gallagher
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MSgt Michael D. Vo
TSgt Oz Ashkenazi
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...Quickstoppers

Action vs. Inaction

By MSGT HUMBERTO MARCHESE
HQ AMC/SEO

How often have you seen a hazard and simply maneuvered around it to avoid getting hurt? Do you recall your first encounter with this condition—thinking, “This is not safe” but simply avoiding it instead of doing something about it? Eventually, the hazard blends into what you and others accept as the environmental norm, and your ominous sentiment slowly fades into the periphery of your consciousness. After all, it hasn’t materialized into a serious accident yet.


Let’s suppose for a moment that a visitor—let’s say an inspector—stumbles upon your work area and points out a hazard that needs immediate correction. You know, that hazard you and someone else were concerned with at some point. What kind of reception might this person receive? After all, what does he know? As far as you and everyone in your workplace are concerned, avoiding this hazard has become part of your routine, and no one has had a serious accident because of it.

Sometime thereafter, an accident happens to an unsuspecting person. It’s unfortunate that our initial concerns about the condition should be validated by an accident. This doesn’t have to be the case, and I want to highlight one instance where folks identified a hazard, realized that the potential outcome could be unacceptable, and were persistent in fixing it.

In April of 2012, two NCOs converged on an old natural gas incinerator. TSgt Lambdin alerted the unit Safety NCO, TSgt Sotak, to an incinerator that had sheared from its foundation and now had the smell of natural gas emanating nearby. TSgt Lambdin

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was logically concerned for his workers’ safety, as they had also noticed the smell of natural gas in the course of their work. Together, the two NCOs sought assistance from several on- and off-installation entities. They found the source of the elusive gas leak, fixed the leak, and repaired the incinerator’s foundation to prevent future leaks or other potential problems. They did not simply avoid it, and they prevented a potential catastrophe before someone was hurt or possibly killed.

We don’t know how many lives may have been saved by their efforts—perhaps one, maybe two or three. We’ll never know. What we can be certain of is that they’ll never regret inaction or have to look at the grieving family of a lost or injured coworker. That is something they can live with. The loss of even a single employee greatly affects family, friends, and coworkers. The aftereffects also compromise productivity and morale, and hinder the overall mission. Can you live with the consequences of inaction? Must a hazard materialize into an accident to gain attention? The answer is obvious. Embrace safety, and don’t become a statistic. 



A DAY IN THE LIFE OF A GROUND SAFETY MANAGER

By MATTHEW KERNEN
60 AMW/SEG


The Ground Safety Manager (GSM) for any installation is one of the most important positions within the safety office. The safety program begins with us, as we are the foundation or rock of the program. Our schedule is packed with meetings, training, briefings, presentations, etc., and we are the Subject Matter Expert (SME) for safety. Since we manage the entire safety program for the wing commander and installation, our perspective of time management and effectively handling the day-to-day business/operations is profound and requires a strong game plan. There are many instances, when reviewing mishaps, that we receive the infamous call from Command Post that a member of our wing has been involved in a fatal or near-fatal mishap, which then starts the mishap machine rolling. Whatever has been scheduled for that day is changed, which means being able to overcome, adapt, and improvise at a moment's notice.

With this comes the busiest times we ever face: preliminary messages, interviews, Interim Safety Board, Formal Safety Board composition, mishap report writing, timelines with the command to ensure a professional and finished product, and so on. We also have to juggle

many other aspects of our position because half of our office is deployed, personnel are in upgrade training or on leave, a brand new Chief of Safety arrives, etc. This could even be the day-to-day operation without the major mishap. Ground Safety Managers are the know all/see all of and for the safety office. We are relied heavily upon to ensure the safety culture is being changed, and we are the instrumental oil that keeps things in the safety office running.

One of the largest responsibilities of a GSM is to ensure the wing commander is well informed on the status of the installation's safety program. This is done through spot inspections, program assessments and facility inspections, mishap investigations, and trend analysis. *How is all of this accomplished?* Well, we have a staff to assist us; however, one of the biggest tools in the GSM's arsenal is networking. This is a challenge, as we are handcuffed through emails, telephone calls, etc., but networking is one of the most effective tools because it lets personnel know who we are and who our staff members are, and it is instrumental in changing the safety culture. As the GSM, we not only promote safety, but we also have to sell it. We must empower Airmen with knowledge.

Ground Safety Managers are safety professionals who represent the Air Force, Our Command, and our Wing in all we do, providing the critical oversight and advisory role to all facets of the program. We are the teacher, the advisor, and the technical expert, providing important training so personnel can go home to their families and loved ones at the end of each duty day. The GSM is an individual who does make a solid difference day to day in how we operate as a force behind the scenes and out front leading the charge. Although we sit back, think, and analyze data, and then focus on today, tomorrow will always bring another set of challenges.

Those of us who have been in the GSM seat for an extended period of time know how much our career field has changed. Some of us are resistant to change, where others embrace it with open arms. Our duties change daily, going from handling a complaint, and then into a mishap investigation, briefing a commander, handling work orders, putting out small fires, covering meetings ... and the list is endless. In the end, the GSM is the encyclopedia of safety knowledge that everyone turns to, and though at times we feel it is a thankless job, we know deep inside that we may have saved a life that day so others can prevail. 

GROUND SAFETY MANAGERS are resilient and not afraid to jump in with both feet and lead their personnel to accomplishing the mission. We are responsible for the safety of the installation, to include all tenants. Hours are long and sacrifices are made, as we believe in the core values of our Air Force and we support and care for the extended family. Ultimately, we understand that SAFETY does make a difference in mishap prevention, and it is the culture to which we strive to be successful.



Andrew Swenson, 319th Air Base Wing ground safety manager, speaks about winter safety precautions and tips during a wing All Call on Grand Forks AFB, N.D.

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