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This month's *Combat Edge* spotlights the Air National Guard and how its leadership has successfully reversed the trend of a very poor safety record. We've included a wide range of articles from ANG leadership to Guard members in the field. We appreciate the support we received from the Director's office as well as field units to put this issue together. This is the third "Special Edition" issue we have published this year, and it reflects our attempt to focus on various facets of Air Combat Command and our safety program. The ANG plays an ever-increasing role in the Air Combat Command force structure. This is their safety success story.

This is my last "Accent" as the Command's Chief of Safety as I will retire after 26 years on 1 August. I've seen enormous progress in safety in this command and the old Tactical Air Command where I was a Flying Safety Officer and wing Chief of Flight Safety in 1980-82. We've come a long way in preserving combat capability. Matters not whether it's the jet or the aircrew, or the maintenance team on the ground, or the CE troop out boating on the weekend, it's all combat capability that must be kept ready to meet the call. Remember, we are often called the 'Air Force of last resort.' Whether it's enforcing no-fly zones, protecting the Kurds, searching out hurricanes, fighting forest fires, disarming bombs downtown, rescuing mountain climbers in the southwest, or taking sick sailors from boats off Iceland...our Air Force is the last hope of many who need help...who else are you going to call? Farewell and Godspeed.

*Colonel Zak Tomczak*
*Chief of Safety*
It was late 1993, almost 3 years ago, and I was headed for the Air Force Chief of Staff’s office. My organization was in trouble, real trouble. I was taking over as the new Director of the Air National Guard and our safety record was terrible, above 3.0 per hundred thousand flying hours with a fighter, attack and recce rate of over 6.0. During a particularly bad time we had lost three aircraft in a 5-day period. It was not going to be a fun day with General McPeak. I needed time. The Chief was a no-nonsense fighter pilot; he knew the business and he was not going to listen to some half-baked, simplistic briefing about how we were going to “try harder with a back-to-basics approach” - the standard answer to a bad mishap year since

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Let me give you the bottom line first - I survived that day; so did our organization. Not only did we survive, but by taking a non traditional approach to safety we went from a terrible record and one of our worst years to our safest year in history in 1995. FY 95 was also our lowest command-controlled rate in history, and we cut our aircraft loss rate to less than half of our 10-year average. FY 96 has started well and we have the chance to produce another record safety year.

As I climbed the stairs to the fourth floor on the way to the Chief’s office, my aviation career flashed through my mind - I’ve been interested in aviation since I was 4 years old when my father took me in a Piper Cub from the ramp at Randolph AFB TX. I’ve been in uniform since I was 18 and a pilot since 21. I have never been in an aircraft mishap - real close, but never in one. I have watched several mishaps occur from the ground and air, friends, acquaintances, and strangers, in peace and war. I have probably sat through 150 mishap briefs starting when I was a young captain to major general. I wasn’t exactly wet behind the ears and now it was my turn on the hotseat and my organization on trial. What to say, what to do?

The Chief had called me to come to the office. I had no briefing, but here’s what I said: “Chief, I don’t yet know what I’m going to do,
but the regular stuff won't work. Give me some time because I need to do something dramatic and really different that lasts. I'll come back and brief you when I figure out a good program. But, I really do need some time.” Surprisingly, here's what the Chief said: “Shep, good. You've got time. I was afraid you were going to come up and tell me something really stupid like you were going to stop flying air-to-air, or stop flying low levels, or stop deploying. That won't work. Figure out what you are going to do, then, come back and tell me, but DON'T sacrifice combat capability! We can produce zero accidents by parking the aircraft. That's not what I'm after. Now, go fix it!”

The meeting was very short. I'm not sure if I was amazed or relieved. I had time, but the message was clear to me - fix it, don't sacrifice combat capability and by-the-way don't take TOO long! Here's what we did:

Rather than concentrating on the mishaps and chasing statistics with the usual fixes - "Fly higher, fly faster, don't do this or that - all dictated from headquarters" - we put the problem in the hands of those that owned it and we went to work on our “CULTURE.”

When we did an honest analysis of our mishaps, many were what I call “dumb” mishaps - those caused by intentionally flying unprofessionally, disregarding the rules, not doing what you briefed. It was apparent that if we simply eliminated those mishaps we could go from “out of the box” back to at least an “acceptable” mishap rate. We looked in the mirror and said - “We have a cultural problem in the Guard. Many of our mishaps indicate we aren't flying like professionals and our numbers show it. Let's fix it!” Quite frankly that was hard to say and admit. We were exceedingly proud of our units and our heritage as citizen soldiers. We knew we were good and we wanted to be thought of as world class, but we weren't viewed that way and we weren't flying that way.

Instead of dictating from headquarters we put the problem in the hands of those that owned it - the pilots, ops officers, and commanders. We said, “Here's the problem: Our organization is at risk. No one is going to allow us to continue to lose aircraft at these rates. You know the problems best. You know the solutions best. Now, go find the answers. We want REAL solutions and we want them to last.”

We made a videotape outlining where we were and how we compared to everyone else. I outlined some obvious things but asked the field units to come up with the solutions. I wanted their best thinking from their best thinkers. The most important thing I said was this: “WE ARE GOING TO HOLD YOU PERSONALLY ACCOUNTABLE FOR YOUR ACTIONS” and “WHEN WE FIND THAT UNIT CULTURE HAS CONTRIBUTED TO AN ACCIDENT, WE WILL HOLD THE EN­­­TIRE UNIT ACCOUNTABLE.”

We started a series of conferences called “Safety Focus.” Separate meetings were held with wing commanders, then ops officers and squadron commanders, and finally tactics and safety officers. The conclusions from all groups were amazingly similar: First, we agreed we had a culture problem. Second, we agreed we had a culture problem. Second, we agreed we had a culture problem. Second, we agreed we had a culture problem. Second, we were spending lots of time on high risk, low payoff events that would never really be used in war. We did many things not because they were valuable wartime skills, but because we would be “inspected” on them, or just because
the aircraft would do them, or just because they were “fun.” Third, we were all willing to take tough actions and be accountable as individuals and units. Fourth, we did not want to back off on our ops tempo or combat capability. Finally, we were smart, tough, and in control of our own destiny; therefore, we should collectively be able to stop the “dumb” mishaps.

The two most important words in our conferences were “CULTURE” and “WE.” It wasn’t just the bosses dictating and deciding. We ALL owned the problem; and if it was going to get fixed, we would ALL fix it. We all agreed to stop the high-risk, low-payoff events. We made hard decisions and used “tough love.” We held individuals who knowingly violated the rules personally accountable for their actions - no more good-ole-boy network. In some cases we held entire units accountable, grounded them, reduced their C-status; and took them off all deployments and exercises for up to 1 year until they could prove they had their act together.

We started a series of culture visits using a trained team that attempts to discover the cultural underpinnings within a unit, not just in ops, but throughout the unit. The team attempts to discover what “true” culture exists within the unit - what are the “real” values used by unit members to make decisions and drive actions. The culture visits provide straight-talk, no-nonsense outbriefs to the unit at all levels - what are the people really saying and feeling - what are they really doing - how do they really feel about their leadership - where are the real problems. The outbriefs provide a tough look-in-the-mirror approach to the unit at all levels and help them to realize that they are in control of their own culture and destiny. The cultural visits have been a religious experience for some units and commanders and revealed things that no inspection team would ever find. The visits have caused several units to make major changes in the way they operate. One unit discovered an unknown culture in ops that has produced zero mishaps in 4 years after four mishaps in the proceeding 24 months.

We are now expanding the cultural visits into a cultural workshop that teaches commanders how to instill and maintain a good unit culture.

Our entire process - combining a quality approach to a long-term problem - concentrating on the culture that caused the mishap, not the mishap itself - and holding people and units personally and collectively accountable has paid off.

After several years of high mishap rates - last year we had our safest year in history. Despite flying almost 50% of our time in fighters and most of that in the single-engine F-16 with the older engines, we had an overall rate of 1.24. We also had the lowest command-controlled rate in history, .50. We cut our aircraft loss rate to less than half of our 10-year average while dramatically increasing ops tempo in real world contingencies all over the world. In the last several years we have won Gunsmoke, William Tell, and the Hughes Trophy. FY 96 is half over and we have a chance to make this year even better than last. There are also unanticipated spillover effects - our ground safety rate this year is an unbelievable “ZERO” and so is our Class B rate!

In our safety efforts we had a good role model close by - the Army National Guard. In late 1995 the Army National Guard had a mishap - their first one in 29 months! Despite flying over 30% of the flying hours of the entire Army, most of it in helicopters, low level, and lots of it at night with NVGs - the Army National Guard went almost 2 1/2 years without a Class A mishap. They did it by concentrating on culture. Sit in an Army Guard helicopter today and you will see “the” role model for cockpit aircrew discipline, checklist discipline, crew resource management, and professionalism - it’s better than anything you will see in military or civil aviation worldwide. It took them 10 years to change from a sustained poor mishap rate to a sustained excellent rate. We are going to do the same thing in our organization.

AND, we are not satisfied. Our quest is for “zero” - no command-controlled mishaps for a 12-month period; tough to do. We almost made it in FY 95. We aren’t there yet, but we will be - watch us! Culture and accountability are the answers - safety is the by-product.
“Excellence In All We Do” is one of three core values of our United States Air Force, the other two being “Service Before Self” and “Integrity.” My thoughts and words, for your consideration, will delve into this search for excellence in all we do and how we can make this value “come alive” as we prosecute our daily taskings. How does it apply to safety in every facet of every mission area? What follows is what I passionately believe and why I have arrived at these principle-centered beliefs.

Twenty-five years of non-stop flying our United States Air Force’s best equipment, maintained by America’s finest technical experts...our enlisted force...has been my privilege. Twenty-five years of non-stop training towards readiness, from the days of F-102s to today’s marvelous technology and capability embedded in the F-16C (Block 30, Big Inlet). In between, I’ve been involved in the Close Air Support business for more than a decade both as Forward Air Controller (FAC) and fighter as well as spending time dual qualified in “heavy” crewed transport type aircraft.

This multi-faceted career has allowed me to literally view our business from all angles, altitudes, speeds, and elevations from the perspective of a Ground FAC “talking Lead’s eyes onto the target” or as the ingressing fighter “hauling the iron” at 540 against a well-defended target complex; I have been in each seat. I have trained to varied scenarios through the ever-evolving threats: high altitude intercepts, multi-ship/multi-type gaggles; from the days of ram tactics of the F-102 after your missiles were expended, to the “cranks,” “pumps,” “notches,” “launch and react” or “launch and leave” tactics of the multi-mission F-16. What a thrill. Through it all, there have been the shared team and individual moments of pride, elation, fear, pain, anger, and glory that, I believe, only we in “the business” will ever know or understand. You and I are very fortunate
to do what we do in service to our Nation.

With that comes the innate responsibility that we each share to do it correctly, as briefed, with 110% of our attention focused on the mission at hand. Now, here is where we seem to fail: *The Human Factor*. This is a human centered endeavor, and it is a well known fact that we have been known to make mistakes! Reflecting back on those 25 years, I have personally known a fighter squadron’s worth of pilots who have died in midairs or collisions with the ground (CWG) as well as those who successfully ejected and can tell their story - good or bad - to the next generation. There have been tears shed for those lost friends and comrades in arms. There has been anger over the loss. I’ve been at the bedside of those injured during crashes and ejections, sharing the pain of those moments with the pilot involved and their families. I’ve been at the funerals. I have also experienced the joy of looking eye-to-eye into the smiling faces of those that made a timely ejection decision after a successful Search and Rescue (SAR) effort. It’s been a long haul; there are lots of scars... but that’s not bad... it’s called learning.

Lots of jets have been lost. Lots of friends have been lost. Each one stepped out the door to the jet to do the mission “as briefed.” In each case the machine failed them or they failed themselves in their judgment, air discipline, or understanding of where they and their machine were at a given moment in time and space during the prosecution of their game plan on that fateful day.

In 25 years, I’ve been the wingman coming down final - knees knocking as shock sets in; gear down, full stop - after having seen the unforgettable plume of smoke from my flight member’s jet rising from the target area. I’ve been questioned by Safety Investigation Boards (SIBs) during the investigation phase. I’ve briefed COMTAC and COMACC as a Wing Commander three times on Class A mishaps. So, the bottom line is I’ve been there. I’ve experienced all the emotions from every level: Wingman, Flight Lead, Safety Officer, Commander. Having shared my background with you, you will understand that I have an opinion or two on how to “make it better.”

You see, our task - yours and mine as aviators in the world’s most respected air and space force - is to continuously improve and make it better. Each day, each mission. It is our charter as we “search for excellence.” We must identify and act on principles that drive ourselves and our fighter pilot culture to new levels of performance and safety. It is our responsibility to our United States Air Force and our Nation that has entrusted us with this unique privilege. It is more important than ever to have these shared beliefs - whether you fly fighters in the Active Component, the Air National Guard, or Air Force Reserve - because in today’s and tomorrow’s “Total Force” we are, more than ever, one team. One team that flies together and fights together, training to the same standards of performance. We provide the Nation’s Combat Power. We do it with less resources and increased ops tempo. We must always do it with a focus on safety.

The first principle: Peer and Personal Accountability (P2A). We in the Air National Guard (ANG) conduct our daily operations under the SAFETY FOCUS PROGRAM formalized by our ANG leadership over the last 6 years. It is a program grounded in the words of Maj Gen Donald Shepperd, Director of the Air National Guard, in his remarks to ANG leadership at Safety Focus VI. He said, “We seek a unit culture founded on integrity, pride, and professionalism in which no one in the unit will accept anything other than striving to make the unit an effective, safe, world class organization. Integrity is the bedrock. Peer and personal accountability is the mechanism used to maintain the culture.” More specifically, Peer and Personal Accountability is defined as a principle that promotes safety in all mission areas. Wherein, no one in the organization will allow anything to happen that is not professional, in accordance with policies and directives and backed up by a foundation of integrity. If an individual strays, his or her peers will demand they come back into line. All unit members expect to be held accountable for their actions. No one in the unit would think to perform an act that reflected poorly on their peers.

Reread Peer and Personal Accountability...
It is a great message about shared responsibility and accountability. It applies to everyone in the organization whether you support the mission, maintain the jets, or fly the tasked sortie. It’s about effective, timely communication, eye-to-eye straight talk between all players - Commanders, Supervisors, Flight Leads, Wingmen, and the Maintainers on the flight line. It’s about integrity. Remember this principle, use it as part of your daily game plan. It’s a tool to help us get to ZERO MISHAPS - one mission, one flight, one day at a time.

The second principle: Situational Awareness (SA). I discovered the exact definition of this overarching principle in a Class A mishap report a few years back. The author is unknown to me. The words are haunting and memorable. All of us in the CAF brief it every mission. What follows are the words from the report . . . “situational awareness (SA) is a very complex issue that has been a high interest item in recent years. SA has been defined as ‘a pilot’s continuous perception of self and aircraft in relation to the dynamic environment of flight, threats, and mission, and the capability to forecast, then execute tasks based on the perception.’

“It is important to emphasize that SA is both a continuous and a dynamic state of attention and decision making. SA is constantly expanding and contracting, increasing and decreasing as time and events pass. It widens and narrows based on events, priority of tasks, and areas of attention. In a low SA environment it is likely that events, tasks and areas would not be perceived or would be ignored.

“The elements that make up SA are wide ranging and include: experience and training, physical flying skills, spatial orientation, physical and emotional health, mental attitude and cockpit resource management skills. A critical concept to grasp is that any and all anomalies of attention can and do influence SA. Such anomalies include generalized inattention, selective inattention, channelized attention, distraction, boredom, fascination, temporal distortion, confusion, and cognitive task saturation.”

The report goes on to say: “The anomalies of attention that appear to be factors in this particular mishap are confusion, distraction, cognitive task saturation, and channelized attention. It is concluded that a low level of situational awareness, brought about by a combination of confusion, distraction, physical and cognitive task saturation, and channelized attention, was a factor which led to the failure of both mishap pilots to ‘see and avoid’ . . .”

The resultant midair caused one instantaneous death, one ejection, and two lost aircraft.

The bottom line is know and understand yourself. Know and understand your mission and its limits. Know and understand your jet. Know and understand what you bring to the merge or any other critical phase of flight at any given moment in time and space. It will save your life. It will preserve our precious resources. Those two commodities are priceless to our leadership, you, your family and this Nation we so proudly serve. Without SA “Terminate” or “Knock it Off.”

Peer and Personal Accountability (P2A) and Situational Awareness (SA) are everything. Read and reread the above until they are an inherent part of your daily game plan. I do. Some principles are timeless and enduring. I passionately believe these two - P2A and SA - are in this category. Decades of experience and learned behaviors and attitudes have brought me to this point in my beliefs about how to approach my job every day as Commander of the 115th Fighter Wing. It’s what I think about. It’s what I try to instill in our pilots and the rest of our Wing members.

In closing, I’ll paraphrase one of my favorite authors, Stephen K. Covey. “Our goal must be to transcend traditional prescriptions of faster, harder, smarter, more. Rather, we must set our compass on the future, because knowing where we’re headed allows us to create the vision we need to succeed in the near and far futures.” The compass is set based on overarching principles that we believe in and act on, principles that support our core values of Integrity, Service Before Self, and Excellence in all we do. I offer two principles to set your compass for success in the air and on the ground: Peer and Personal Accountability and Situational Awareness. Think about it. Check Six.
Most people realize that when the balloon goes up, flight safety improves. Very few stupid mishaps happen while doing real-world missions, with live munitions, and with the whole world watching our every move. It’s easy for everyone to focus on the mission while in an AOR. By “focused” I mean undivided attention, with high adrenaline and everyone working as a team.

As you read this, there are at least 20 “focused” pilots, in 10 locations, sitting alert in their AOR - The United States. These pilots and their maintenance support crew are going about their daily or nightly routines - yet focused on their ultimate mission - always waiting for the next scramble horn to blow. These alert pilots fly extremely challenging missions - never knowing when, where, or whom they will meet. Their sorties are usually: real-world, demanding, diversified, high-profile missions using live munitions. What appears to be a safety “problem” actually works to their advantage - it keeps them focused and, in turn, keeps them safe. This is the “peacetime” uniqueness of the air sovereignty mission.

While our other forces are working hard defending our interests overseas, 20 ANG aircraft provide the total air sovereignty for all of the Continental U.S. It’s unimaginable that the dedicated air sovereignty mission has been a constant federal budget target for several years. Our FIRST priority should be to provide for the security of the Continental United States. If that sounds like a lot of flag-waving, let me explain.

Our dedicated air sovereignty pilots do this mission extremely well - while doing it safely. Without them, general purpose units would carry the air sovereignty mission - and their plates are already full. This mission needs to stay focused to keep it safe. The only way to keep it focused is as a dedicated mission - air sovereignty. It’s too complicated, too dangerous, and too “currency reliant” to be flown as an additional duty.

Let me explain the hurdles and barriers that keep our pilots focused.

If you believe these pilots only practice ho-hum intercepts, on sunny days, between scheduled airline trips - you’re totally wrong.

Our pilots sit 24-hour alert around the US perimeter. The number of scrambles depends upon the location; but in 1995, alert pilots scrambled 342 times to intercept unknown targets. Many more times, the targets were identified just before takeoff and the pilots taxied back to the alert facilities.

The mission requires our pilots to fly in all types of weather. They do it safely, by doing it smartly. Minimums are 300 feet and 1 mile or higher depending upon the pilot’s weather category. Some of the senior pilots can remember launching in zero-zero on what was considered “Mandatory Status.” This status still exists; but because of peace initiatives, it’s been years since
anyone has had to launch in weather below normal minimums. The point is our pilots understand their weather limitations and deal with it in a professional and responsible manner.

Our crews are on 5-minute alert. That means from the time the horn blows until airborne is 5 minutes. And yes, they do sleep, eat, shower, and all the other things fighter pilots do. But they also perfect a safe system to get a fighter airborne. This timing isn’t some goal set by the flight lead that is simply debriefed after the flight - scramble times and airborne times are sent to the Region Air Ops Center and NORAD. It’s “real-world,” and timeliness in this mission is critical. The air sovereignty of our homeland is at stake. Don’t forget that after they scramble and return to base, the jets and the pilots return to alert status. The requirement is within 1 hour; however, the average time for our units is much less.

Imagine being sound asleep at 0200, doing a no-notice, high adrenaline sprint to the aircraft, and minutes later being airborne on your way to an unknown threat or target. It happens safely because our pilots and their ground crews are dedicated professionals who understand their personal limitations and their mission. It takes a special type of person to change from what they are doing and immediately become a fighter pilot.

You’re probably wondering about sleep/wake cycles for these superman pilots. A crew’s duty time status depends upon location. Crew scheduling provides sufficient overlap for crew work cycles, and a second crew is always ready to relieve one which has completed a work cycle. Again, the crew needs to recognize when they are physically and emotionally ready to launch on a moment’s notice, and when they’re not - to say so. This takes professional dedication to do the mission and do it safely.

Night vision goggles (NVG) are a way of life with alert crew members. First Air Force pilots provided a significant part of the OT&E and now safely use NVGs on most of their night missions. Our pilots must prepare their cockpits for scrambles prior to going on alert, and NVGs add another dimension to their operational risk management.

Now, consider the mission itself. More often than not, it’s intercepting a slow moving aircraft. For those of you who have tried to intercept a 120 knot target at night, still heavy, and possibly in the weather, you know this isn’t a task for your night currency checkout. On the other hand, the scramble might be for a MIG from Cuba to a cruise missile launched by some nefarious third world thug.

First Air Force units have received significant improvements from the “cone head” days. They do, however, balance the typical safety related problems associated with flying older aircraft with a world class team of maintainers. The inventory consists of:

- Four units with Block 15 F-16s powered by PW-200 engines
- Three units with Block 25 F-16s powered by PW-220E engines
- Three units with F-15 A/B MSIP aircraft powered by PW-100 engines

The 119 FW, Fargo ND, won the 1994 William Tell world-wide air-to-air competition using their Block 15 F-16s. Remember, they were competing against the world’s newest and best equipment. This says a lot for their abilities, dedication, and focus on the mission.

In summary, the air sovereignty mission is safe because the pilots and maintenance personnel are focused on the mission. They’re focused because it’s a difficult, specialized, and demanding mission. Any attempt to do it another way would have deadly consequences. Let’s keep safe operations and the defense of our homeland our first priority.
YA' KNOW, PED. NO MATTER HOW MUCH WE TEACH OR SUPERVISE, THERE IS STILL SOME WHO DON'T GIVE A FLIP 'BOUT HOW THEY DO THEIR JOB.

AND...?

MOST OF US CALL IT A STATE OF MIND, AND SAY MANY JUST AIN'T PAYING ALL THAT MUCH ATTENTION.

SO WHAT'S YOUR POINT?

SOME WILL BLAME IT ON TOO MANY DISTRACTIONS ON AND OFF TH'JOB TO KEEP OUR ATTENTION FROM WANDERING.

IS YOU TALKING 'BOUT COMPLACENCY?

YOU GOT IT. TH' CULPRIT IS STILL AROUND WAITING TO TAKE TH' CREDIT FOR TH' NEXT ACCIDENT OR INCIDENT.

DON'T YOU THINK WE'VE BEAT THAT DOG TO DEATH? OUR PEOPLE ARE JUS' TOO SMART TO...

WELL, WE NEED A POSITIVE CHANGE IN THE WORK ENVIRONMENT. COMPLACENCY AIN'T NEVER GOING AWAY COMPLETELY BUT WE CAN SURE TAKE A BITE OUT OF IT.

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Ours has become an information society. Daily, businesses are finding new and innovative ways to use electronic communication to their advantage. Falling hardware prices and technology advances (resulting in faster communications capability) are fueling a drive toward the information superhighway. To maintain its role as a leader, the Air National Guard must make the fullest use of these capabilities as it moves forward into the 21st century.

The Air National Guard Readiness Center realized communications between themselves and their many geographically separated offices could be quicker, easier, and more effective when done electronically. As a result, the ANG Safety Bulletin Board System (BBS) was first made available to ANG safety offices in October 1992.
The software used to operate the ANG Safety BBS is a full featured electronic bulletin board system that allows users to send/receive files, read bulletins, send/receive private e-mail, or participate in public discussions via public message areas. It allows the ANGRC safety office to post bulletins or conduct surveys applicable to all users.

The success of a BBS system is determined by its users. Users will not use a BBS if faced with connection difficulties, confusing screen navigation, or most importantly, they find nothing of interest on it. Understanding this, the BBS was designed to make it as accessible and user friendly as possible.

A successful BBS must be available the first time, every time. Consequently, our system currently allows up to 16 simultaneous users, via modem, using a single 800 telephone number. Feasibility tests are now being conducted with new hardware and software which will allow an additional 16 simultaneous users via LAN connection. The future involves determining how to integrate the BBS with the ANG Safety World Wide Web page.

A user's interaction with the ANG Safety BBS begins with a logon sequence. Logon is a process whereby users are identified, checked for their password, and given access to the BBS. Access to various features depends upon user access levels controlled by the system operator.

After successful logon, the BBS notifies users if any messages are waiting for them. Users are given the option to read these messages immediately or wait until a later time.

Users must read bulletins from the ANGRC safety office before they are given access to the BBS main menu. From the main menu, they may access the following BBS areas:

- Message areas (public/private)
- File library (multiple topics)
- Bulletins (previously read)
- User directory (multiple sort options)

Public message areas represent the most popular section of the ANG Safety BBS. Here, users are able to participate in public discussions. There are even anonymous public message areas where users can anonymously post information for crosstelling purposes.

Users find public message areas useful because this BBS features a powerful capability of linking related messages. Each reply is linked to its original message allowing them to form a flowing, dynamic conversation. Consider this example: While reading messages in sequence, a user may find an interesting message and decide to follow its chain of replies. The user may add his reply to the chain or return to reading the remaining messages in sequence.

The BBS file library area serves as a central data bank. This feature allows users to store files on the BBS where they are available to all users. Stored files can be computer programs, application files, text information, or any data capability of being stored on a disk. This feature allows users to share locally developed plans, OIs, or other work products with the rest of the ANG safety community, thereby eliminating a need for each unit to reinvent the wheel.

In summary, the ANG Safety BBS provides a significant information sharing capability. It serves as a central crossroads for information exchange and does it well. Please remember, however, that it is only a tool. It does not, by itself, impart pearls of wisdom, provide assistance for users with difficult issues or make available "ready to use" plans and checklists. Only the BBS users themselves can do that. Knowing this, I salute the ANG safety professionals who have made the ANG Safety BBS a success through a willingness to share their individual knowledge, experience, time and talent with their fellow safety counterparts. The synergistic effect of their combined efforts has yielded dramatic results in the form of improved crosstelling, new ideas, and better ways of providing quality service to our commanders and our units.
Operational risk management (ORM) has become a hot topic in Air Force Safety circles over the past few years as safety professionals search for ways to break through the plateau in mishap reduction. In particular, the Air Force Safety Center at Kirtland Air Force Base has studied and refined the subject. After hearing a briefing on ORM there, we at the 184th Bomb Wing of the Kansas Air National Guard decided to implement the program in our unit.

By way of background, at the time of this decision, the 184th was in the middle of a transition from the F-16C to the B-1B. Perhaps more importantly, the unit had changed from an Air National Guard F-16 training unit to an operationally ready bomber unit. Among the many changes was a change in the composition of daily flying training missions. Instead of syllabus-scripted local training flights with strict control of each facet of the student training mission, the new bomber missions involved training flights throughout the continental US. Mission elements were directed more by aircrew training requirements and availability than by the syllabus. As a result, the previous methods of informally evaluating risk were clearly no longer reliable. So, a system that allows aircrew and leadership to formally evaluate and then reduce risks or accept necessary risks seemed a perfect match.

Our first question was, what is ORM? We discovered that it can be a way for everyone involved with a sortie, from the aircrew to leadership, to systematically assess the risks involved with that sortie. We all knew that we take risks every time we fly, but in the past our only assessment of that risk was informal. The operations officer or the supervisor of flying (SOF) and the aircrew would look over the elements of the mission and either launch the sortie, or not, depending primarily on personal experience. Of course, there was some formal guidance for certain risks, like weather minimums and aircrew experience levels, but no comprehensive, standardized way to evaluate all the risks.

We started by researching existing ORM systems and discovered that Air Force Special Operations Command had published AFSOC Pamphlet 91-1 which detailed their ORM program. Using this as a rough guide,
we formed a team of subject matter experts which consisted of members from each of the Operations functional areas, Safety, and representatives from each of the B-1B crew positions. This team examined all the mission elements and built a 2-page matrix which identifies and grades the risks inherent in each mission. Examples of the risks identified in the matrix include: aircrew experience, currency and familiarity, weather, terrain, mission duration, and operating location. While not all inclusive, the above list demonstrates the various areas included in the matrix. After identifying and grading the risks involved, the team tested the matrix using previously flown and hypothetical missions to validate the grading. Then, the details were briefed to all wing aircrew and the system was put in use.

In addition to identifying and evaluating the inherent risks of a mission, our ORM system is used to ensure that the appropriate level of leadership is aware of and accepts the risks in a given mission. For a daily training mission, with a normal low to medium risk level, the aircrew with SOF concurrence can decide to fly the mission. Above a predetermined numerical risk level, however, the squadron commander must approve the launch of the mission. At an even higher level of risk, the operations group commander must give his permission to fly.

The daily execution of the 184th ORM program is fairly simple and easy. The hard part was setting up the matrix. The process starts with the schedulers, who complete an ORM sheet for each sortie that they schedule. These partially completed sheets (they do not have the weather risk graded for example) go with the schedule to be reviewed by the operations officer, then on to the aircrew when they plan the mission. The aircrew completes the ORM matrix, including evaluating any changes from the original schedule and factors such as weather. The final preflight step is for the
daily SOF to also complete the matrix. At any point in the process, if the risk level exceeds the predetermined values, either the squadron commander or operations group commander are included in the decision to launch or change the mission. Because it is only a 2-page matrix, it takes very little time to complete, yet it provides a standard look at each and every mission flown in the 184th Bomb Wing. After the flight, the completed ORM sheets are collected and the information is briefed to the senior staff on a weekly and monthly basis.

Overall, the 184th experience with ORM has been positive. In a recent survey of aircrew on safety issues, more than a quarter of the respondents identified ORM as a very positive aspect of the 184th safety program and only one respondent made a negative comment and that was about the increased paperwork. Additionally, during a recent ORE, squadron personnel expanded the use of the ORM system to include a simulated wartime risk assessment involving the intelligence scenario inputs. The 184th ORM program provides a practical, easy to use risk measurement tool and, most of all, a method to accomplish our mission safely.
It is a summer evening in July of 2025 as my spouse and I sit down to eat at our favorite restaurant. My wrist communicator vibrates. It is my daughter, Holly. She is a consultant for a large corporation and travels all over the world. I am right in the middle of consuming my salad, so I tell her I will call her back in a moment. In the past I would have had to determine what city she was in, her phone number, and at what time she would be in. For quite some time now we have been assigned one telephone number; it follows us wherever we go.

As we get to dessert, two paramedics walk in the room and speak to an elderly man sitting two tables away from us. They are speaking Spanish, most people now speak two languages in our country. They ask him if he is all right. The wrist communicator he wears senses his blood pressure and pulse. If a patient at risk has irregular signs, a signal is sent via satellite to a nearby care facility. Medical people respond to the GPS coordinates of the patient; these coordinates are accurate to less than 1 foot so they know right where he is. Information transmitted to these medical technicians include the complete medical history of the patient. If the man has a stroke or heart attack, medical personnel will have the necessary equipment to literally bring him back from the dead.

My wrist communicator beeps again, it is the door bell at my house. I enter *2 and I am able to talk to the person at the door. It is the UPS man with a package; I hit *5 on my wrist communicator and the garage door opens to allow him to put the package inside. The door closes after he exits.

When we leave the restaurant, our car is already running and the interior at a comfortable temperature. There is little danger of anyone taking our vehicle as it senses our DNA and will not move unless an authorized person is at the wheel.

We stop on the way home to visit with our other daughter, Raquel. She is in the Air National Guard and "flies" for the 115th Fighter Wing. As a pilot, she does not have to carry her harness to her aircraft. She merely walks to a control trailer where she sits at the controls of her uninhabited aerial platform (UAP). The aircraft has the necessary energy to stay aloft for several days. It requires several changes of crews in one mission. The UAP has the ability to take "real-time" photos and transmit them to ground stations throughout the world. It can designate a target and direct an energy beam to do a calculated amount of
damage. Accuracy is measured in inches. Star Trek stuff? Well, maybe, but many of the devices I have described already exist or are currently being developed.

The smart companies and those that will survive must have vision to "see" into the future and prepare for it. If we in safety are to survive in this ever changing world, we too must have vision that guides us to forever look forward and to accept what is possible. Here are some examples of the far-sighted thinking we must have to survive.

The automated system of mishap reporting and data collection in the future must be one that is easy to use, provide ease of sending, and allow those that put data in to get data out in real time. Our vision would be a system that will take our voice commands and turn them into a report. The information would then be sent to a data collection point as well as to all other agencies which, in turn, can use this data for mishap prevention. It must take no longer than a couple of minutes to input all data and send. It must be an open system. Information is sent to all agencies at the same time. The program will be keyed to mishap prevention; it will track not only mishaps, but incidents. Mishaps will be rare as our mishap rates fall.

We see the word "safety" everywhere we go, on the back of trucks, on cones that line work zones on our highways, on the passenger card in the front pocket of your airline seat, and many other places. Safety is a word that gets attention. We need to take a look at this word we call safety. We don't call an 800-mile rescue in the North Atlantic, at night, in bad weather, "safe." Missions we fly will neither be safe nor unsafe but simply entail varying degrees of risk. We will move towards being risk managers analyzing risks, keeping our commanders informed, and then deciding if completing the mission is worth the risk. The 184th Bomb Wing already has a risk management program in place. They define each mission metrically. If the risk score is high, the unit commander must sign off the mission. Our vision is a well-defined program that uses metrics to help each unit define its risks and to apply these risks to the mission. The word safety will be replaced by risk management.

The ANG is now running a test program at the 184th Bomb Wing in Kansas and the 171st Air Refueling Wing in Pennsylvania that combines various compliance agencies into one office. Visionary commanders and Adjutant Generals in these two states have allowed their people to move forward and support the process. Instead of having bio-environmental, fire department, public health, and ground safety services conducting separate compliance inspections, these units will have combined these inspections and write a single report. Our vision is one office where the commander can go to find out what the hazards are on his base. Agencies on base get one all encompassing inspection, not several
inspections scattered throughout the year. The management of this affair will also be a great preparatory job for future commanders.

The aircraft Class A mishap investigation process is undergoing many changes. Who will comprise our boards, who will they work for, and who and where will they get briefed? Will privilege be extended to all or just to those we need to get information from? We now do two boards, a safety mishap investigation board and an accident board. Recently we have done only one board. Will we do this more in the future?

Today when the members of a mishap board do an investigation, it is usually the first and only one they will do. We rarely use the same people. Some of these boards have done a marvelous job while others have not done so well. Our vision is to streamline this process, to have it done without undue influence from anyone, and focus on determining what happened. Mishap boards will be more open and all interested parties will get information throughout the board process via video conferences. Accountability for the mishap will rest with the responsible agency. The granting of privilege will be the exception rather than the rule. Investigations will be completed in half the time they now take.

Culture will become the focus of a comprehensive program that will analyze a unit's culture. This analysis will be performed by a team of professionals who will determine not "what" is happening in a unit but "why." We are learning more about this program as we go to additional units, but after analyzing previous mishaps, the culture of the unit clearly was an influencing factor. Our vision is a program that will help every commander understand his unit culture and then provide the tools necessary to adjust this culture. We will no longer stop at asking what happened; we will ask why.

Our future will have us dealing more and more with peer accountability. Peer accountability will serve to bring back in line those that may tend to stray. We now have some organizations that do peer appraisals as well as upward appraisals. The ANG safety office and counter drug office both have programs similar to what I have described. The Israeli Air Force has a program of peer appraisals that they use to help select their commanders.

Our vision is a program that will help every commander understand his unit culture and then provide the tools necessary to adjust this culture.
FLIGHT LINE SAFETY AWARD OF DISTINCTION

Maj Bruce E. Heylmun
95 RS, 55 WG
Offutt AFB NE

On 19 Mar 96, Maj Heylmun, the 95 RS SOF, was monitoring the taxi for initial takeoff of ELVIS 88, a RC-135W departing from RAF Mildenhall. From the SOF vehicle, he scanned the aircraft visually for safe configuration as the crew performed final pre-takeoff checks in the hammer head. Everything appeared normal as the aircraft received takeoff clearance, back-taxied onto the runway 11 overrun, and lined up for takeoff. Maj Heylmun positioned himself to monitor the takeoff, and continued his visual scan as the aircraft boosted its engines for a static-rolling takeoff. As the aircraft passed abeam his position on takeoff roll, he saw the aft hatch fall inside the aircraft. Recognizing the time critical situation, Maj Heylmun transmitted “ELVIS 88, Abort, Abort, Abort,” and visually confirmed the aircraft was initiating the abort procedures. The crew heard the advisory and initiated the abort at 95 knots. At this low speed, minimal braking was required, and the aircraft slowed quickly to taxi speed, exiting the runway at mid-field. Once he observed the aircraft was under control and decelerating, Maj Heylmun requested and received clearance from tower to follow the aircraft down the runway checking for FOD and providing assistance to the aircraft. When the aircraft cleared the runway, Maj Heylmun contacted the aircraft to explain the abort call. He also had the crew check the hatch, confirmed hot brakes were not suspected, and relayed to tower that the runway was clear of FOD. Additionally, he coordinated for maintenance to meet the aircraft and perform trouble-shooting in parking. After inspection by maintenance, the aft hatch upper latching pin was determined to be the cause of the incident. The pin had become maladjusted and was no longer fully engaging the latch. Maintenance was able to install a new hatch and launch the sortie with minimal delay.

CREW CHIEF EXCELLENCE AWARD

Sgt Christopher J. Hively
SrA Antonio D. Moreno
79 FS, 4404 WG (P)

As crew chief of F-16 CJ #92-0923, Sergeant Hively was preparing for engine start in support of a taxi check. Moments after the pilot engaged the jet fuel starter (JFS) a fire broke out near the JFS door. Sergeant Hively quickly informed the pilot, who accomplished appropriate procedures and began an emergency ground egress. The fire, however, continued to spread to the belly of the aircraft as the fire guard, Senior Airman Moreno, activated the fire bottle and battled the flames. Sergeant Hively grabbed a ladder and helped the pilot egress the aircraft. Airman Moreno was eventually able to extinguish the flames with no damage to the aircraft. Sergeant Hively and Airman Moreno’s quick response to a hazardous situation prevented possible injuries and saved a valuable combat aircraft.
WEAPONS SAFETY AWARD OF DISTINCTION

MSgt Bonnie J. Richardson
TSGt Timothy W. Rearich
99 CES, 99 ABW
Nellis AFB NV

Sergeants Richardson and Rearich were selected to lead the clean-up operation for Range 62 Target 07 (62-07) on the HQ Air Warfare Center (HQ AWC) Range Complex. Because of the terrain, the wide variety of CBU’s employed on the target, and the sheer numbers of unexploded ordnance (UXO), 62-07 is considered the most hazardous area of the AWC range complex. The target and the surrounding area were literally covered with unexploded bomblets and CBU shells making it unsafe to approach the target in a vehicle and mandating all EOD personnel approaching the area to wear body armor. Sergeants Richardson and Rearich were instrumental in developing a comprehensive plan to reduce or eliminate the UXO hazard and bring in heavy equipment to remove the tons of scrap metal left from CBU shells and target residue. They developed an extensive pre-mission training program and ensured all personnel selected to the team were thoroughly briefed. They conducted target familiarization training for new personnel rotating into the mission to ensure they understood procedures, safety precautions, and chain of command. Safety and teamwork were emphasized at all levels. Detailed logs were kept and pre- and post-operation daily briefings were conducted to ensure safety and improve the plan of attack as the clearance progressed. The results were evident.

AIRCREW SAFETY AWARD OF DISTINCTION

Capt John Dyck, Lt Col James Story
391 FS, 366 WG
Mt Home AFB ID

On 2 Apr 96, Capt Dyck and Lt Col Story experienced a dangerous aircraft malfunction while practicing fighter maneuvers (BFM) in the local training area. Capt Dyck and Col Story completed two intercepts and three BFM engagements without incident. During the fourth engagement, Capt Dyck noticed that he could not roll left with full left aileron in. Quickly determining that one of their rudder actuators failed, Capt Dyck and Col Story set a course for Mountain Home AFB and configured their aircraft for landing. With the right rudder deflected fully right, it took great skill, airmanship, and crew coordination to maintain level flight. With full left rudder and 10 degrees of left bank in to counteract the failed right rudder, their aircraft was unable to turn left as it approached the base for landing. Analyzing the situation, Capt Dyck and Col Story decided to attempt an approach end barrier engagement on landing. As the aircraft touched down, it immediately started to veer right. The aircraft engaged the cable, bringing it to a stop 50 feet from the edge of the runway. Because the F-15E checklist does not have an emergency procedure to deal with a hard-over rudder, only the quick thinking, skills, and systems knowledge of Capt Dyck and Col Story prevented the loss of a valuable combat asset.
GROUND SAFETY INDIVIDUAL AWARD OF DISTINCTION

SSgt Chad D. Lingerfelt
4 EMS, 4 FW
Seymour Johnson AFB NC

Sergeant Lingerfelt’s constant shop visits and innovative programs ensure safety maintains a high profile throughout the squadron. He created an in-house training program called the “Shadow Program.” He trains section safety representatives to conduct safety inspections and to do walk around inspections in other flights on a monthly basis. This introduces a new safety “perspective” and increases the chance of discovering safety hazards. Sergeant Lingerfelt’s ability to prevent mishaps has produced positive results. His FY 96 first quarter statistics of 10% on-duty and 30% off-duty mishap reductions show a tremendous improvement over the same period last year. His efforts outside the squadron further demonstrate his commitment to the safety of the Air Force community. He was instrumental in the installation of a stop sign at a dangerously busy intersection and worked to have more rugs strategically placed at the base fitness center preventing wet basketball floors. Again, Sergeant Lingerfelt solved the problem, precluding future accidents. His personal style and visibility ensures safety is at the forefront of all squadron activities. He personally briefs all squadron safety mishaps at commander’s calls to keep personnel aware of potential on- and off-duty hazards. His personal involvement with mishap investigations resulted in a program that ensures 100% contact between the commander and all personnel involved, including the flight chiefs if needed. He engineered efforts to computerize initial and annual job safety training plans incorporating them throughout the squadron. Through his persistence EMS has developed a way of thinking that can be simply stated as, “In 4 EMS when it comes to safety, ZERO is not just a number, it’s a way of THINKING.”

PILOT SAFETY AWARD OF DISTINCTION

Capt Daniel J. Ourada
8 FS, 49 FW
Holloman AFB NM

On 23 Feb 96, Capt Ourada was number two in a flight of two F-117As on a day Surface Attack Tactical Sortie. Ground ops, takeoff, and the initial part of the departure were normal. As Capt Ourada completed the rejoin, he heard a loud “thump” and a “bang,” which were immediately followed by a Master Caution light and the left generator, AMAD oil, oil, and hydraulic lights on the annunciator panel. Capt Ourada quickly analyzed the situation, informed his lead, and began a turn back to Holloman. As soon as he had done this, he was faced with a left duct overheat and then a fire light on the left side. Capt Ourada accomplished the boldface procedures for the duct overheat, and then shut down the left engine for the confirmed fire. He immediately began dumping fuel and set up for a single engine recovery. Despite compound system failures and high gross weight (12,000 lbs of fuel remaining), Capt Ourada flew an exceptional single-engine approach and landing. Even at higher landing speeds he was able to keep the aircraft under control, and bring it safely to a stop in the remaining runway. Faced with a sudden emergency situation and only seconds to react, Capt Ourada responded flawlessly and prevented possible loss of life while saving a valuable Air Force asset.
The 335 FS smoothly managed the wing's largest 1 year increase in flying activity, increasing sorties and hours by 14% and aircraft utilization rates by 17% from Fiscal Year 94. Over 3,600 sortie and 5,900 flying hours were integrated with a maintenance program of over 5,000 aircraft maintenance events and 7,750 training events while preparing for an ORI and Southwest Asia deployment. This was all achieved while beating 80% of ACC aircraft performance standards under squadron control! For 2 of the past 3 years, the squadron has received either an "Excellent" or "Outstanding" rating for every ground and weapons safety inspection. The 335 FS was the first in the F-15E community to create a squadron-level engine element to efficiently manage the growing workload generated by the F-100-PW-220 engine and halt a decline in experience levels in engine maintenance. This was a tremendous asset during several one-time inspections for cracked augmentors and low pressure turbines that grounded aircraft until repaired. In one 4 week period alone, crew chiefs removed 22 engines for inspection with not one engine misdiagnosed by squadron personnel. During Operation SOUTHERN WATCH, the Chiefs generated over 1,200 sortie and 3,200 flying hours over Southern Iraq. Despite severe parts shortages and recurring nose landing gear shimmy problems, not one SOUTHERN WATCH sortie was lost throughout the entire 90-day deployment. During recent tensions with Cuba, the 335 FS was tasked to generate eight fully loaded aircraft and provide combat power from the Seymour Johnson ramp for the first time in history. Squadron maintainers' superior reaction enabled them to generate all aircraft in an astonishing 10-hour period and ready them for immediate launch well ahead of headquarters requirements. With these unequaled accomplishments, it is no wonder that the 335 FS achieved the milestone of 60,000 mishap-free hours.
I love the outdoors. Hunting and fishing place second and third behind family on my list of priorities. I work four 10-hour days a week, so I have ample time to pursue my interests.

On a Monday in the middle of the summer last fishing season, I prepared to catch that Citation bass that has eluded me for so long.

I left the dock about 6:30 in the morning, and everything was perfect for a morning of quality fishing. Going down lake for 15 minutes, I rounded a point of land and noticed a small boat close to the far shore running at a high rate of speed. I heard yelling; but with the noise of my outboard engine, I didn't associate the screams with anything other than someone having fun on the water. Initially, I thought someone was water skiing and it struck me as being odd because of the early hour.

The boat began to maneuver in such a way that I knew something was not right. Closer investigation revealed that the boat did not have an operator and two people were in the water. A man and his young son had somehow been thrown out of the craft.

The younger person didn't concern me as much because he was wearing a personal flotation device and he was very close to the shore. The father's situation was entirely different. The unmanned boat which was going at full throttle was going around in circles in a manner that prevented him from swimming to shore. He was treading water and wasn't wearing a life jacket. As I approached, I could understand the screams I heard were him telling his son to get out of the water away from the runaway boat.

I was able to get my boat parallel to his. A slight bump steered it away enough to let me pull him out of the water into my boat. He was exhausted and scared. I didn't know how long he had been treading water, but I don't think he could have kept it up much longer.

I took him to shore to join his son. Thank-fully, no serious injuries had occurred with either person.

He began to explain to me the circumstances that led up to his accident. He said that the boat was new to him and this was the first time he had put it in the water. Coming up lake, the arm that he was steering the outboard motor with developed a cramp. Without slowing down, he had tried to switch arms behind his back and completely missed the tiller of the motor. The motor turned abruptly and made the boat go into such a sharp turn that the two of them were thrown out. When I questioned him about the "kill switch" on the engine, he didn't know what I was talking about.

We still had the problem of an unmanned boat going full throttle in circles in the middle of the lake. I left the two on shore and motored to the nearest marina to notify the proper authorities about the safety hazard. When I returned, the boat had beached itself and my new friend had regained control of it.

The rescue team that responded to my call seemed more than happy that no one was seriously injured and the safety hazard no longer existed.

Reports and statements took up most of the quality fishing time for the day, but that missed day of fishing made me realize that a few of the things I did needed improvement. Thanks to the experience, I know my equipment better than ever. I inspect my safety equipment before every trip. I use my safety equipment for the purpose of its design. I do not take anything for granted and I am positive that I'm not alone.

By the way... I'm still looking for that Citation bass!
QUESTIONS OR COMMENTS CONCERNING DATA ON THIS PAGE SHOULD BE ADDRESSED TO HQ ACC/SEF, DSN: 574-7031

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CLASS A MISHAP COMPARISON RATE

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(BASED ON PROGRAMED HOURS FLOWN)