

Air Combat Command's Mishap Prevention Magazine

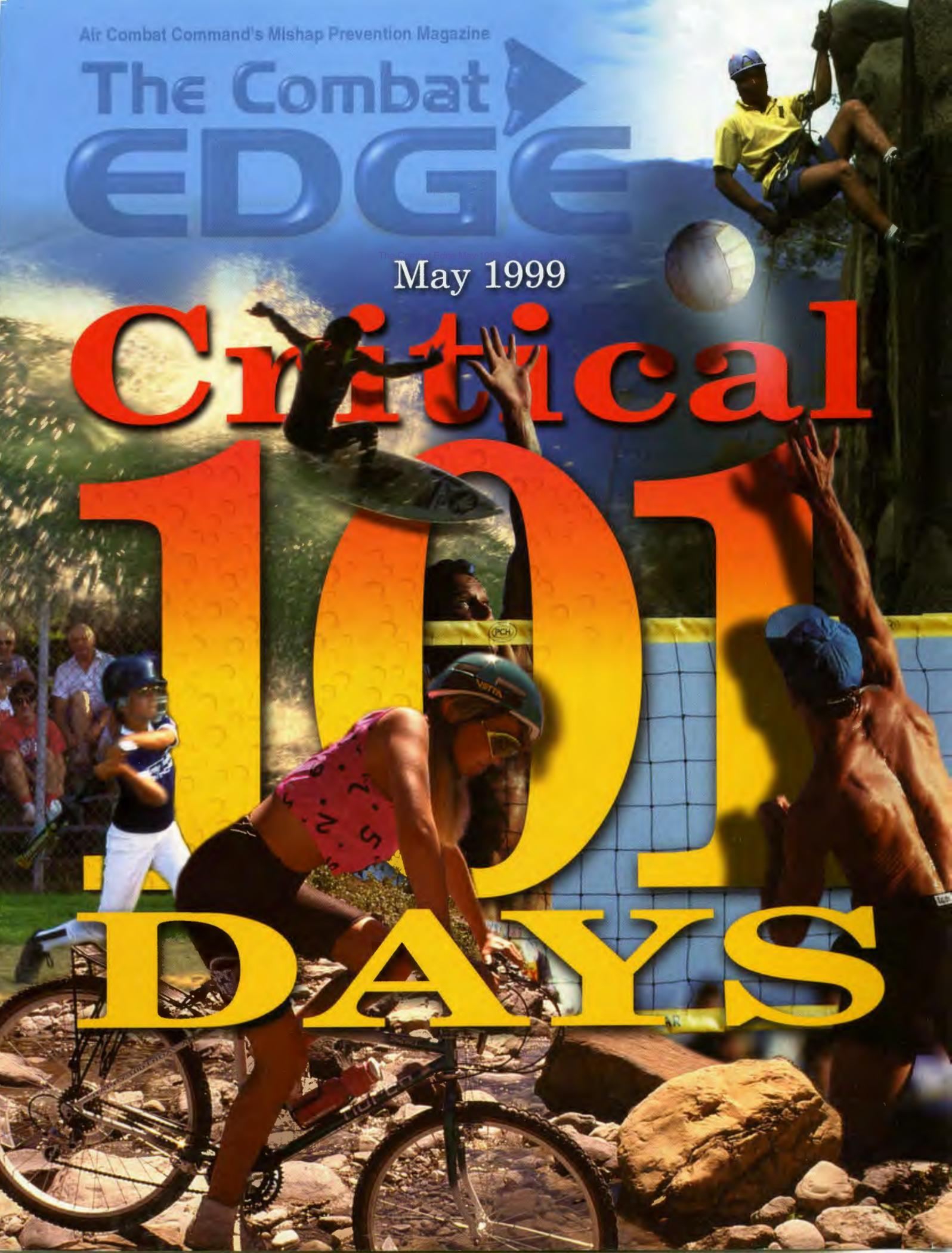
The Combat EDGE

May 1999

Critical

1001

DAYS



The Combat Edge

Air Combat Command's
Mishap Prevention
Magazine

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ACCENT on Safety

With our simultaneous engagements in multiple hot spots around the world, it's getting a bit more difficult to prioritize addressing the risks we must face on a daily basis. However, the one consistent aspect of the locales most of us might encounter is that it will soon be summer. The "101 Days of Summer" Campaign has been a long-standing USAF attempt to address the risks that seem to be multiplied by summer's rise in the heat index. For sure, there is a heavy focus on off-duty activities since we see a particular surge in injuries and deaths related to sports, recreation, and vehicle accidents. Nevertheless, the risks encountered on duty seem to be equally enhanced as evidenced in our flight, weapons, and on-duty ground mishap rates. So, whether at home or deployed, it's well worth your while to put a few "brain bytes" against the old risk-benefit equation and the effects of hot weather, long days, and the added turmoil of summer personnel turnovers.

I'm sure that most of you know Murphy's Law, "If it can happen, it will." There are even several corollaries; for example, "If it can, it will happen at the worst possible time." Here are a few more axioms:

1. If it has happened before, it will happen again.
2. If it has happened to me, it can happen to you (or vice versa).
3. Whichever, the next time it happens, it's always worse than the time before.

As long as I'm rolling out the cliches, here's another: "While experience may be the best teacher, it's always better to learn from somebody else's experiences (and/or mistakes)"... which is why we publish this magazine in the first place.

We military-types are fond of writing down our "Lessons Learned" and communicating those so that others might benefit. Of course, for there to be any communication, there must be two actions — one must speak and one must listen (or write/read, show/watch, etc.). One could imagine the stunting of mankind's development if Alexander Graham Bell had produced only one telephone instrument — we might all still be waiting for Watson to respond.

The Combat Edge has been a wonderful instrument for conveying the "experiences" that can be viewed as another of "life's lessons learned." And, I strongly encourage folks to continue contributing their stories for others to read. However, we do suffer from a lag in getting those articles to print due to the required production lead time. While permissible for the majority of incidents, I would like to remind folks that there is a far timelier means of conveying your story. Particularly where only good fortune precluded the most dire consequences, your local safety folks can help you in preparing a High Accident Potential (HAP) mishap report.

A HAP report acknowledges an incident's potential severity and instigates a thorough investigation and report timeline aimed at quickly informing the field and initiating appropriate risk reduction efforts. A HAP is a good thing because it means we got lucky, but we're smart enough to know it was only luck and wise enough to do something about preventing a not-so-lucky recurrence.

The world is getting to be a hotter place to operate. To take care of each other, we need to talk it up... and keep the scales tipped to the "bennies" side.

Y'all, be careful out there!
Colonel Turk Marshall
Chief of Safety

101 Days of Summer:

A Critical Time

This period, from Memorial Day to Labor Day, is commonly referred to as "101 Critical Days of Summer." During this period, personal injury mishaps are at an all time high.

Well it's about time to dust off those barbecue grills and pull the bikes out of the garage. Once again, you have survived another winter; and it's time to put up that winter coat and replace it with tank tops and shorts. After a long hibernation from outdoor activities, it's also time to once again enjoy all the won-

warrant it.

As we approach our next "101 Critical Days of Summer," let's take a moment to reflect on the lives that were lost in 1998 and how we can learn from these tragedies. For instance, during the "101 Critical Days of Summer" last year, ACC suffered eight fatalities (i.e., 40%) of the total number of ground mishap

Now armed with this information, let's work together as safety conscious members of the ACC team to eliminate these common — but also deadly — factors. Of course, there are plenty of other factors out there that take lives; but it is paramount we not let the tragedies of our command's history repeat themselves. As with many safety articles, some read-

ers may only view this narrative as mere words on paper, and in reality it is. However, one will never know of the countless lives that can and will be saved if we all would simply practice smart risk management.

e for Safety

TSgt Anthony Stennis, HQ ACC/SEG, Langley AFB VA

derful things that spring and summer can bring.

This period, from Memorial Day to Labor Day, is commonly referred to as "101 Critical Days of Summer." During this period, personal injury mishaps are at an all time high. As our activity level increases, the number of mishaps also tends to rise. Therefore, the best way to stop this rise is through proper identification of hazards.

Identifying the potential sources of danger which cause risk is the first step in mishap prevention. Once identified, take the proper steps to eliminate, reduce, or control the risks involved. And above all, remember this... never accept unnecessary risks (i.e., those that have no benefit and are not worth taking). Since there is risk in nearly everything we do, we shouldn't be afraid of risks; but we should learn to accept risk only when the benefits clearly

fatalities Air Force-wide. As a command, we started out very strong, with no fatalities in the May-June time period. However, as we progressed through the summer, the mishap numbers rose to 3 in July and by 5 more in August. This trend illustrates a possible lack of focus during the latter stages of this important safety campaign.

The major factors involved in these fatalities were: alcohol, excessive driving speed, fatigue, and not wearing seat belts or motorcycle helmets. Folks, let's not let these culprits take another precious life. One of the major reasons why these perpetrators continue to be so effective in their cause is... in each mishap fatality, they were "not identified ahead of time by the victims as killers." Therefore, a proper assessment of the risks associated with each event could not be made.

As you participate in your upcoming summer activities, remember to properly identify the hazards involved and take the necessary steps to eliminate, reduce, or control the risks. Also, don't forget our #1 safety rule: "never accept unnecessary risks." Drunk driving, speeding, driving while fatigued, and not wearing seat belts or motorcycle helmets are risks that clearly have no benefit and are not worth taking. When you play with killers like these, you have nothing to gain and everything to lose—including your life. So, keep these culprits in mind, along with any others that may come your way. Don't wait for that infamous nanosecond when it's obviously too late to prevent a tragedy. Let's approach this year as if our life depends on it, because it does. If we just practice some simple ORM during this critical time, it will help ensure a safe and enjoyable summer. ■

A Lasting



Whitecotton Family Photo
August 1944



Memory

*TSgt Oland Whitecotton
627 AMSS/SE
RAF Mildenhall, UK*

Whitecotton Family Photo
January 1954

You've been out with your friends partying, having a good time, and you've had a few drinks to boot. You don't quite know how many drinks, but it couldn't have been more than a few. Most of those bottles on the table must be someone else's. You can't be bothered to call a taxi, so you decide to take the risk and drive yourself home. After all, what are the chances of being caught? And even if you are caught, at worst you'll lose your driving privileges for a year, pay a couple thousand in fines, and suffer some embarrassment, right? Well, you're wrong — dead wrong!

Do you want to know what's the worst that can happen? Just ask my father. Oh, he didn't

drink and drive, but he has suffered the consequences all his life for someone else's decision to do so. My dad was 12 years old at the time, and his father was the Chief of Police for the city of Bowie, Texas. It was Sunday morning, January 15, 1954. My father and his parents, Herman and Alma Whitecotton, and his three brothers (Billy, Earl, and Herman Jr.) were driving to church. My father vaguely remembers that as they rounded a bend in the road, there was a car approaching from the opposite direction in their lane. Herman swerved to miss the car, but it was too late.

The next thing my father remembers is waking up outside the car with his head bleeding. He'd been ejected from the car when several of the doors popped off from the impact. My father related that he tried pulling his mother from the car, but she was trapped in the wreckage from the waist down, as was his father and younger brother Herman Jr. He said he'd never seen so much blood. He pretty much knew from looking at his parents and younger brother that they were dead. His father was impaled on the steering wheel, Herman Jr. was bent over the dashboard with his upper body laying where the windshield used to be, and his mom was nearly cut in

half in the wreckage. The entire engine compartment had basically been shoved back 2 feet, into and onto the front-seat occupants.

Earl was on the floorboard of the rear seat, crying. My father dragged him out with the help of passersby who had stopped. Billy, like my father had been thrown from the car, though he wasn't as fortunate. His skull was fractured, and he died on-the-spot. Earl died a short time later from internal injuries. My father was the only survivor of the accident. The drunk driver who caused the head-on collision died in the accident, too.

The Montague County Sheriff determined that the man who was driving the other car had been drunk. Friends of the man said he had been returning from an all-nighter in Windthorst, Texas. Witnesses said they had been up all night gambling and drinking, both of which were illegal. Alcohol and gambling were both prohibited in that area of Texas at the time.

This event has had a lasting effect on my father for over 40 years now. Nobody can erase this heartbreaking memory from his mind — you can't bring a dead family back to life. Every time someone mentions their uncle or grandparents, I can't help but think about the ones that I was deprived of by one senseless act of a drunken driver. Long after my father is gone, I'm sure I'll be relating this story to my children and grandchildren. As you can see, drunk driving has "a lasting impact" on people. In reality, it is a very selfish act; it ruthlessly takes and destroys the lives of many innocent families. And beyond that, the pain, anguish, and distress that the survivors and other loved ones feel lasts a lifetime. Be responsible — don't drink and drive. ■

He said he'd never seen so much blood. He pretty much knew from looking at his parents and younger brother that they were dead.

Monthly Awards

GROUND SAFETY AWARD OF DISTINCTION

Mr. Jimmy W. Elliott, 2 TRNS, 2BW, Barksdale AFB LA

Mr. Elliott prevented the occurrence of a major accident involving a split rim (2-piece rim) wheel assembly. In order to perform routine maintenance, a task-certified 3-level technician attempted to remove the front wheel of a Harlan Warehouse Tug. The tug's front wheel has 5 lug nuts designed to hold the wheel onto the hub. There are an additional 10 bolts which hold the 2-piece rim together. The "nut end" of these 10 bolts is exposed to the outside of the wheel the same way as the 5 lug nuts. The technician removed the 5 lug nuts to facilitate normal removal of the tire/wheel. However, the wheel wouldn't come off the hub freely due to a light build-up of rust and paint. Instead of lightly tapping the wheel with a hammer, the technician decided to begin removing the 10 additional bolts, which held the 2-piece rim together. The technician thought these 10 bolts, in addition to the 5 lug nuts, secured the tire/wheel assembly to the hub. In other words, the apprentice thought there were a total of 15 lug nuts instead of the 5. Unbeknownst to the technician, the wheel would explosively separate due to the rapid release of air pressure if the additional 10 bolts were removed. (The T.O. was not being utilized since this was a simple, routine task. Assigned personnel use tech data during complicated tasks or those not previously accomplished. The technician had



removed wheels countless times before this incident.)

Fortunately, a miracle occurred. Mr. Elliott, a veteran technician, happened to glance towards the tug from a distance of 30 feet. Mr. Elliott noticed a pile of wheel nuts near the front of the tug, close to where the technician was squatting. On an instinctive hunch, Mr. Elliott yelled to the technician "GET AWAY FROM THAT TUG NOW!" Mr. Elliott then hurried over to the tug to see exactly what the technician was doing. He discovered the technician had removed 8 of the 10 bolts, which held the 2-piece wheel together. Scared and extremely nervous, Mr. Elliott quickly exhausted all air from the tire by removing the valve core.

Mr. Elliott's keen eyesight and attention to detail prevented an explosive catastrophe from occurring. Had he acted with great haste, the technician would have removed the 9th bolt, causing the wheel to burst apart with enormous force with the possible result of severe injury or death. Mr. Elliott saved the technician's life.

(Editor's note: Supervision in the work center has been intensified. Also, additional emphasis on the subject has been added to work center safety briefings.)

Monthly Awards

AIRCREW SAFETY AWARD OF DISTINCTION

*Capt Matthew J. Burger, Capt Neil P. Eisen
TSgt Alan D. Hotaling, TSgt Bryan E. Winder
SSgt Louis V. Distelzweig
56/41 RQS, 85 GP
Keflavik NAS/IC*

On 2 Apr 98, two HH-60G Pavehawk helicopters departed Keflavik Naval Air Station, Iceland, on a night tactical training mission. One of the several training objectives for this mission included a simulated survivor pick-up from open ocean. Weather conditions for this challenging mission included clear skies and gusty winds of 25 knots. The sortie was tailor-made to exercise the squadron's demanding combat rescue capability and was flown entirely with the aid of Night Vision Goggles.

The overland portion of the sortie was challenging, but the crew executed the briefed plan with precision and there were no surprises. While en route to the designated over-water pick-up point, Jolly 21 (flight lead) separated the flight to ensure adequate aircraft separation for the impending survivor pick-up. Jolly 21 terminated his descent at a mere 100 feet above the water level and slowed the aircraft to 100 knots. It was during this critical altitude and airspeed configuration while on the down wind leg of his pattern that Jolly 21 noticed something terribly wrong with the #1 engine. The engine's freewheeling turbine speed (Nf) was beginning to increase out of designed limits. As a consequence of this anomaly, the rotor RPM of the helicopter was increasing to a critical level. The crew immediately responded to this time sensitive emergency by increasing collective input in an attempt to control the rapidly increasing rotor speed and to put precious altitude between the aircraft and the ocean. Years of emergency procedure and crew coordination training was instantly recalled and pressed into service to cope with this potentially life-threatening emergency.



The Aircraft Commander (Capt Burger) immediately maneuvered the aircraft to a safe altitude and began to proceed to shore. His copilot (Capt Eisen) quickly notified their sister ship of their engine problems and declared an emergency with Keflavik Tower. It soon became obvious that, despite their best efforts, rotor RPM could not be maintained with

collective inputs alone. The Flight Engineer (TSgt Hotaling) quickly referenced the emergency procedure checklist and directed the pilots through the increasing rotor RPM checklist. Capt Eisen retarded the #1 engine to idle while Capt Burger struggled to maintain aircraft control. All the while, the two pararescue men (TSgt Winder and SSgt Distelzweig) on board the aircraft diligently

cleared the flight path for the crew, while the flight crew struggled with the emergency. Finally, with the #1 engine at idle, the crew was able to control the rotor rpm with RPM SAFE LIMITS. The crew recovered the aircraft to Keflavik and flew a flawless single-engine approach. The aircraft was shut down without further incident.

Post-flight analysis revealed that the #1 engine Hydro-Mechanical Unit (HMU) had failed. This critical component controls fuel to the engine and was causing the #1 engine freewheeling turbine to race out of control. The crew's timely and accurate response to this emergency saved themselves and their aircraft from a potentially dire situation. Their performance during this complex emergency while in a critical phase of flight is commendable.

FLIGHT LINE SAFETY AWARD OF DISTINCTION

SSgt William R. Payne, Jr., 56 RQS, 85 GP, Keflavik NAS IC

SSgt Payne was the HH-60G flight engineer on a briefed two-ship tactical training sortie. During the aircraft run-up, as the throttles were advanced from idle to fly, it was noted that the #2 engine's freewheeling turbine speed (Nf) and torque were much higher than the #1 indications at identical throttle settings. This was briefly discussed and dismissed as a slight rigging difference.

During a subsequent engine health indicator check, Sgt Payne noted that once again the #2 Nf was irregular. The throttle was retarded to idle with Nf reading 95%, while the #1 throttle indicated the typical 89% Nf at idle. Although the crew was content to once again dismiss this as a slight rigging problem, Sgt Payne insisted on further investigation. At this point, maintenance was called in to investigate. The engine expert stated that none of the noted engine indications were addressed by his technical guidance and any further investigation by maintenance would necessitate shutting the aircraft down. The aircraft commander, based on this information from maintenance, was willing to take the aircraft and suggested this to the

crew. Sgt Payne, however, did not feel that the aircraft was airworthy. He voiced this opinion and recommended the aircraft be shut down and turned over to maintenance for additional troubleshooting. The decision was made to shut down the aircraft. During shutdown, the crew noted a 5% split between the gas generator speeds of the engines, exceeding the 3% allowable split between the two engines. Maintenance investigation into the problem following the shutdown revealed a sheared load demand spindle pin.

Sgt Payne's persistence, despite the fact that it was in opposition to his aircraft commander's suggestion, is particularly noteworthy in this instance. His excellent employment of Crew Resource Management certainly averted an in-flight emergency and possible damage to the aircraft and crew. Not only does Sgt Payne's "Good Catch" indicate a superior degree of aircraft systems knowledge, but his decision to make the unpopular call to terminate the mission illustrates his commitment to Operational Risk Management. No degree of unnecessary risk is acceptable on a training mission.

WEAPONS SAFETY AWARD OF DISTINCTION

SSgt Howard W. Strayer, II, 77 BS, 28 BW, Ellsworth AFB SD

SSgt Strayer exemplified top military standards in the performance of his duties by identifying a safety deficiency during weapons load training on the ALE-50 towed decoy system (TDS).

As part of initial procedures qualification training on the ALE-50 TDS, Sgt Strayer was to conduct munitions preparation. This required removing the shielding cap from the electrical connector, inspecting for contamination, damage, and corrosion then reinstalling the shielding cap. Since the magazine did not have a shielding cap, he rejected it for loading in accordance with a technical order warning. Upon questioning the requirement to have a shielding cap on the magazine, he was told there were none available and to load them since it was an empty magazine. Uncomfortable with the answer, he brought his concerns to his supervisors. The 28th Bomb Wing Loading Standardization Section and 28th Munitions

Squadron were contacted to find out if a shielding cap was needed per the technical order. The system program office for ALE-50 and ACC/LGWS were also contacted for clarification; they determined the lack of a shielding cap was definitely a concern.

All live loading of the ALE-50 was halted until shielding caps could be installed on the magazines. Sgt Strayer discovered further shortfalls in that only one shielding cap was made by the manufacturer and none were available for flight line loading. Local fabrication shops were brought into action. Teams were able to get quick approval for the local design, meeting all safety standards, and keeping the towed decoy program on track for the B-1 aircraft. Sgt Strayer's cautious persistence exemplifies the proper operational risk management approach to doing business. His actions helped clarify technical order safety procedures and averted a potential weapons-related mishap.



CREW CHIEF SAFETY AWARD OF DISTINCTION

A1C Patrick L. Karnes, 57 AGS, 57 WG, Nellis AFB NV

At approximately 0900 on 23 Nov 98, A1C Karnes was preparing to launch out his aircraft, an F-15C. While removing protective covers and performing other pre-launch tasks, Amn Karnes noticed an unusual hissing sound coming from the cockpit area of the aircraft. Amn Karnes simultaneously summoned his supervisor for assistance and entered the cockpit to determine the source of the strange noise. His investigation revealed a serious leak in the pilot's oxygen supply hose where it connects to the oxygen regulator control panel. Further investigation determined that a screw had vibrated loose from the oxygen hose connector. Had this condition gone undetected, an in-flight loss of the oxygen supply to

the pilot and subsequent physiological incident may have occurred. Serious damage or loss of aircraft and aircrew could have followed. Amn Karnes' attention to detail, thorough systems knowledge, commitment to safety, and inquisitiveness to look further than required, prevented a possible serious incident or loss of aircraft and loss of life.



PILOT SAFETY AWARD OF DISTINCTION

Lt Col Thomas N. Dietz, 94 FS, 1/FW, Langley AFB VA

Approximately 3 minutes after takeoff on a local F-15C combat training sortie, Lt Col Dietz was climbing through 12,000 ft MSL when he received a master caution and associated hydraulic warning lights indicating the failure of the PC1A hydraulic system. Shortly thereafter, the PC1A light went out and the PC1B hydraulic warning light came on as the F-15 hydraulic reservoir level system (RLS) attempted to isolate a developing hydraulic leak. Within several minutes of the first master caution light, the right and left utility pump warning lights illuminated as the entire utility hydraulic system pressure dropped to zero. Col Dietz declared an IFE, started dumping fuel, and turned back to LAFB approximately 25 miles away. Col Dietz's wingman performed a battle damage assessment and confirmed hydraulic fluid was leaking from the bottom of the F-15. The wingman also provided backup emergency checklist guidance for the developing compound emergency. Post flight inspection revealed the hydraulic leak occurred in a hydraulic line connected to the F-15's left stablizer actuator-part of the F-15 Non-RLS system. This critical hydraulic

failure rendered the F-15's flight controls in the least flyable condition with a "dead" left wing (no aileron or flap hydraulic power), and an inoperable flight control Computer Augmentation System (CAS) for pitch, roll, or yaw. Additionally, the pitch and roll ratios for the hydro-mechanical flight control system reverted to their emergency position reducing flight control authority to its least effective configuration for aircraft recovery. In addition, the F-15 was unable to extend the landing gear with hydraulic power and had no braking system available (normal or emergency). Col Dietz discussed his situation and intentions with the SOP to fly a reduced AOA, no flap, straight-in approach, and landing with an approach end BAK-12 cable engagement. The recovery, approach, and high-speed landing were flown flawlessly; and Col Dietz successfully engaged the approach-end cable at 170 KIAS. Col Dietz's superior airmanship, superb flying skills, and thorough aircraft systems knowledge prevented the loss of both an invaluable Air Force combat aircraft and a skilled fighter pilot.

Making Smart Decisions

9 Safety Tips to Help Protect You and Your Family

1. Have a Clear Head. Make sure you always have a clear head before deciding to operate a motor vehicle. Alcohol and certain drugs, both illegal and legal, can severely impair your driving skills. Many prescription and over-the-counter medications can cause dangerous drowsiness. Get a good night's rest, and don't drive for long stretches without a break. If you are tired, don't risk the safety of yourself and others on the highway by trying to drive. Just as with alcohol — designate a driver or choose another means of transportation such as a taxi cab or public transportation.

2. Limit Driving Alone When Tired. Driving with someone else in the car can increase your overall alertness. It is well recognized that when driving alone, especially when sleep deprived and at night, your chances of a crash are dramatically increased.

3. Read the Labels. If you are taking any medications, be sure to read and obey the warning labels. If the label says the medication causes drowsiness or not to drive — heed the warning and don't drive. The warnings are there for a reason. Consult with your doctor or pharmacist if you have any questions about medications for your condition that don't cause drowsiness.

4. Plan Ahead. Allow yourself plenty of extra time to reach your destination, and allow for emergencies or traffic jams. In today's busy world, most of us are in a hurry to get where we are going. By allowing extra time, we can be more relaxed when operating our vehicles and thereby cut down on the incidences of road rage... such as excessive speeding, tailgating, and weaving in and out between cars.

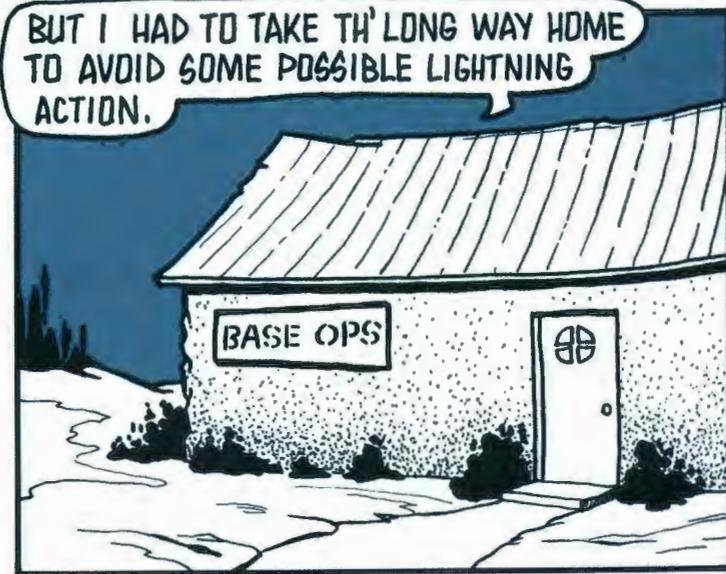
5. Research Safety Features. Safety should always be a top priority when shopping for a vehicle. Research the safety performance of any vehicle you are considering buying — including how the vehicle performs in crash tests. Both driver and passenger side air bags are now mandatory in all new cars. Look for side impact bags in many new models as well. When buying a used vehicle, look for one with air bags. Research what type of safety systems are in the car, and choose the safest to protect you and your loved ones in the event of a collision.

6. Relax. Avoid aggressive driving by relaxing and having patience. By not being in such a rush to reach your destination, you'll be a calmer person and better able to resist the temptation of speeding or running through red lights. And don't forget... a yellow light means to slow down, not speed up. Always stop at red lights.

7. Be Alert to Signs of Fatigue. If you start to feel tired when driving, pull over in a safe area; and let someone else drive. If you are alone, pull into a safe location (such as a well lit rest stop), and take a short nap or get out of the car so you can walk around for a few minutes. Stop as often as necessary. When traveling on long trips, eat light. Large, heavy meals can make you drowsy.

8. Practice Common Sense Safety Rules. Always wear your safety belt, and make sure all your passengers are buckled properly, even on short trips. If traveling with children, educate yourself on the many kinds of child safety seats and restraints. Choose which system is best for your child, and always follow the directions. Make sure children ages 12 and under are always buckled up in the back seat, the safest place to ride.

9. Keep Your Eyes on the Road. Avoid taking your eyes off the road by eliminating any possible distractions ahead of time. Before setting out on a drive, be sure that important items are within easy reach (i.e., directions and maps, sunglasses, etc.). Reduce to a minimum any dangerous diversions of your attention from the task of safe driving — such as changing tapes or compact discs. Moreover, always pull over to a safe place to use your cellular telephone.



Freewheeling

Freewheeling is it really free?

Is it Really Free?

Freewheeling is doing something “off-the-cuff”; it’s doing something unplanned and on a whim...



In my 6 months back in the safety business, I've noted many improvements. We've introduced Operational Risk Management (ORM), which we believe will cause the next significant decrease in mishaps. Hopefully in our introduction of ORM, we're doing it the right way and not creating an empire by trying to cram it down people's throats like some recent philosophies that I'd prefer not to name. We've decreased our mishaps, but we can still do better in achieving further dramatic reductions in our mishap rates. How? Well, I still see — both in 9th Air Force and in all commands across the Air Force — what my boss calls “freewheeling.” Let me tell you what freewheeling is and how it's hurting our people.

Freewheeling — What is it?

Freewheeling is doing something “off-the-cuff”; it's doing something unplanned and on a whim. It's doing something without much, if any, forethought or planning. In fact, freewheeling is the direct opposite of ORM. It's doing something without any analysis, consideration of risk, or sense of consequence. Got it? OK, here are some true-life examples of what I'm talking about.

A Freewheeling IP

An Instructor Pilot (IP), in an effort to maximize training for his student Weapon System Officer (WSO), directed him to lower the landing gear using the alternate gear extension. Now this doesn't sound so bad except that this event was unbriefed, not in the syllabus, and caught

the WSO by surprise. Also, the student WSO was flying the aircraft at the time. While it is true that WSO flying is an approved training requirement, it must be done within certain parameters — not below 2000' or in the radar pattern. In this case, the aircraft was on a 13-mile final and below 2000'. So let's see what we have here — an IP was directing his student to perform an unnecessary, unbriefed event that was not in the syllabus while the WSO was illegally flying. Hmm...

On with the story — concentrating on flying, the WSO grabbed the wrong handle and jettisoned the canopy instead of lowering the landing gear. Fortunately, nobody was hurt; but the Air Force lost a canopy at a cost of approximately \$284,000. This is what I call freewheeling — no planning, no thought.

There's a reason we brief extensively before we fly and debrief even more extensively after we fly. We are engaged in a serious business in which people can be killed. Flying is a precise endeavor that requires meticulous preparation, performance, and review. There is no room for freewheeling. Freewheeling is not found just in the flying game; here's a story from on the ground in the Desert.

A Freewheeling Suburban Operator

One airman was familiarizing another airman with the driving characteristics of a Chevy Suburban... when he decided to do some freewheeling. This Suburban was armored due to the local threat level, so it had different driving characteristics

than your basic Suburban vehicle. The airman, who had received driver training, decided to provide some additional impromptu training to his fellow colleague. He attempted to demonstrate a very risky evasive maneuver to his partner. During the course of this demonstration, he lost control of the vehicle and rolled it over. Fortunately, the incident resulted in only a destroyed vehicle and two bruised airmen; they could have been killed. The “instructor” in this case had already received driver training, but no training in instructing other airmen. Furthermore, there was absolutely no need to demonstrate such a risky driving maneuver.

Summary

The motivation of both these folks (i.e., the IP and the airman operating the Suburban) was to provide training for their respective students. Although their motive was admirable, it was misplaced. Instead of enhancing the training of our personnel, we lost a canopy and destroyed a vehicle. Taking all things into consideration, we were very fortunate because we could have lost a lot more.

Hopefully, I've made my case against freewheeling and doing things off-the-cuff. Don't be fooled; freewheeling is not free from risk. You may get away with it in your personal lives (from time to time that is); but in the high stakes world in which we operate, we can't afford it. My purpose here is not to embarrass anybody; but in the safety business, we need to learn from everyone's mistakes. The price is too high to pay if we don't. ■

TEAM SALUTES

The HQ ACC Team Salute recognizes a person, group of people, or unit for notable displays of quality performance in the area of mishap prevention. Recipients are selected by the ACC Safety Awards Board from the monthly nominees for ACC safety awards and are featured periodically in The Combat Edge magazine. Our congratulations to these superior performers.

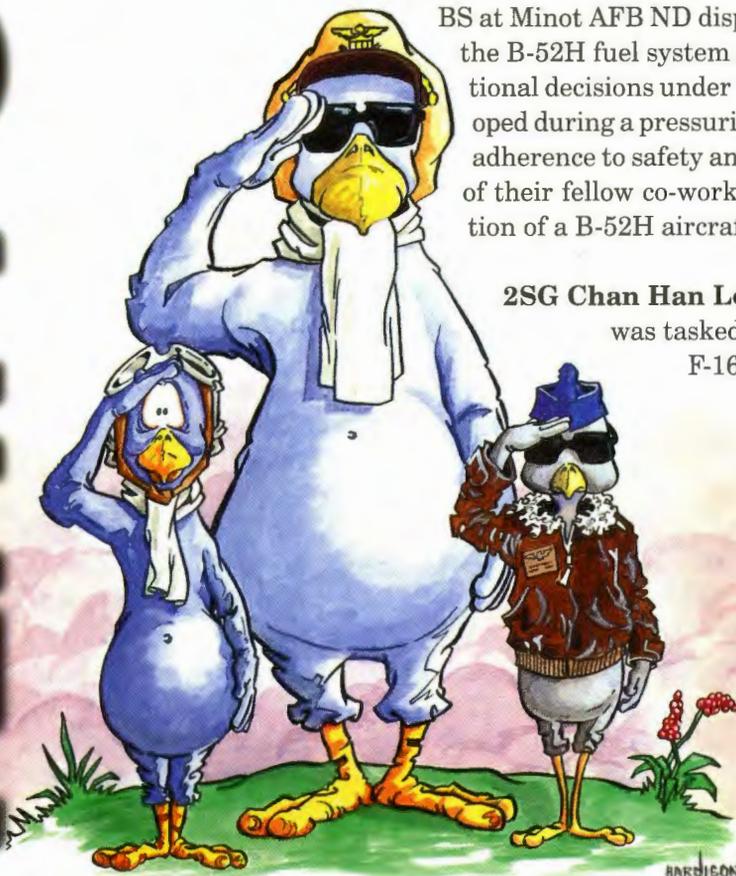
Civilians Gordy Pollard, Paul Grignot, and Ben Collins along with the Mission Commander, Major Barry Brannon of the 82 ATRS at Tyndall AFB FL, safely controlled the flight of an unmanned QF-4 Full-Scale Aerial Target (FSAT) during an advanced test mission. In spite of a flight control problem, they successfully executed the first QF-4 FSAT manual landing thereby saving a significant 1.4 million-dollar Air Force test asset.

3SG Oswald Wong Leung Kwan of the 428 FS at Cannon AFB NM was tasked to perform a turnaround servicing on an F-16 aircraft. After noticing a loose bolt on an engine bearing heat shield, he immediately notified the engine maintenance specialists for corrective action. As a result of 3SG Oswald's close attention to detail and going the extra mile to inspect areas beyond the requirement of the technical order, he saved an aircraft and also prevented possible loss of life.

SrA Marc J. Ruel and A1C Michael S. Hartman, Jr., of the 23 BS at Minot AFB ND displayed outstanding system knowledge of the B-52H fuel system and exhibited a keen ability to make rational decisions under pressure. When a severe fuel leak developed during a pressurization test, their quick actions and strict adherence to safety and technical directives ensured the safety of their fellow co-workers and prevented the possible destruction of a B-52H aircraft.

2SG Chan Han Leong of the 428 FS at Cannon AFB NM was tasked to perform a preflight inspection on an F-16 aircraft. Due to 2SG Chan's dedication and initiative, he went the extra mile and inspected areas that were not required in his checklist. As a result of his inspection, he prevented a potential Foreign Object Damage incident and possible loss of aircraft.

SSgt Bradley A. Cressman of the 93 BS at Barksdale AFB LA performed a pre-flight inspection of a B-52H aircraft. During the cockpit portion of the inspection, he discovered an Egress System Hose flat-



tened and kinked on the radar-navigator ejection seat. SSGT Cressman's attention to detail in performing his job in accordance with technical data prevented a potential dangerous and critical situation from occurring which would have had a serious affect on flight safety and possibly resulted in loss of life.

TSgt Kyle T. Blanchard, SSGT Brent A. Freeman, and SrA Paul J. Piskura of the 20 CRS at Shaw AFB were tasked with troubleshooting the number one engine of an A-10 aircraft after the pilot had experienced an in-flight emergency. A thorough investigation by the crew revealed a 1/2" to 1" hole located in the combustion frame. The aggressive maintenance actions and meticulous attention to detail demonstrated by the crew prevented an absolute engine fire and possible personnel injury during a future engine start.

A1C Jeremy J. Buntz of the 333 FS at Seymour Johnson AFB NC was completing a rudder actuator hydraulic inspection on an F-15E during periodic phase maintenance. His close visual inspection in a hard-to-reach area revealed a loose bolt on the rear most bottom section of the vertical stabilator. His attention to detail and keen understanding of the aircraft while performing tedious yet vital maintenance saved the Air Force an invaluable combat asset and possibly aircrew lives.

TSgt Gregory W. Barnhill, TSgt John D. Kilpatrick, and SSGT Davey A. Ellis of the 917 WG at Barksdale AFB LA discovered four egress system gas line b-nuts loose on three A-10 aircraft. The loose gas lines were identified as a result

of a hands-on checking of every gas line exposed with the ejection seat raised to the maintenance position or removed. If these discrepancies had gone undetected and an emergency had arisen during flight, the pilot would not have been able to eject.

SrA Quienell Owens, Jr., and SrA Harrison E. Flagg, Jr., of the 57 AGS at Nellis AFB NV were performing launch and recover assist duties. During their shift, an F-16 aircraft taxied into the live Ordnance Loading Area. Noticing the aircraft's left main brake was smoking and engulfed in flames, the crew immediately notified the pilot and extinguished the fire. Their quick and decisive actions ensured the safety of the pilot and other personnel and saved the \$32 million F-16 fighter aircraft from further damage.

A1C Frederick C. Butts, Jr., of the 27 EMS at Cannon AFB NM took it upon himself to take advantage of the arrival of four transient F-16s from Nellis AFB NV to train newly assigned members. The training lesson involved the inspection of known Foreign Object Damage (FOD) problem areas within the aircrew station. During his orientation session, he discovered a mechanical pencil lodged in one of the problem areas, removed it, and took it upon himself to inspect the remainder of the aircraft for other potential FOD problems. His initiative and vigilance may have prevented an aircraft incident along with possible loss of life.

TSgt George P. Mitchell of the 84 TS at Tyndall AFB FL ensured the safety of more than 40 Integrated Avionics Test Facility

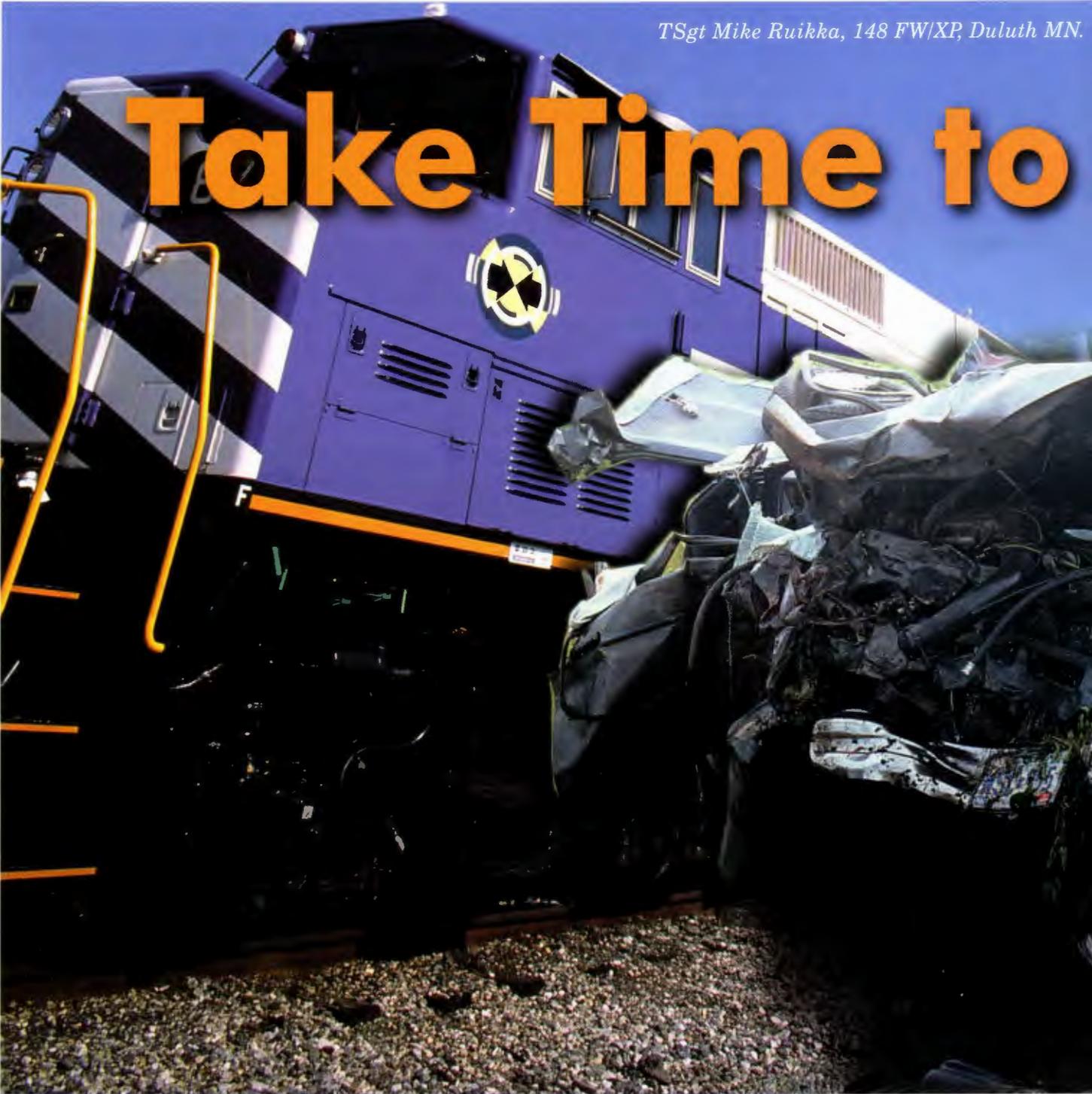
(IATF) personnel and \$75,000,000 of avionics and radar equipment. When electricians identified suspected violations of the National Electric Code, TSgt Mitchell took the initiative to immediately assess the safety of IATF power systems. TSgt Mitchell's quick action not only protected the lives of IATF personnel, but it also convinced expert electricians to cancel their emergency work order, thus preventing a complete shutdown of the IATF and interruption of its mission.

MSgt Mark D. Conrad of the 33 FW at Eglin AFB FL has designed and implemented a comprehensive Operational Risk Management (ORM) program that has significantly impacted safety awareness throughout the entire United States Air Force. His program was selected as both an ACC Best Practice as well as an Air Force Best Practice. MSgt Conrad's colossal efforts to heighten safety awareness are clearly manifested in the extremely successful safety program he built and manages today.

TSgt William S. Perkins of the 49 TES at Barksdale AFB LA identified and corrected unsafe work practices in daily maintenance activities. His briefing to squadron instrumentation personnel on the hazards of aircraft egress systems and emergency ground egress procedures allowed them to safely perform on-aircraft equipment installation and checkouts. As the chief liaison to the 2 BW maintenance operations, he also participated in pre-launch activity and monitored maintenance support for 49 TES missions. His actions ensured safety and mission requirements were met. ■

TSgt Mike Ruikka, 148 FW/XP, Duluth MN.

Take Time to



The knowledge that I was operating a train that, through no fault of my own, killed two people will stay with me for the rest of my life.

I am a traditional guardsman. In my civilian occupation, I work as a locomotive engineer. I have worked for the railroad 5 years. During this time, I have been very surprised by the number of people who drive around railroad gate crossings

Wait!



and ignore the accompanying flashing lights along with other posted signs warning of an oncoming train.

Many of the people I work with have been involved in railroad crossing accidents. Most of those stories do not have happy endings.

My story starts 3 years ago while I was a student engineer. I was 2 weeks from taking my final exams the day it happened. The train crew that day consisted of myself, a qualified engineer (i.e., my instructor), and the conductor. Our train consisted of two SD-60M Diesel-Electric Locomotives and approximately 160 taconite rail cars.

The day started out fairly well. We were on duty at 10:00 a.m. and departed the rail yard at 10:30. As the student, it fell upon me to operate the train for most of the trip, which was expected to take about 12 hours. The first part of the trip was uneventful. We made it to the iron mine in about 4 hours. After loading up with around 14,000 tons of taconite, we proceeded on our way.

Once again, the trip was uneventful... that is, until we reached a small town in northern Minnesota. Near a small crossing just west of town, two brothers were in their car towing a boat. Ignoring all the warnings, they attempted to beat the train and drive their vehicle and boat trailer around the gate crossing. As soon as I saw the vehicle on the railroad tracks, I immediately applied the emergency brakes. Unfortunately, the train was not able to stop in time; it collided with the vehicle and the two brothers died instantly.

Another brother who was driving up the highway saw the entire incident happen before his very eyes — I'll never forget hearing the helpless cries of grief and anguish that came forth from that poor young man. It was a woeful and pitiful situation. Moreover, as a result of the mishap, their families are now without two husbands, fathers, sons, and broth-

ers; not just for a little while, but forever.

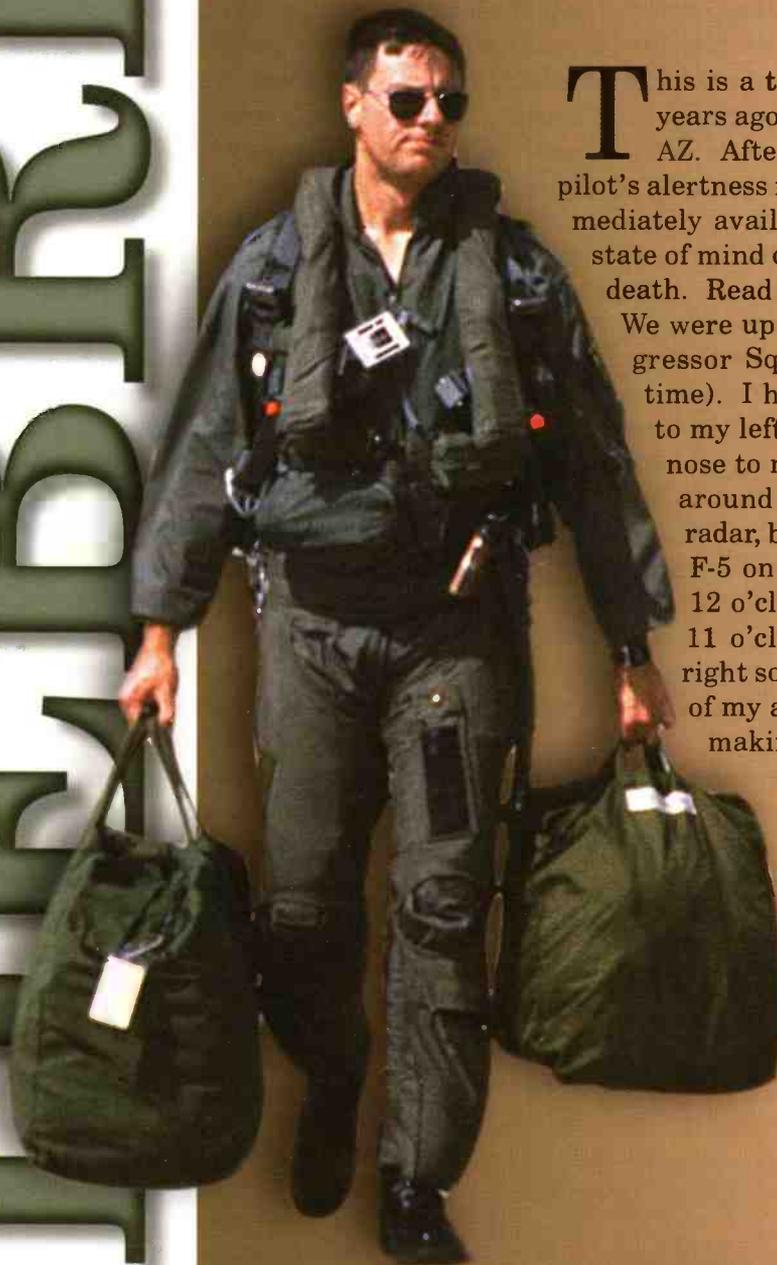
I cannot imagine what those families felt like when they first heard of the tragic news; nor can I fully understand what they are going through now as they live each day without their loved ones. Personally, however, I do know that I had a very hard time dealing with the mishap. It is a day I will never forget. The knowledge that I was operating a train that, through no fault of my own, killed two people will stay with me for the rest of my life. Although I truly believe I had done everything a person could possibly do to prevent the accident, the fact remains that two people are dead.

To this day, I stand amazed when I see people continuing to ignore the caution signs and warning lights at railroad crossings. Many, many people are willing to take the risk of driving their vehicle over a railroad crossing when there is an oncoming train only seconds away from their path. It only takes one collision with a train to abruptly end a person's life. The risk involved in an attempt to save only a few minutes of travel time in your car is simply not worth it.

The moral of this story can be summed up in two words — be patient. Before you even give the smallest thought of driving your car around a flashing railroad crossing gate, stop and think about what it will do to your family when the police knock on the door to tell them you won't be coming home. Exercise patience by waiting the few minutes necessary for the train to pass by. When it comes to railroad crossing safety, take my advice — the advice of someone who knows. TAKE TIME TO WAIT... and live! ■

In the Blink of an Eye!

*Lt Col Dennis Selvig, USAF (Ret)
Sumter SC*



This is a true story of what I experienced several years ago as an F-15 Instructor Pilot at Luke AFB AZ. After this harrowing sortie, I learned how a pilot's alertness impacts the ability to quickly process immediately available information. Maintaining a ready state of mind can make the difference between life and death. Read on to find out why...

We were up on a 2 versus 2 mission against the Aggressor Squadron (who were flying F-5s at that time). I had my wingman spread out line abreast to my left, and the two F-5s were coming at us — nose to nose. The closure speed was somewhere around 750-800 knots. I had them both on the radar, but I needed to pick them up visually. The F-5 on my side was a few miles out and at my 12 o'clock; his wingman was over to my left at 11 o'clock. I turned about 20 degrees to the right so that I would have everybody on one side of my aircraft when we got to the merge. After making the turn, I checked the radar again to see what was happening and continued to look outside to pick everybody up visually.

On a scan through the cockpit, I noticed that I had a range bar on my head up display that was showing 5,000 feet and unwinding fast. My target had also moved back to my 12 o'clock. I looked out front to see if I could pick him up by eyeball. I certainly should have been able to... after all, he was zero azimuth and zero elevation.

I don't know if you know how

big an F-5 is at 1 mile range and pure nose on. Try to imagine your refrigerator. Take that fridge down the highway a mile, drop it off, and drive back to where you started. Look back. Kind of small down there, isn't it? I couldn't see anything at a mile. As we were closing into each other, I saw a dot... then a dot with wings and a tail. My next image was of an F-5 right beside me, to the left about 20 feet and slightly low. The pilot was hunched over in the cockpit, and I could see the back of his helmet as he flashed by. His shock wave jolted me in my cockpit. I must have had an angel flying with me that day — our jets were definitely too close for comfort.

At the debriefing, I asked him why he was hunched over when he went by. He said, "Because I thought your wing was going to cut my head off! That was a minus 2-G push-over." I felt kind of stupid about not taking any action to avoid the situation, but then I realized he was able to do something only a second or so before we met — probably because he had a little bigger image to see. What had happened? Why did I let him come zinging in while I just sat there and didn't do a thing? Well, there are several possible answers:

- 1) Bad reflexes (I'm over 50 now, but I wasn't then)
- 2) Poor eyesight (I need Mig spotters now, but didn't then)
- 3) Couldn't make up my mind about what to do (could be true)
- 4) Stupid (definitely true)

However, none of these possibilities answer one question that lingered in my mind for a long

time after I had the "near-miss." What about what I saw? In a flash of time, the other jet went from an image of a dot with wings to an image right beside my cockpit.

Things that are coming at you "fast" aren't where you see them — they're closer. OK, still with me? Hang in there while I explain another lesson from safety school. It takes a finite amount of time for an image to travel from your eyeballs back along

**In a flash of time,
the other jet went
from an image of a
dot with wings to an
image right beside
my cockpit.**

your optic nerve to your brain. Then you have to process that image. Closing in at 800 knots, the approaching aircraft would be at your front doorstep in just "a blink of an eye." Therefore, we need to realize that what we see out there coming at us at supersonic closure is really a lot closer than it seems due to our limited image processing/reaction time.

So what are you supposed to do with this little tidbit of knowledge? Cut yourself some slack... I hope. Realize that what you see

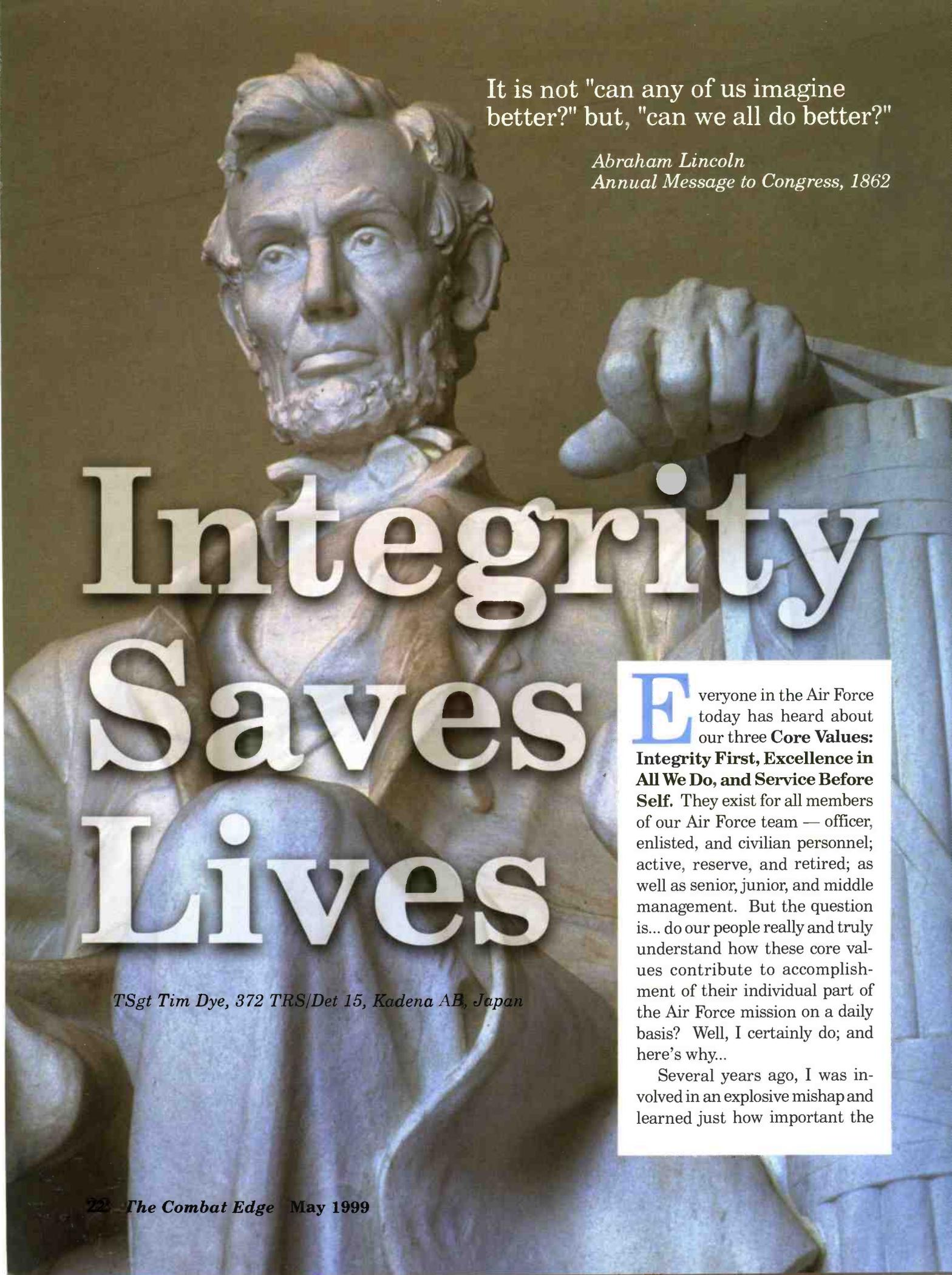
is not always what you get. When you are in a tight situation, you need to give yourself a little extra space and a little extra time. How do you do that?

Well, you know what the old fighter pilot said when somebody asked him, "Aren't your reflexes getting a little slow for this line of work?" He said, "Yes they are. But now I rely on my experience and judgment to keep me out of situations where I need fast reflexes." I think we can all be a little like the old fighter pilot by thinking ahead in order to give ourselves the extra pad we need in order to react appropriately to stressful time-limited situations. A proper state of alertness and readiness to process immediately available information is an important aspect of flying safely. After all, a lot can happen in just a "blink of an eye." Check Six! ■



About the Author

Lt Col Dennis Selvig, USAF (Ret) is a previous Chief of Flight Safety for Ninth Air Force. He has flown the F-15, F-4, and A-37. He was previously published in TAC Attack, writing an article entitled "Live to Fly, Fly to Live."



It is not "can any of us imagine better?" but, "can we all do better?"

*Abraham Lincoln
Annual Message to Congress, 1862*

Integrity Saves Lives

TSgt Tim Dye, 372 TRS/Det 15, Kadena AB, Japan

Everyone in the Air Force today has heard about our three **Core Values: Integrity First, Excellence in All We Do, and Service Before Self.** They exist for all members of our Air Force team — officer, enlisted, and civilian personnel; active, reserve, and retired; as well as senior, junior, and middle management. But the question is... do our people really and truly understand how these core values contribute to accomplishment of their individual part of the Air Force mission on a daily basis? Well, I certainly do; and here's why...

Several years ago, I was involved in an explosive mishap and learned just how important the

core value of “Integrity First” is and how it can make a difference in our daily life. It all started one morning during a routine day at work. I was responsible for the build-up and testing of several AIM-7 Sparrow missiles for live fire testing. We had several people working in two maintenance bays, one group unpacking components and the other assembling/testing the missiles. Everything was going fine with no problems, that is... until lunchtime. A few minutes before noon, the Staff Sergeant in charge of the operation decided to break the crew into two shifts — one to go to lunch immediately and the other to continue working until the other crew returned from their break.

I was put in charge of the crew that continued to work during the regular lunch period. As mentioned before, everything seemed to be running great, until I noticed one of the airmen on my crew was unusually nervous and upset about something. I pulled the airman aside and asked him what the problem was. At first, he was unusually silent about it. However, I finally persuaded him to open up and tell me what was bothering him so badly. He explained to me how the Staff Sergeant in charge of unpacking the components had decided it was easier and faster to do the job by hand rather than with lifting the equipment as required by the Technical Order (T.O.). He told me they had dropped one of the rocket motors while unpacking it in another maintenance bay that was to be used in the build-up. He also said that the Staff Sergeant told him there were no reasons to look up the drop criteria in the T.O. and that it didn’t need to be inspected because “it wasn’t damaged.” (Note: Interestingly enough, the

airman had just arrived from his technical school only a month before and was afraid to question the Staff Sergeant’s decision on the incident.) Upon hearing this from the airman, I immediately looked up the drop criteria for the rocket motor in the T.O. The warning read as follows: “Rocket motors can detonate upon ignition” if there is a crack in the solid rocket propellant. Next, I informed my shop chief and notified Munitions Control to begin running the

By the time the Staff Sergeant and the rest of the crew returned from their lunch break, the Squadron Commander, Flight Chief, Quality Assurance Inspectors, and Weapons Safety Inspectors were all waiting there to talk with him.

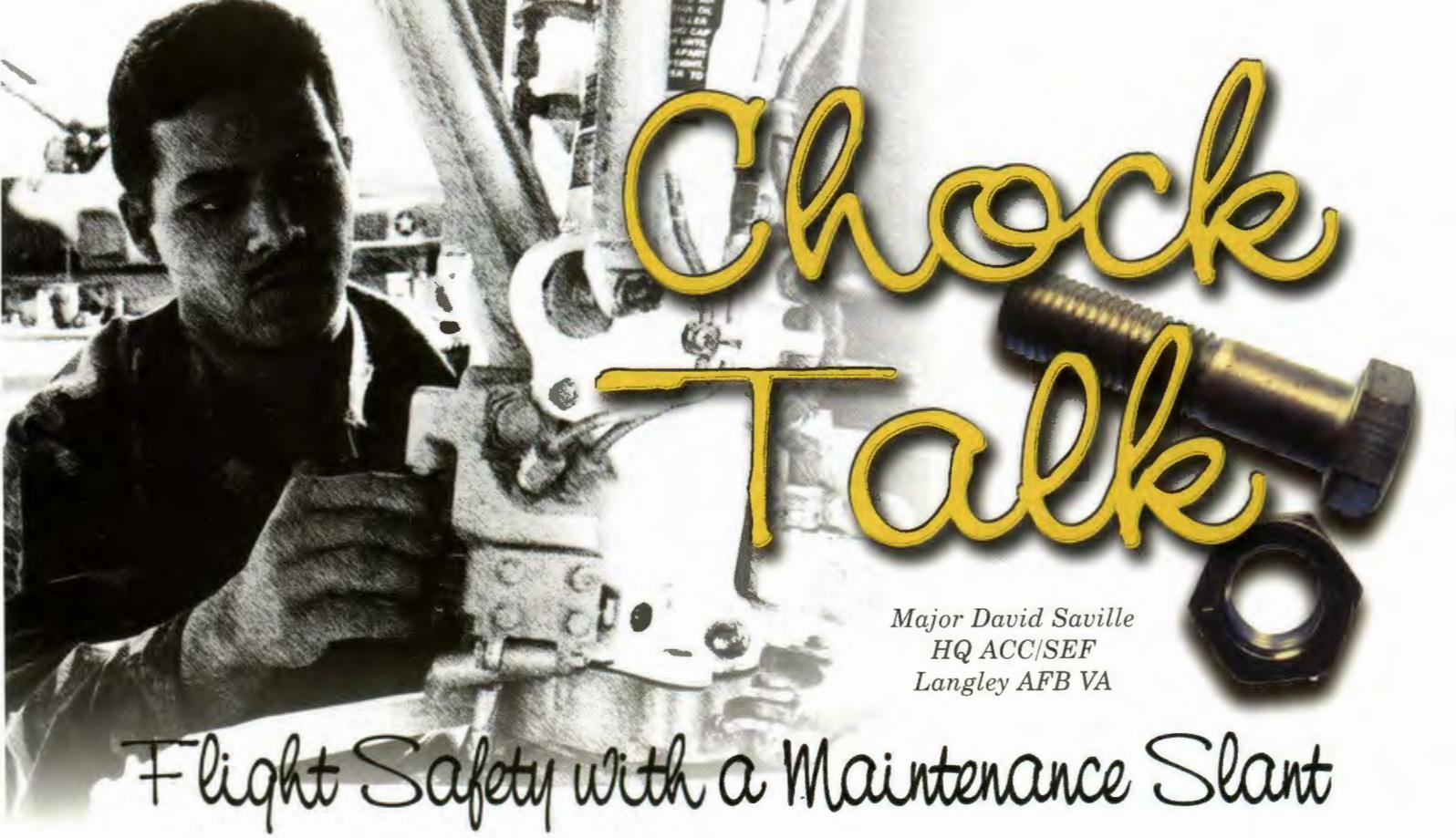
Emergency Action Checklist for an explosive mishap.

By the time the Staff Sergeant and the rest of the crew returned from their lunch break, the Squadron Commander, Flight Chief, Quality Assurance Inspectors, and Weapons Safety Inspectors were all waiting there to talk with him. They wanted to hear his reasons for not reporting the dropped rocket motor. Needless to say, he had no valid rationale for not re-

porting the incident. Because he was in a hurry to go to lunch and didn’t want to take the time to follow procedures as outlined in the T.O., he got into some pretty serious trouble. More importantly, he lost his integrity with his peers. Besides this, I wonder how the Staff Sergeant would have felt if the dropped rocket motor had not been reported and ultimately resulted in the loss of an aircraft... as well as the injury or death of a pilot? In my mind, that would be a much greater punishment than anyone could ever receive for exercising such irresponsibility.

Air Force Core Values can really make a difference in your day-to-day life. This incident could have resulted in a very terrible tragedy. As a result, integrity is a very important character trait — it is the willingness to do what is right, even when no one is looking. Underpinning integrity are several other moral traits that are indispensable to our service in the United States Air Force as well; these include: courage, honesty, responsibility, accountability, justice, openness, and self-respect. As a result, integrity is the trademark of the Air Force.

As weapons maintainers, we don’t pencil whip our weapons status reports, and we don’t cover up T.O. violations because integrity is key to safe mission accomplishment. At the same time, however, it is very easy to lose and almost impossible to gain back from someone else once you’ve lost it. Therefore, the next time you have to question your own integrity in a situation, admit your mistake and be honest and truthful about the incident. The bottom line is this — as members of the Air Force, we must possess Integrity First. Why? Because “**Integrity Saves Lives.**” ■



Chock Talk

Major David Saville
HQ ACC/SEF
Langley AFB VA

Flight Safety with a Maintenance Slant

Safety Challenges of Unit Deactivation

A Monumental Effort

At first glance, the title of this month's Chock Talk article may seem to indicate a deviation from its original charter. However, the "Flight Safety with a Maintenance Slant" theme is here, and in a big way. I was encouraged to write about a phenomenon many of us have endured with great emotional stress, and that is... deactivating a flying unit. Deactivating a flying unit (or any maintenance unit, for that matter) is one of the most challenging flight safety leadership environments we face, and very little guidance is offered to make it easier. This month's article is dedicated to the vast multitude of maintenance professionals who ace this unpleasant task, over and over. I

want to offer a few reasons why it's so tough to do and suggest some ways to manage it successfully. Hopefully, the information in this article will be a useful, encouraging tool to those facing this challenge in the future.

Virtually everyone in the USAF of the 1990's has been directly or indirectly involved with more than one squadron deactivation in their career. Each of us can imagine the monumental effort required in getting a particular unit established and then reflecting on the huge effort associated with bringing it to closure. We've seen deactivations get done right and not so right. In fact, I did a survey among people I work with on a regular basis and found out that virtually everyone I

talked to has been through the challenges of a unit deactivation. I learned that although each unit closure is unique in many ways, the similarities are profoundly consistent. The following observations and ideas are a result of that informal research.

Some Observations

As many of you know, learning that your squadron and your mission are going to deactivate is like learning you have cancer — getting the news is a shock to the system. Like a rug yanked out from under our feet, many changes occur all at once. Just as you and your co-workers are sifting through deeply personal feelings about the year that will follow, so is the organization as a

whole. The unit's focus changes dramatically from all the efforts and goals to improve and perfect the squadron to the unpleasant task of managing the mountain of tasks and issues associated with the closure. Self-help projects and strategic visions get replaced by planning for aircraft transfer docks and assignment teams. Through all that, one unsettling voice bubbles up in the back of everyone's minds, saying, "If we get out of here without a mishap, we'll be very fortunate."

Why Bother About Safety?

Why? Why is safety so suddenly challenged at the announcement of a squadron's closure? As anyone who's been through a unit deactivation knows, closing without a serious mishap is one of the toughest jobs in the Air Force. I would like to highlight three basic reasons why.

1. Death of a Dream: Don't trivialize the role unit pride plays in day-to-day operations, and don't underestimate the negative effect of losing that unit pride. The average troop cares a lot about what he or she is a part of. We like to believe we matter. It is deeply troubling to watch the evaporation of a legacy into which we poured our professional hearts and souls. Bloody knuckles made the seemingly impossible happen, and now the unit or the mission is apparently no longer required. It's like getting a pink slip, saying, "Your services are no longer necessary." That hurts, and it leaves us rudderless, wondering which way to go, or if we even matter. We wonder if our contributions and sacrifices over the past few years were worth it. Everyone from a motivated airman

in the middle of a self-help project, to a crew chief keeping his delayed discrepancies to a minimum, to a SMSgt who finally got some serious mentoring going in her shop, finds themselves grappling with the "death of a dream." Closing a unit we served in hurts, and we should acknowledge that.

2. Distractions: This is probably the single most powerful force that challenges safety issues in a unit facing deactivation. Both personal and professional stressors clutter our mind, setting the stage for a textbook avoidable mishap. Each person harbors the worries of the unknown, of what will happen to him. Mortgages, early assignments to destinations unknown, transferring school credits, marital problems, kids finishing the school year, and thwarted personal plans are all big issues bouncing around in our heads. Then someone circulates a false rumor of a RIF (i.e., an involuntary "Reduction in Force"), and the local leadership can't guarantee the rumor is false. Panic sets in, and the next thing you know someone loses a finger.

He admits to you in the emergency room that, "I read the cautions and warnings in the T.O. (Technical Order), but I guess I didn't really comprehend what I was reading." Yes, distractions are a tremendous threat to safety in a closing unit.

3. Doubled Workload: There is a monumental workload that gets added to the existing mission in order to properly close a unit. It takes a lot of effort to deactivate a unit, which further frustrates an already challenging situation. And, as if that was not enough, you need to figure out a way to fund the cost of the bow wave of pending farewell mementos for everyone leaving. After all, your teammates have doubled their efforts in an often-thankless task; a thoughtful memento is the least we should do.

4. Divestiture: In other words, you begin to lose support long before the unit stops operating. Everything from spare parts to training slots get harder to secure. It may even seem like you can't get enough priority in the



DoD photo by Javier Garcia, GS-7

system to get your leaking roof repaired. After all, "You're closing! Why should we invest in you now?"

Some Suggestions

The several people I spoke to on this subject not only helped analyze the various reasons for safety challenges in a closing unit, they also helped build a list of suggestions on how to manage this phenomenon successfully. What follows is certainly not comprehensive, but it represents some common themes that came out of the dialogues I had with some who did it right.

1. Keep the Focus: Fight the distractions and aggressively keep everyone focused on safety fundamentals. That requires a constant, vigilant, vocal, visible, and mobilized effort. Supervisors at all levels have to get out and talk it up, motivating everyone on their watch to compartmentalize external stresses and maintain the concentration required to do the job safely. Anywhere you find worries becoming unmanageable, you need to address them... and without delay. Enforce the basics of "Maintenance 101," such as attention to detail, forms documentation, housekeeping, tool discipline, etc. (Note: See the Chock Talk article in the January 1999 issue of *The Combat Edge* for more details on the concept of "Maintenance 101.")

2. Replace the Target of Motivation: It is important to give yourselves a new vector. We always work better when we strive toward a positive goal rather than just avoiding various negative outcomes. Some will want to know if they'll get a medal or recognition for their surge efforts,

while others just want the opportunity to do the job right. For example, those personnel operating your aircraft transfer docks need to embrace the idea that the quality of the jets sent to other units matters. It matters very deeply because the gaining unit needs quality airframes and because it reflects on everyone involved — reputation matters. Even when your older airframes are going to the bone yard, they could be needed in the event of a crisis — that certainly matters. Furthermore, finishing strong is a clear demonstration of your unit's character. There is a lot of dignity in "leaning through the tape."

Yes, the loss of unit motivation when facing deactivation must be re-vectored to a new and positive vision.

3. Have a Wake: I'm not kidding here! "Have a wake!" We already spoke of "Death of a Dream," and there comes with it an actual grieving process. Just as brushing grief under the rug is wrong for an individual, so it is with an organization. To combat this gloominess, I know of one unit that had a big party -- a festival-style wake -- in which unit alumni and local mayors were invited. The get-together did a lot toward raising everyone's spirits. This is no small feat, mind you. We already highlighted the heavy workload associated with closing a unit and the difficulty in budgeting for all these important events, so it takes a lot to pull it off. But as you would guess, most everyone who has been through a unit deactivation would agree that the effort invested in carrying out such an event is certainly worth it. Another idea I heard of is to hold an auction with all the sell-

able squadron memorabilia (e.g., unit photos, trophies, plaques, etc.) and use those funds to that end. Innovation is the norm here, but you get the idea... a wake gives people closure and validates the importance of their efforts. It's not a stretch to see the link to better safety performance here either.

The Bottom Line

No doubt, there are many more suggestions for overcoming the safety challenges of unit deactivation that I didn't think of or couldn't fit into this article. However, the bottom line is simple: (1) Recognize the profile of the task before you, (2) Manage those stressful realities with a positive plan, and (3) Determine to finish safe and strong for all the right and dignified reasons. I wish no one had to endure another unit deactivation in the future, but that is unlikely. Given that reality, it's important to know there is a right and wrong way to close your organization, and flight safety performance was the primary focus of everyone who ever did it right. Aim high! ■

"The alleviation of human error, whether design or intrinsically human, continues to be the most important problem facing aerospace safety."

- Jerome Lederer

Flight Safety Stats

ACC & ACC-Gained Losses for FY99

1 Oct 98 - 13 Apr 99

Class A Damaged or Destroyed Aircraft

8 AF	
9 AF	
12 AF	    
AWFC	  
ANG	 
AFR	None
Aircrew Fatalities	

Class A - Fatality; Permanent Total Disability; Property Damage ≥ \$1,000,000

* Non-Rate Producing

ORM 101: A Basic Course in Common Sense

Col James L. Stanley, HQ ACC/SEO, Langley AFB VA

Capturing the Essence of ORM

I have got to be perfectly honest with you — since taking over as Air Combat Command's ORM Czar, I have been reading everything available to find out what Operational Risk Management really is. I have reviewed the computer based training available on the ACC Web Page (you find it under ACC/TRSS)... I have read and studied AFI 91-213, "Operational Risk Management (ORM) Program," and AFPAM 91-125, "ORM Guidelines and Tools," which combine to give the reader a "soup-to-nuts" review of the USAF ORM Program... I reviewed COMACC's tape on ORM and its importance to Air Combat Command... I even talked to "Orville" before he rode off into the sunset. What I am about to give you is my interpretation of this critical program, which is too often misunderstood and maligned. Hang in there with me as I do my best to capture the essence of ORM.

The "M" Word

First of all, I believe we can do a better job at instituting Operational Risk Management into our everyday activities — which is where it

should be. ORM started out with one hand tied behind its back due to its name. It suffers from the disease I will call the "M" word. That's right, "Management." The "M" word connotes visions of Big Brother mandating another program down to the masses — does TQM (Total Quality Management) or MBO (Management By Objectives) sound familiar? ORM will continue to struggle until it is ingrained into daily work and play practices of all our personnel. Real use of ORM cannot be legislated; it must be part of the Air Force culture... to become part of our culture, it must be embraced in everything we do... to become embraced, it must be easily understood — this is where we can do a better job.

Operational Risk Management is depicted as a formalized 6-step process:

1. Identify the Hazards.
2. Assess the Risk.
3. Analyze Risk Control Measures.
4. Make Control Decisions.
5. Implement Risk Controls.
6. Supervise and Review.

When reviewed, it is a logic train

which we perform every day; however, it is difficult to memorize and cumbersome to execute in daily operations. My goal is that COMACC should be able to stop any Air Force member and ask them what ORM is... and they should be able to tell him. When COMACC can do that, he will know that his ORM program is in full swing and making a difference.

Short, Sweet, and To the Point

Let's try this — ORM is a systematic, common sense approach to minimize risk. Short, sweet, to the point, and by-golly, captures the essence of ORM without taking half a page. Now, let's look at the steps in a different way. How about Identify, Assess, Analyze, Decide, Implement, Review. You Identify a hazard... Assess that it does pose a risk... Analyze measures to take to eliminate or minimize the risk... Decide which measures to take based on cost and benefits... Implement the risk control measure... and lastly, Review the risk control measure to see if it worked. It is critical to remember that ORM doesn't stop at the Review step; it is a circular process that pushes you

to ensure that your measure was the correct decision. If during the Review step you identify that it did not give you the result you desired, you determine the reason by starting at step one again — Identify. The most important point to make now is that the 6-step process is perfect for more strategic ORM. Daily, simple ORM may only require a few of the steps — and you do it daily without having to remember the 6-step process.

The Three Levels of ORM

I like to break ORM down into three fundamental categories - Basic, Operational, and Strategic. Each level is equally important; however, each requires a different amount of ORM effort — some intuitive and some complex.

Basic Level

Basic ORM is risk management you do every day, throughout the day, at work and at home. For example, imagine you are walking through your office when you see Amn Newbee's desk drawer protruding outwards and causing a hazard. After you push it back in, you go about your business grumbling about his inconsiderate behavior. Congratulations — you just did ORM, and you didn't even have to think about it. You Identified the drawer hazard, Assessed that the drawer sticking out in a walking space was a risk, Analyzed which risk control measures are available, and Decided to correct the problem by electing to push in the drawer. You carried out a very simple process; however, it is critical to our risk management culture.

Operational Level

The operational category is a more staffing type of ORM. Here is a good example. The ACC staff

was reviewing a proposal for F-16s to pull some of our Iceland alert commitment. Historically, this alert had been tasked to F-4... and now F-15... aircraft, both of which are two engine aircraft. Now a proposal to use F-16s was up for consideration. During review of the proposal, the following issues were identified and researched: (1) the F-16 has only one engine, (2) prevailing weather and crosswind were valid concerns, and (3) alternate airfields would be difficult to reach due to the range of the F-16. It was the classic opportunity for ORM to work its magic! The hazards were identified as

...it is a common sense program which has application at home, work, or during contingency operations.

weather, range, and single engine operations. The risk was assessed for the F-16 to perform this mission in the demanding Iceland environment. Analysis revealed that no risk control measures were available or realistic. The decision was made not to task the F-16.

Strategic Level

This is the full-blown, call out the cavalry, ORM which most of our personnel equate to their training. In reality, it will be the exception when this level of ORM is used or needed. A prime example of this type of ORM oc-

curred during DESERT STORM when Coalition forces were employing tactics that were primarily low-level ingress and attack. The decision to utilize low-level attacks was based on months of target and threat study; it was determined that the low-level attacks would minimize risk to our forces. After a couple of days, however, it was evident that loss rates due to low-level attacks were exceeding an acceptable level of risk. At that time, a decision was made to use mid-to-high-level attacks. This change in tactics saved lives and assets. This is ORM in its most strategic forum. Our planners went through the ORM 6-Step Process and ultimately used Step 6 (Review) to determine that risk levels were unacceptable. Then after going back to Step 1 (Identify the hazards), new risk control measures were instituted which were more effective.

ORM — a Common Sense Program

Operational Risk Management is not magic and should not be a burden to getting the mission accomplished. These three examples of different levels of ORM show you that it is a common sense program which has application at home, work, or during contingency operations. It is easy to execute — it just takes awareness of risk and a proactive attitude to mitigate that risk. My ultimate goal is for ORM to become so much a part of the Air Force culture that my position as ORM Czar is no longer required. COMACC will be coming to your base soon. Be prepared to tell him all about Operational Risk Management and why it has become part of your lifestyle! ■



BUCKLE UP AMERICA

There's Just Too Much to Lose



*Excerpts taken from DOT HS 808 751 Pamphlet, August 1998
National Highway Traffic Safety Administration
United States Department of Transportation
Washington DC*

What's the Problem?

Every 14 seconds, someone is injured in a traffic crash; and every 14 minutes, someone is killed. Personal pain — a child's grief from losing a parent or a serious injury to a family member — cannot easily be measured. But costs can be measured, and motor vehicle crashes cost America over \$150 billion a year — that's an average of \$580 per person!

About half of all children under the age of 5 who die in crashes are not buckled up. In fact, crashes are the leading cause of death for chil-

dren ages 6 to 14. In addition, over 40,000 people die in crashes each year; and over one-third of the population doesn't buckle up.

What's the Solution?

Seat belts and child safety seats are the answer to this problem. In a crash when people wear seat belts and children are properly restrained, medical costs are reduced because injuries are reduced. When lap and shoulder belts are properly used, the risk of death to front seat passengers is reduced by 40%. When used correctly, child safety

seats are 71% effective in reducing death to children under the age of 5 and are 69% effective in reducing the need for hospitalization. And remember, never place a rear-facing infant seat in the front seat of a car equipped with a passenger side air bag. The safest place for children 12 and under is to have them properly secured in the back seat! [Note: Paragraph 5 of Section C, "Occupant Protection and Vehicle Requirements," in Air Force Instruction 91-207, "The United States Air Force Traffic Safety Program," states that "**all people** in a moving

motor vehicle on Air Force installations or off an installation using vehicle for conduct of Air Force business must ensure **operability and use** of available installed occupant protective devices (i.e., restraints, air bags, child safety seats, etc.).” In addition, the instruction states that... **“military personnel regardless of duty status or location must use installed occupant protective devices.”** - Ed.]

“Buckle Up, America! Week”

Every hour, someone in America dies in a traffic crash simply because they didn’t wear a seat belt. In fact, failing to buckle up contributes to more fatalities than any other single traffic-safety related behavior. America has an opportunity to put an end to this — to save lives, prevent injuries, and reduce health care and other costs that burden society when crash victims are unbelted.

May 24-31, 1999, is “Buckle Up, America! Week.” This is part of an overall, 1-year, “Buckle Up, America” campaign dedicated to increasing seat belt and child safety seat use. The overall national campaign focuses on getting everyone to wear seat belts and puts an emphasis on enforcement of all occupant protection laws. The nationwide goals for this initiative are: (1) to increase seat belt use from 69% to 85%, and (2) to reduce child fatalities by 15% by the year 2000. Meeting these goals would prevent an estimated 4,200 deaths, 103,000 injuries, as well as save America \$6.7 billion each year.

Note: The following article is the personal testimony of an Air Force member and how his seat belt protected him.

- Ed.

There’s Just Too Much to Lose

I was on my lunch break with a lot of errands to do — out the back gate, to the bank, to the post office, and then a quick lunch. After finishing my errands, I had plenty of time to pick up a fast bite to eat before heading back to work.

After leaving the post office, I was on my way to one of the local fast food establishments. I was mentally occupied with the relative calorie count of a large taco salad versus a large baked potato with chili and cheese. Preoccupied with these thoughts in my mind, I began to approach the intersection in front of the shopping center. As the upcoming traffic light turned green, I saw the vehicles ahead of me beginning to pull away. A little quick mental calculation on my part showed that there was no need to slow my speed because I was well behind the other cars.

As I proceeded to drive forward, I noticed the cars in the on-coming left-hand-turn lane poised for the turn into the shopping center. Since my traffic signal was green, I knew the right of way was still mine. Then all of a sudden, the “intolerable” happened. The lead car in the on-coming lane started to move across my lane directly in front of me. My hand instinctively hit the horn as my foot jammed on the brakes. My mind instantly calculated and rejected every evasive action I thought of. I was boxed in with nowhere to escape! I knew I was going to hit the oncoming car... and I was going to hit it hard! After hearing the blasting sound of my car’s horn along with the desperate squealing of rubber tires from my vehicle on the road’s surface, we collided “in a very big way” with each other.

Allow me to “back up” a moment (no pun intended). Directly upon impact, my body whipped forward like a rag doll. I distinctly remember being headed for the window — but the lap belt and shoulder harness grabbed me and held me back securely. After the initial impact of the collision was over, there I was — sitting upright in the driver’s seat. I certainly was shook up, but I wasn’t badly injured; and I wasn’t dead.

It is very difficult to express the emotions I felt as I reached to touch my seat belt around me. As I did so, I couldn’t help but gaze upon the incredible mess that was formerly the front end of my car. Suffice it to say, I was thankful then (and I’m still thankful now) for having worn my seat belt in that incident. Take it from me — someone who speaks from experience, “If you’re ever tempted not to wear your seat belt, don’t give into the temptation. Seat belts work, so buckle up each and every time from this day forward. If you don’t use them, there’s just too much to lose.” ■

National Safe Boating Week

May 22-28 1999

National Safe Boating Week May 22-28 1999 Boat Smart from the Start. Wear your life jacket.

BOAT SMART FROM THE START.



WEAR YOUR LIFE JACKET.