
The Combat
EDGE
September 2003

General Hal M. Hornburg, Commander

Colonel Kevin W. Smith, Chief of Safety

The Combat Edge

Volume 12 Issue 4,
ACC SP 91-1

Photo courtesy of U.S. Air Force Thunderbirds

Photo by SSgt Bennie Davis III

Photo by PH3 Todd Frantom

Departments

Visit us on the web @ www2.acc.af.mil/combat-edge

MAJ REBECCA COLAW
EXECUTIVE EDITOR

MS. BARBARA TAYLOR
ASSOCIATE EDITOR

SSGT CARRIE ATWOOD
DESIGN & LAYOUT

The Combat Edge (ISSN 1063-8970) is published monthly by Air Combat Command, HQ ACC/SEM, 175 Sweeney Blvd, Langley AFB VA 23665-2700. Send address changes to the same address.

DISTRIBUTION: F. OPR: HQ ACC/SEM. Distribution is based on a ratio of one copy per 10 persons assigned. Air Force units should contact *The Combat Edge* staff to establish or change requirements.

ANNUAL SUBSCRIPTIONS: Available to non-DoD readers for $51.00 ($71.40 outside the U.S.) from the Superintendent of Documents, PO Box 371954, Pittsburgh PA 15250-7954. All subscription service correspondence should be directed to the Superintendent, not HQ ACC/SEM.

CONTRIBUTIONS: Please send articles with name, rank, DSN phone number, e-mail and complete mailing address and comments to:

Executive Editor, *The Combat Edge*
HQ ACC/SEM
175 Sweeney Blvd
Langley AFB VA 23665-2700

Telephone: (757) 764-8868
DSN 574-8868
FAX: (757) 764-8975
e-mail:rebecca.colaw@langley.af.mil

The editors reserve the right to edit all manuscripts for readability and good taste.

[M] Denotes images digitally manipulated.

Front Cover: *Courtesy of U.S. Air Force Thunderbirds*

ACCent on Safety

ARE YOU LIVING WITH THINGS THAT ARE NOT QUITE RIGHT?

As I travel around ACC, I see things on our installations that folks are living with that are not quite right. I see bushes blocking the visibility at intersections, tree limbs obscuring traffic signs, faded key road markings, inoperative maintenance stand brakes, construction work not properly marked, traffic congestion due to insufficient parking, and Aerospace Ground Equipment needing repairs.

After a fatality last year COMACC asked the question, "Just how many of these kinds of things are we living with?" Unfortunately, it is still way too many.

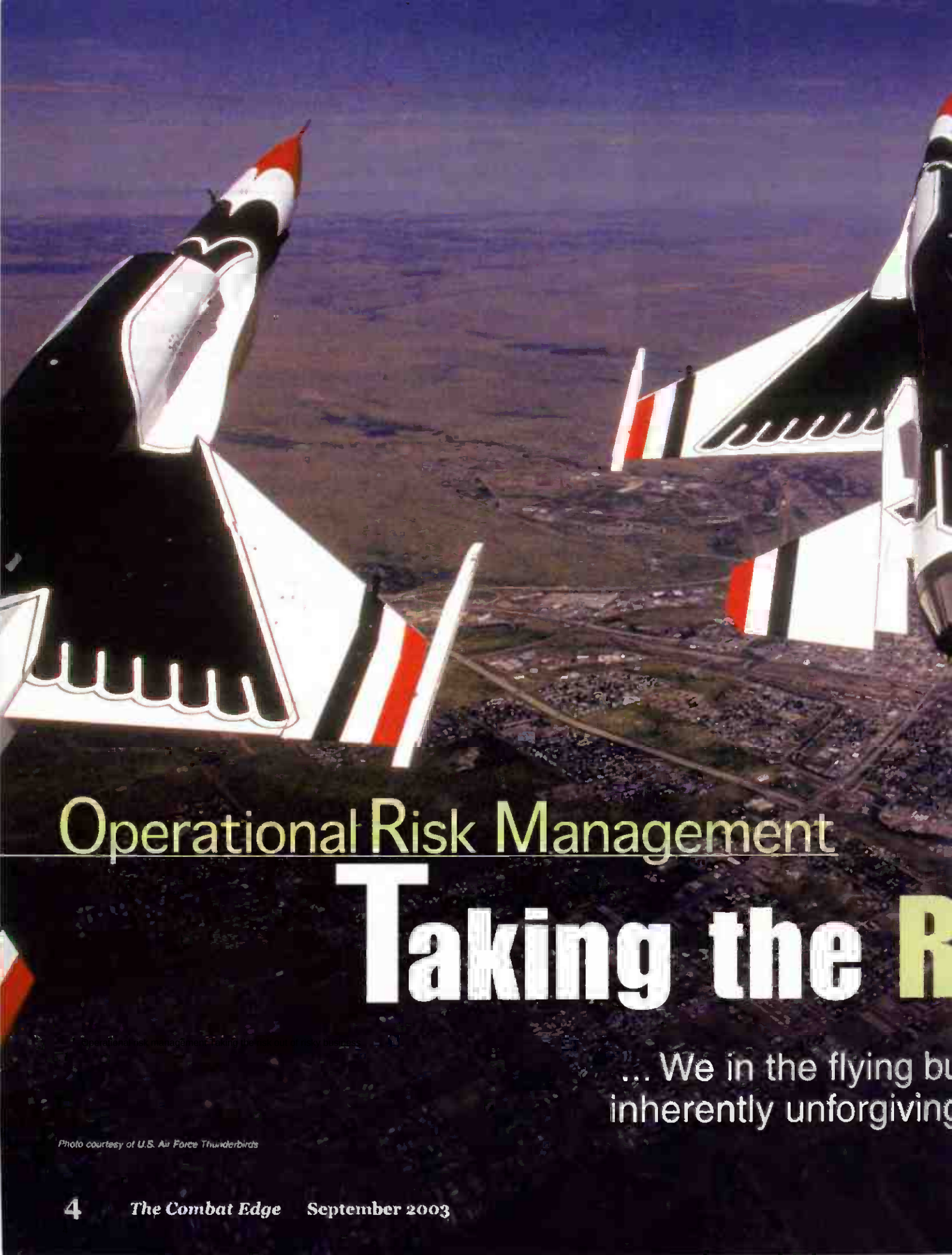
Many of us let things go because it is an inconvenience to take the time to report deficiencies. Others allow these shortcomings to continue because they don't know how to report them. Still others don't report problems because they don't think they will be listened to. These are all just excuses not to get involved.

Part of being an Airman 24/7 is not allowing deficiencies that can hurt someone to exist. That means taking the responsibility personally to report them to the appropriate agency. Then if action is not taken in a reasonable period of time to correct the problem, contact your base Safety office and fill out an AF Form 457, "USAF Hazard Report," that requires an assessment within a strict time frame. If that still does not get the deficiency corrected, then bring it to your commander's attention. It is your commander's job to provide you with a safe environment to work and live, and they can directly engage other organizations on your behalf.

The bottom line is don't become apathetic. Be an Airman 24/7 and don't just live with things that are not quite right. Insist that deficiencies are corrected before they hurt someone or something.

Photo by SSgt Christopher Mathews

Colonel Kevin W. Smith
ACC Chief of Safety

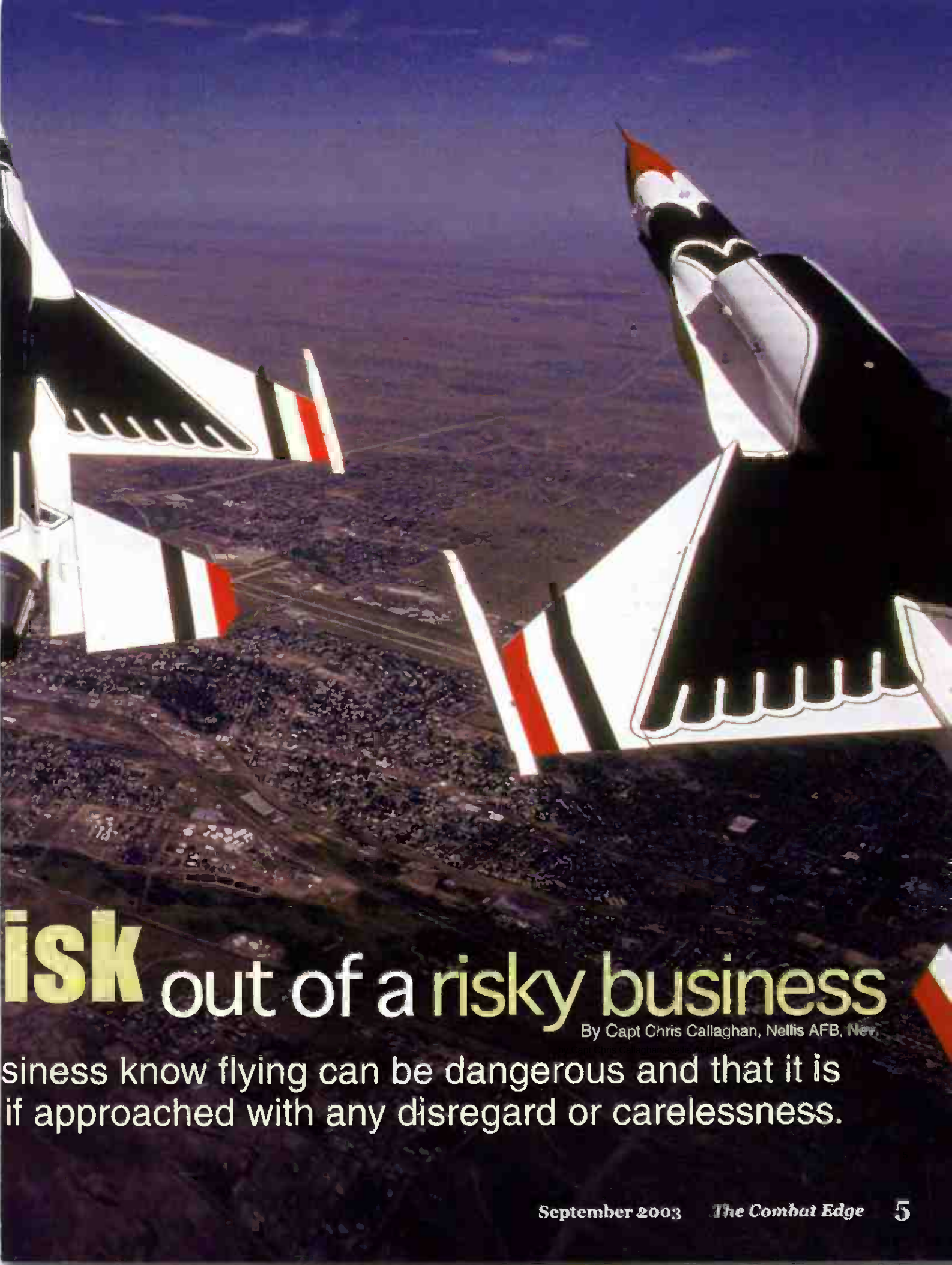


Operational Risk Management

Taking the R

... We in the flying bu
inherently unforgiving

Photo courtesy of U.S. Air Force Thunderbirds



Risk out of a risky business

By Capt Chris Callaghan, Nellis AFB, Nev.

siness know flying can be dangerous and that it is if approached with any disregard or carelessness.

"Isn't your job dangerous?" I'm asked that question very frequently as an Air Force pilot and as a Thunderbird. My answer always points to the fact that we take a seemingly dangerous job and break it down into safe and manageable phases. We, in the flying business, know that flying can be dangerous and that it is inherently unforgiving if approached with any disregard or carelessness. Today, more than ever, we are deployed all over the world with an extremely busy operations and training tempo, which has introduced very dynamic and challenging environments. Unfortunately, these environments have ushered in a period of increased mishap rates in Air Combat Command, and the irreplaceable loss of people and planes.

At the end of the last fiscal year, Gen Hornburg, ACC Commander, challenged us to take charge of the basics and not overlook the risks involved with the less complex portions of our missions. Combat losses are not the source of our accidents and incidents; lately they are rooted in midairs, controlled flight into terrain, and landing mishaps. It's easy to sit back after a mishap has occurred and see the error chain. To be successful, however, we have to get good at the more difficult task of being proactive about mission hazards. We must identify them early and implement a plan to mitigate risks before they affect our missions and our people.

We have institutionalized ORM into Thunderbird flying because our mission demands it. We operate in close proximity to each other, low to the ground at high speeds, and from different airfields and show sites each week. Our need for ORM is an obvious one, but all Air Force missions demand ORM. We use a very common sense approach to ORM since ultimately its goal is a simple and logical plan to identify and reduce risk in our daily operations.

Thunderbird ORM is very specific to our environment and requirements, as it should be for all of us. We fly according to a regulation that drives very conservative operations. We are spring-loaded to the conservative approach because a safe demonstration is our number one priority. Our training philosophy is no different than those of other Air Force squadrons; it is based on the building block approach. Our goal is not to over-saturate pilots, but allow them to develop proficiency in basic skills and then introduce more demanding tasks. We accomplish this through a specific syllabus for each trainee with a graduated altitude stepdown plan that starts with slightly wider formations. Gradually, and at a comfortable pace, we work lower to the ground in tighter formation.

Even when we've arrived at our lowest altitudes and tightest formations, we continue to practice ORM on each sortie. We have specific steps to abort maneuvers and we practice aborts daily. We have a safety observer on the ground to back us up, and identify the need to abort if minimum parameters for each maneuver are not met. We abide by very strict deconfliction contracts and execute abort procedures if there is any doubt. We simulate in-flight emergencies and abnormal situations during demonstration sequences, and take them to logical conclusions.

As each location presents a new set of challenges, we find our-

Photo courtesy of U.S. Air Force Thunderbirds

ORM is part of everything we do ... ORM keeps us safe

selves using a mixture of conservative steps. This process begins with meticulous planning weeks in advance of any show. We use satellite imagery of each demonstration site to become familiar with ground references and potential hazards. From there, we develop a plan to deal with any identified hazards. In extreme cases, we decide that a given location is simply not suited for high speed, low altitude formation aerobatics. Our analysis continues upon arrival with an airborne survey. We verify the accuracy of our imagery, look for additional hazards that the imagery didn't reveal, and cross-check the location of show line markers.

Upon completing the analysis, we have the information to implement a plan to minimize the risks involved with the demonstration. Elements that challenge us in the demonstration are similar to ones we all deal with: terrain, weather, turbulence, fatigue, etc. We brief a plan to deal with these each time we fly and this consistent routine is critical to our success. We specifically implement the plan a number of ways. These include the flexibility to fly "wider" formations in high winds or turbulence, raising our minimum altitudes for inconsistent or rolling terrain, modifying our ground track for obstructions (such as towers), using increased landing spacing for short and/or wet runways, and increased taxi spacing in areas of higher FOD potential. Each pilot has the obligation to recommend a conservative call if he sees the need. Just as these ORM steps are unique to us, yours will be unique to your operation. These steps allowed us to have a very safe and successful year in 2002 and, as we embark upon our 50th Anniversary in 2003, we will continue to fly with safety at the top of our priority list.

One of the many challenges we are all faced with when we fly is to mitigate the risk associated with each phase of flight. Some of these hazards are predictable but others happen real-time. Dealing with both types requires the discipline, leadership, and airmanship to adjust our sorties as required, including terminating for the day.

We know that our people are our greatest Air Force asset. We also know that we can't accomplish the mission (killing MiGs, putting bombs on target, delivering supplies, refueling aircraft, etc.) if we don't take care of the basics. ORM is a tool to help us in all phases of flight with the goal of safe and successful operations. Let's use it proactively to get the job done right and bring everyone home safely. Happy hunting!

Editor's Note: *Capt Chris Callaghan—aka—Thunderbird #3, is the right wing and flight safety officer.*

Thunderbird ORM is very specific to our environment and requirements, as it should be for all of us. We are spring-loaded to the conservative approach because a safe demonstration is our number one priority.

Photo courtesy of U.S. Air Force Thunderbirds

Photo courtesy of U.S. Air Force Thunderbirds

Photo courtesy of U.S. Air Force Thunderbirds

ORM

BALANCING Risk & Mission

By Capt Mike Straight

What level of risk should we accept during training?

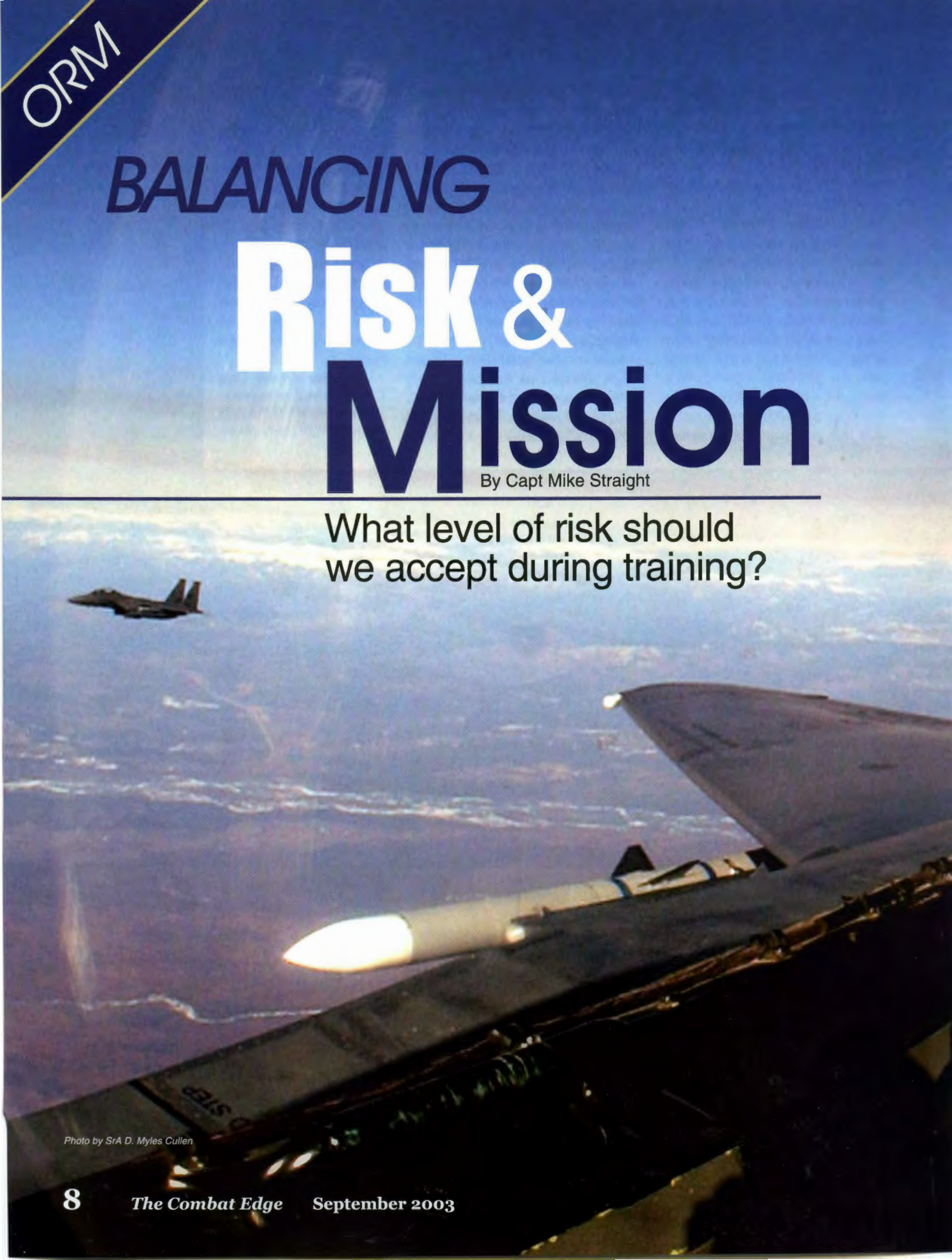


Photo by SrA D. Myles Cullen

This article first appeared in the August 1985 edition of TAC ATTACK and was authored by Capt Mike "Boa" Straight. Throughout his career, Boa had a strong ability to safely accomplish a mission with great results. What Boa wrote in 1985 still holds true for how we must train today and it shows us that using the principles of ORM is nothing new.

As fighter aircrews, one of the tougher judgments we are paid to make is determining the acceptable balance between mission accomplishment and risk to our equipment and ourselves. Obviously, this judgment plays a major role in developing our wartime tactics and game plans, but this proper mission versus risk balance is just as crucial to our peacetime training.

In combat, the specific mission objectives may make the level of acceptable risk fairly clear. For example, an offensive MiG sweep normally requires employing lower risk tactics than a defensive Combat Air Patrol (CAP) of your own airfield. But in our peacetime training, the proper trade-off of risk versus mission is less clear. To ensure victory in the next air war, we've got to prepare now with realistic and demanding training. But the more realistic the training, the more we risk our priceless people and very expensive equipment. To be truly prepared for our wartime missions, should we accept combat levels of risk during training? Or is all training risk unacceptable in order to conserve our resources for the actual shooting? The right answer obviously lies between these two extremes, and only a thorough understanding of the training priorities and risk will allow us to judge the proper balance.

As fighter crews involved in daily air-to-air and air-to-ground training, we control both sides of this balance: the level of training risk, and the training gained from acceptable risk.

We control risk by judging the limits of realism in our training. Many of the hard limits of realism are specified in published guidance such as the air-to-air training Rules of Engagement (ROE). By specifying minimum altitudes, airspeeds, separations, etc., these guidelines provide some definitions to the line between realism and risk, and represent our commanders' judgment of acceptable risk. But even these well-defined limits require aircrew judgment in their application. For example, with two fighters approaching head-on with 1,200 knots of closure, the maneuver required to comply with the 500-foot minimum separation ROE is based on an experienced judgment, not an easily observable gauge readout. Training guidance, like ROE, attempts to define absolute peacetime boundaries between realism and risk. But we determine, for each sortie, whether mission specifics and aircrew experience warrant operating on the dictated edge or at some level short of it.

The other side of the training equation we are paid to control is training effectiveness. We control what is gained from the risks of daily training. Our training must be demanding — we must be capable of effectively taking our equipment and ourselves to the peacetime limits. But it is up to us to ensure that training on the edge provides maximum payoff. We must understand specifically what is to be gained for all risk we accept.

Photo by SSgt Shane Cuomo

Photo by Cecilio M. Ricardo, Jr.

We manage risk in both combat and in peacetime training ..

Our handle on this is our selection of and adherence to training objectives tailored to each sortie. Effective training objectives identify where we plan to push ourselves and what we expect to gain from the risks of the mission. By adhering to the objectives during the sortie, we avoid wasting time, fuel, and risk on less pertinent aspects of the sortie. For example, basic fighter maneuvers entail a certain level of risk; but they are essential for any competent fighter crew. But a prolonged 1-v-1 scissors is an inappropriate increase in risk in a sortie where the objectives and resources are designed for four-ship employment. Obviously, any risks taken solely for personal entertainment or ego satisfaction are unacceptable.

Risk is part of what we do for a living, war or peace, but it's not simply an aspect of luck or chance. Instead, it's a mission element that must be evaluated and controlled much like fuel or weapons load. And though many of the peacetime limits of acceptable risk are spelled out in our training guidance, the major responsibility for balancing the risk versus mission equation falls to the guy with his finger on the trigger.

Photo by SSgt Bennie Davis III

ORM

It's more than just Crew Rest

By Capt David Levenson, Naval Exchange Pilot

Every crew brief covers Operational Risk Management (ORM), but the ORM part all too frequently lacks depth.

On one particular flight, the entire crew had gotten plenty of sleep, but ORM still played a significant role in averting a mishap over the skies of Macedonia. I was ECMO 1 in an EA-6B during a night-strike mission over southern Kosovo. After the strike, we headed toward our tanker. The communications with AWACs were unusually weak and full of static. There was a layer of broken clouds just below the tanker altitude. Without air-to-air radar or night-vision devices, finding the tanker was becoming next to impossible. With our fuel getting close to bingo, we finally found the tanker and commenced the join-up on the left, which is the standard side for the Navy, but not standard for the Air Force.

We hadn't briefed which side of the tanker we would join on — mission planning overshadowed that type of detail. Once joined, we realized that two British Tornadoes were already on the tanker, one taking fuel and the other on the right side. After they finished, I saw Dash 2 disconnect and apparently clear off below us. As we slid back, anticipating getting in the basket, a bright flash filled our cockpit accompanied by severe buffet. The Tornadoes had tapped burner right in front of us, instead of exiting down and aft. They turned off their lights and went left into us. My pilot dumped the nose and successfully avoided them. We climbed back to the tanker, got our gas, covered another strike, and returned to Aviano.

Once on deck, I told the operations officer what had happened. Tanking briefs started getting a lot more attention. In fact, in the 45 days we were over the skies of Bosnia, this near-midair was one of the most hazardous flight events experienced.

This may seem like just another close call, but ORM could have easily lessened the severity of the problem or broken the chain of events leading to it. In most cases, you can easily cope with the risks of day-to-day flying. The next time you brief ORM, think of "Dumb, Different, or Directed." Each of these categories won't cover all risks that you may encounter, but they can highlight potential problems.

Some ORM concerns under "Dumb" are flying in terrible weather, descending below the briefed hard deck, or continuing a flight beyond calculated bingo. These things can usually be solved quickly in the cockpit. There are also not-so-obvious, dumb risks, and these might be the most

Photo by PHAN Ryan O'Connor

Photo by PH3 Todd Frantom

Photo by PHAN Ryan O'Connor

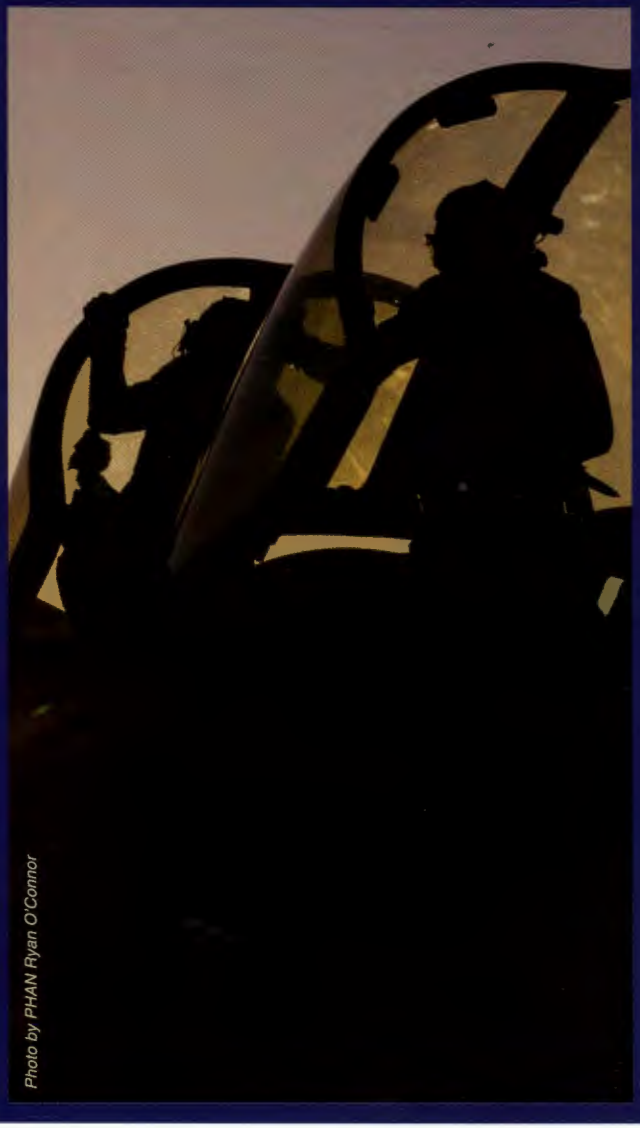


Photo by PHAN Ryan O'Connor

Identifying the possible hazards is a great first step, but it is just as important to identify control measures for these hazards and ways to lessen the effects. If the severity or probability is too great, complete avoidance is often the best solution.

important: poor mission planning, flying with people who have unresolved personal problems, or flying with outdated FLIP or charts. Unfortunately, these will not become apparent until too late.

"Different" covers those actions that vary from the normal activity. For example, flying into a new airfield or unfamiliar airspace. Air refueling at night is also a good example. Before our near collision with the Tornado, we should have identified the unusual procedures and briefed them. While not particularly dangerous, the items in "Different" can contribute greatly to causing a more dangerous situation.

Lastly, "Directed" activity covers those actions ordered by higher authority that may influence the aircrew's judgment. These actions are check-rides, functional check flights, cross-countries, or combat. The crew might be directly or indirectly pressured to complete the flight or check. Over Macedonia, our crew wanted to complete the air refueling, avoid a bingo divert into an unfamiliar airfield, and support the last of the night strikes. The internal drive to complete a mission, whether combat or peacetime, can cloud an aircrew's judgment.

Identifying the possible hazards is a great first step, but it is just as important to identify control measures for these hazards and ways to lessen the effects. If the severity or probability is too great, complete avoidance is often the best solution. Usually, identifying the hazard and sticking to the planned mission is enough. Occasionally, you have to make slight changes in the plan. It may be as simple as taking off earlier from a high-density-altitude airport when the temperatures are typically cooler. Remember, the goal of ORM is to understand and manage the known risks involved.

Editor's Note: *This story is reprinted courtesy of APPROACH, December 2002. Capt Levenson was flying with Navy squadron VAQ-134.*

ACT: DAILY RISK MANAGEMENT

ACT is a supplemental tool that may be used for risk assessments in time-critical situations. ACT is most beneficial in less complex off-duty activities, such as driving and recreational events. This process may also be appropriate in the execution phase of an operation in which mission demands do not allow enough time to perform a detailed analysis using the six-step ORM process, or for an "on-the-run" review prior to performing a technical order task. ACT merges the six steps of ORM into three broader steps that may be used where risk management is accomplished mentally or verbally and action taken in minutes or even seconds.

THE ACT 3-STEP PROCESS IS:

1. Assess the Situation
2. Consider Options to Limit Risk
3. Take Proper Action

Step 1

Assess the Situation. Look at your surroundings. Determine what could go wrong, the likelihood of occurrence, and severity of the impact if something does go wrong. Areas for consideration include:

People. How many people are involved and what are the chances for injury, illness, or death? Assess personal risk factors such as fatigue, distractions, emotions, health, and lack of training. What are the chances that any personal risk factors will affect the safe and successful accomplishment of the task or activity?

Task or Activity. Look at what you are trying to accomplish. Is there adequate time? What are the consequences of not completing the task or activity?

Equipment. Take into account the equipment you are using. Do you have the right tools for the job? Is machinery in good condition? Are the necessary safety devices in place? What are the chances the equipment will be damaged or destroyed? Do you have the correct personal protective equipment for the task?

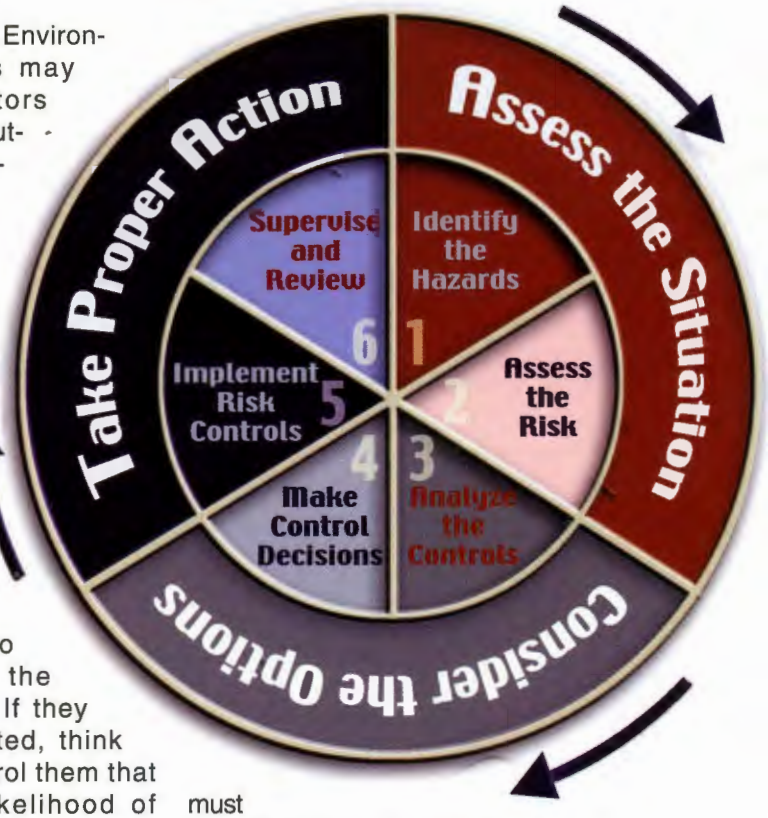
Environment. Environmental conditions may present risk factors whether inside or outdoors. Consider factors such as light, noise, weather, road conditions, etc. What is the likelihood that unfavorable conditions will negatively impact the task or activity?

Step 2

Consider Options to Limit Risk. Seek ways to eliminate or limit the risks, if possible. If they cannot be eliminated, think about ways to control them that will lessen the likelihood of something going wrong. Does the task have to be completed now, or can it be postponed to await more favorable conditions? Do you have the authority to make a decision, or does the level of risk necessitate that you elevate the circumstances to someone else for a final decision? The objective in this step is to make an informed decision at the appropriate level. Remember, if you have the authority to accept the risk, you may need to document the reasons for your decision.

Step 3

Take Proper Action. Implement the best options to mitigate risk. If others are involved, make sure they fully understand the potential risk and proper actions they must take. When you are done with the activity, take a few minutes to review your thought process. If your ACT process worked, remember the options you used to lessen the risk factors and use them again. If your ACT process didn't work as well as planned, think about how you might improve the situation the next time.



Editor's note: *Draft Revision to AFPAM 90-902 submitted by ACC/SEF.*

Tinker AFB, Okla.

552nd Air

Established:
552nd Early Warning and Control Wing, on March 30, 1955

Activated:
July 8, 1955

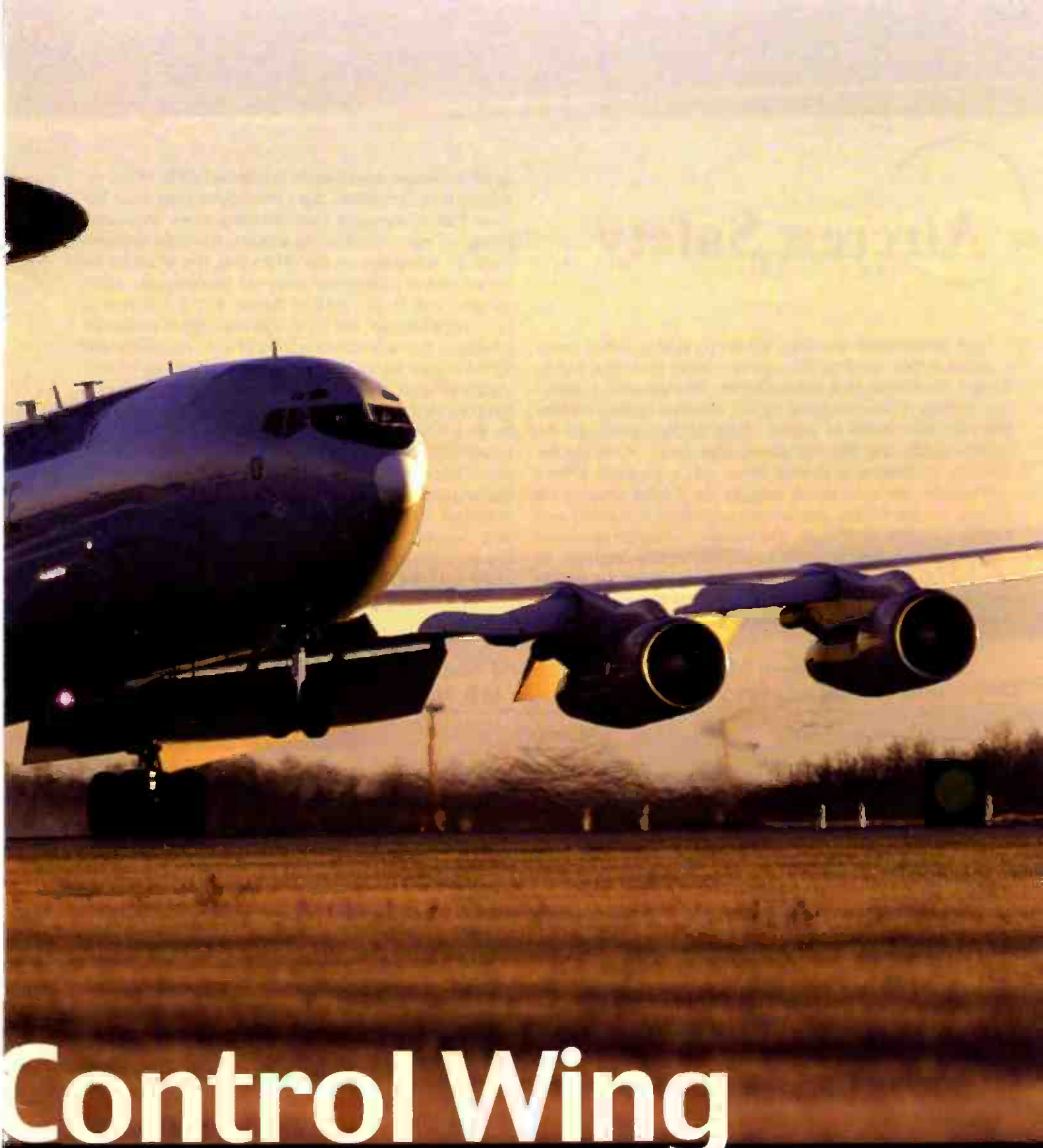
Redesignated:

- 552nd Airborne Early Warning and Control Group, on July 1, 1974
- 552nd Airborne Warning and Control Wing, on May 5, 1976
- 552nd Airborne Warning and Control Division, on October 1, 1983
- 552nd Airborne Warning and Control Wing, on October 1, 1991

General Characteristics:

Primary Function: Airborne surveillance, command, control and
PW-100A turbofan engines **Thrust:** 21,000 pounds each engine
in diameter, 6 feet thick, mounted 11 feet above fuselage **Speed**
Endurance: More than 8 hours (unrefueled) **Unit Cost:** $270 m
crew size varies according to mission) **Date Deployed:** March 1

Photo of P3 Centry (AWACS)



Control Wing

communications **Contractor:** Boeing Aerospace Company **Power Plant:** Four Pratt and Whitney TF33-
Length: 145 feet, 6 inches **Height:** 41 feet, 4 inches **Wingspan:** 130 feet, 10 inches **Rotodome:** 30 feet
Optimum cruise 360 mph **Ceiling:** Above 29,000 feet **Maximum Takeoff Weight:** 347,000 pounds
illion (fiscal 98 constant dollars) **Crew:** Flight crew of four plus mission crew of 13-19 specialists (mission
977 **Inventory:** Active force, 33 (1 test); Reserve, 0; Guard, 0

Aircrew Safety
Award of Distinction

Lt Col Vanderburgh and Capt Wickering distinguished themselves in their handling of a serious in-flight emergency while flying a B-2 aircraft on a combat sortie. Minutes prior to entering the Area of Responsibility (AOR), the crew noticed a vibration indication on the #4 engine. Capt Wickering brought the throttle to idle and the indications went away. Knowing the dangers of entering a combat zone with a possible engine malfunction, the crew slowly brought the throttle towards full power. As the throttle approached midrange, crunching and rumbling sounds were heard. The vibration indication increased and the oil level and pressure indications rapidly decayed. In accordance with the checklist, the crew shut down the engine and coordinated with AWACS to hold outside of the AOR. Analyzing their options, Lt Col Vanderburgh determined the aircraft could safely be recovered to Whiteman AFB. After rejoining their formation, the crew began their near 20-hour trek homeward encountering more obstacles along the way. Working as a team, the crew endured three air refuelings on the return trip, two of which required tanker disconnect override procedures. Additionally, due to the loss of power and a full load of retained weapons, the crew was required to perform a toboggan maneuver during two of the air refuelings and fight the yaw inputs caused by loss of an engine during power changes. After more than 35 hours airborne, the crew reached Whiteman AFB and then coordinated for an emergency landing. Capt Wickering performed a flawless engine-out approach and landing. The superior knowledge, skill, airmanship, and timely actions demonstrated by Lt Col Vanderburgh and Capt Wickering resulted in the safe recovery of two irreplaceable crewmembers and a valuable national asset.

Capt Bryan Wickering and Lt Col Richard Vanderburg, 394th Combat Training Sqn., 509th Bomb Wing, Whiteman AFB, Missouri

Pilot Safety
Award of Distinction

Capt Yost was tactically maneuvering his A-10 at low altitude when his right throttle suddenly became very difficult to move. He quickly called a Knock-it-Off, requested the lead, and sent his flight lead to chase. With the right throttle stuck at 81 percent rpm, Capt Yost elected not to adjust it any further, fearing that it might become stuck at a higher power setting. After consulting the checklist, it was decided that the aircraft was controllable in its current configuration and the #2 engine was not shut down. With excellent coordination and assistance from the Supervisor of Flying, a Conference Hotel was initiated to determine the possibility of a post-shutdown fire after landing. SPO experts at Hill AFB concluded that although the possibility did exist, it was not likely. Capt Yost elected to burn down gas to shorten his landing roll and diverted to Seymour Johnson AFB, with its 12,000' runway. Capt Yost rolled out on a 10-mile final to runway 26. Configured for a simulated single-engine approach with gear, no flaps, and no speed-brakes, Capt Yost attempted to slow to his final approach speed of 153 KIAS. However, with the left throttle in idle and the right engine still producing thrust, the aircraft did not want to slow down below 160 KIAS. Capt Yost continued the approach, skillfully aligning the aircraft with the runway using right rudder and fanning the speed-brakes once the landing was assured. The aircraft quickly slowed to the correct approach and touchdown airspeeds and settled to the runway on centerline. While continuing to monitor aircraft control, he immediately opened the speed-brakes fully, and slammed the #2 throttle up and aft, hoping to shut down #2 normally. Although the throttle moved, the engine did not shut down! He carefully reached for and pulled the right fire handle to shut off fuel to the #2 engine. After 5-10 seconds, engine instruments finally began to decrease and Capt Yost smoothly applied the brakes. Capt Yost's excellent in-flight coordination and flawless execution of a tricky stuck throttle approach and landing prevented the possible loss of a valuable combat asset.

Capt Jeff Yost, 74th Fighter Sqn., 23rd Fighter Group, Pope AFB, North Carolina

Flightline Safety
Award of Distinction

The flight line swing shift was scheduled to hot refuel six aircraft returning from their first sortie. Two hot pit spots and two cursory spots were set up to accomplish the hot refueling. TSgt Vazquez was assigned as the expeditor that evening and was observing the hot pit procedures. The mishap aircraft had already landed and passed through de-arm and the cursory checkpoint. As aircraft 1284 was taxiing out of the cursory check and into the hot pits, TSgt Vazquez noticed an irregularity with the augmentor section. The hot pit "A-man" proceeded to marshal the aircraft into the spot while TSgt Vazquez moved his vehicle closer to get a better look at the tail section. He observed a definite oval shape to the engine exhaust nozzle and a gap between the divergent segment and the divergent seal at the 2 o'clock position. TSgt Vazquez then radioed the Maintenance Operations Control Center and directed the pit crew to cease hot pit procedures and marshal the aircraft to a parking spot for shutdown. That evening, when the augmentor section was removed and inspected, maintenance found the primary actuator transmission in pieces and the synchronizing ring broken in two places along with a multiple number of damaged seals and flex shafts. If not for the keen observation and eye for detail shown by TSgt Vazquez, aircraft 1284 may have attempted the second takeoff with the possibility of further damage and/or loss of life.

TSgt Hector M. Vazquez, 177th Fighter Wing, Atlantic City IAP ANGB, New Jersey

Ground Safety
Award of Distinction

TSgt Wright's efforts were instrumental in the unit receiving no write-ups and one of the best ratings at Tinker AFB during the Base Environmental Compliance, Assessment, and Management Program (ECAMP) inspection. In addition to the ECAMP inspection, he also excelled during the base Bio-Environmental inspection of the squadron. This inspection was geared toward the safety of unit personnel. TSgt Wright, in preparation for this inspection, reviewed the unit's AF Forms 55 for proper documentation and ensured unit personnel had access to personal protective gear in order to conduct their daily duties in a safe manner. The results of TSgt Wright's performance can be measured by the extremely low mishap rates the 34 CCS sustains. He continually disseminates relative and pertinent mishap prevention information, and posts safety briefings in every area of the unit to keep the safety message in the face of all personnel. He has been known to place safety briefings in the latrine; there is nowhere that his safety arm does not reach. He presented a timely and comprehensive briefing on the 101 Critical Days of Summer to the entire unit during a Commander's Call. Above all, TSgt Wright brings his safety message to the 34 CCS both on and off duty. He volunteered for a week at Stillwater, Oklahoma, to support the annual Oklahoma Special Olympics. His attention to detail and unselfish attitude resulted in the safe convoy of 30 vehicles and 75 personnel. The results: flawless transportation of personnel and equipment, setup and teardown of six tents and 45 packages of camouflage, and zero mishaps during the entire week. TSgt Wright's accomplishments are why the 34 CCS enjoyed one of the safest months EVER.

TSgt Walter H. Wright, 34th Combat Communications Sqn., 3rd Combat Communications Group, Tinker AFB, Oklahoma

ACC Safety Salutes Superior Performance

Maj Walt C. Allen, Pilot
Maj Russell K. Armstrong, Copilot
Maj Edward S. Bodony, Navigator
SSgt David H. Streeter, Flight Engineer
Maj Jan C. Baca, Air Battle Mgr
SFC Anthony Campanero,
Airborne Target Surveillance Supervisor
SSgt Tery R. Elliott,
Airborne Comm System Tech
SrA Jason A. Loucks,
Airborne Comm Sys Tech
SMSgt Michael E. Mayfield,
Airborne Msn Sys Spec
Maj Barbara M. Omstead,
Air Battle Manager
SSgt Philip Robertson,
Airbonre Msn Sys Spec
116th Air Control Wing
Robins AFB, Ga.

Capt Mark Mullarky, Aircraft Commander
Capt Ellis Garner, Instructor Pilot
Capt Josh Anderson, Pilot
1Lt Eric Pangelinan, Navigator
SSgt James Foulis, Flight Engineer
TSgt Marshal Todman, Loadmaster
SrA John Gilbert, Radio Operator
71st Rescue Squadron
347th Rescue Wing
Moody AFB, Ga.

SSgt Kevin J. Downey,
F-15 Crew Chief
33rd Acft Mant Sq.
33rd Fighter Wing
Eglin AFB, Fla.

Submit your People for Awards!

AIR COMBAT COMMAND
Flight
Weapons
Ground
SAFETY

How to Submit?
www2.acc.af.mil/combat-edge

car buying Safety Tips

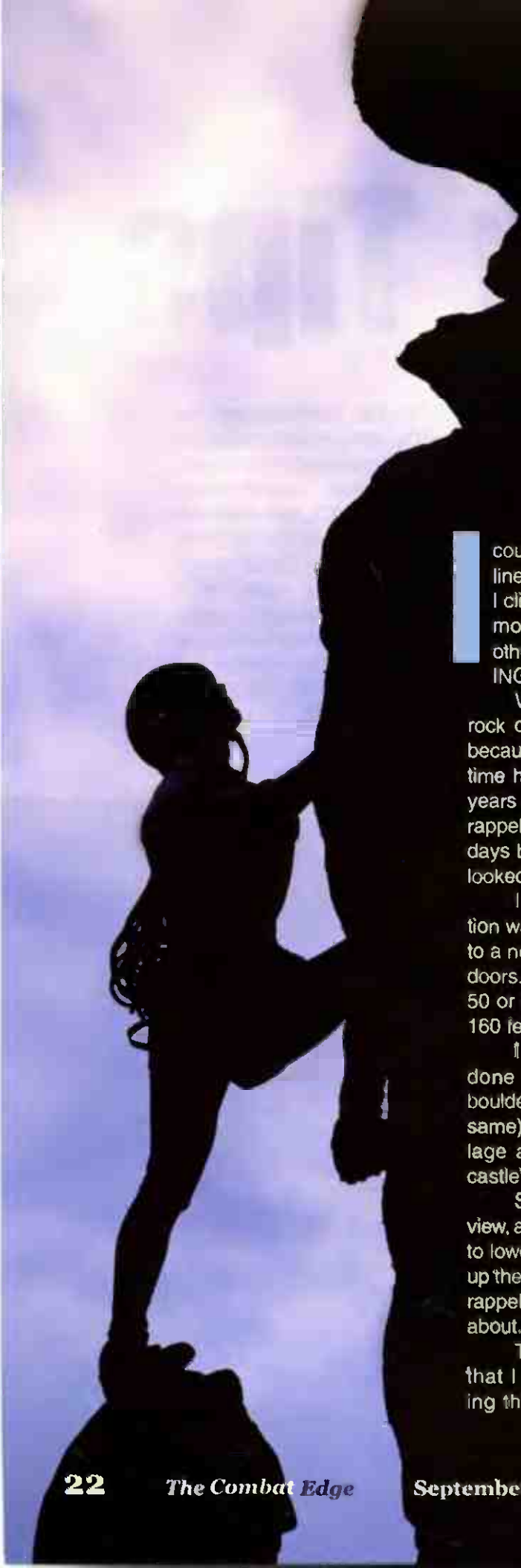
By Mr. Clyde D. Crawford, Sr., Barksdale AFB, La.

Can we be absolutely sure we will safely make it to our destination? Do we really know how safe our vehicles are? How many of us actually take the time to research our vehicles' safety record?

It is best to do this research before purchasing your next vehicle. The National Highway Transportation Safety Administration researches and tests various vehicles and releases their findings to the public. The main crash test program uses a five-star rating system to indicate what happens to the occupants when two identical vehicles traveling at 35 miles per hour collide head-on. Dummies are used to determine the many factors and stressors that are placed on those inside the vehicles. These tests use a five-star system where five is the highest rating (least chances of injury) and one is the lowest (greatest chances of injury).

Further information may be found by visiting www.nhtsa.dot.gov and the Department of Transportation (DOT) Auto Safety Hotline at 888-DASH-2-DOT. New and used vehicle purchases are important investments that we all make. Why not put your money into a product that provides the greatest margin of safety — it will be one of the best investments you may ever make and the returns are priceless!

How do we know the cars we buy are safe?



Rock Clim

By MSgt Burrel

during 101 Critic

I could see the irony in the headlines flashing before my eyes as I climbed to the top of the rocky monolith to rappel down the other side. WHAT WAS I THINKING!?

When Dave asked me to go rock climbing, I said "Yes;" partly because I turned him down every time he asked me over the last 3 years and partly because I hadn't rappelled since my security police days back in 1980-something and looked forward to doing it again.

I wasn't sure if Dave's invitation was an attempt to expose me to a new hobby and the great outdoors. I accepted and there I was 50 or 60 — but what seemed like 160 feet above the Turkish terrain.

I had to admit, once I was done climbing over unforgiving boulders (my shins will never be the same), the view of the nearby village and the impressive "snake castle" was amazing!

So, as I sat there admiring the view, and trying to forget I was about to lower myself off a cliff, Dave set up the anchors and other climbing/rappelling gear that I had no clue about.

The reassuring thing was that I knew Dave had been doing this for years and had even taken the Boy Scouts on climbing trips. And besides that, I was well aware of my limitations and knew what I could and would not do.

Although I was eyeing the scenery, I kept one eye on Dave. I noticed how he set up double anchors to the biggest/sturdiest rocks he could find. Then tested the anchors with his body weight. I asked him about the double protection. He said three anchors would be ideal, but two were more than enough in this situation.

I watched him attach two carabiners to the anchors ... ahhh more double protection ... I liked how this was shaping up.

Once everything was in its proper place, it was time to rappel. Dave asked if I wanted to go first or second. I graciously allowed him to take a well-deserved rest after setting up all the equipment. Little did he know that there was no way I was going to let him go down that cliff and leave me up there alone!!

After receiving a crash course (Ouch! Bad choice of words) on knots, eight-plate (a rappelling device), body

nbing ...

. Hancock, Fort Meade, Md.

l Days of Summer

positioning and braking, (not necessarily listed in order of importance) I was up.

I looped the rope through and around the eight-plate like a champ but was not at all comfortable putting all my weight on this equipment. Once I finished inspecting the equipment again I ever so slowly, and I do mean — s-l-o-w-l-y — backed up to the edge while practicing my best Lamaze breathing.

I knew my limitations ...

Once I got up the nerve to lean back and step off, the sensation was truly exhilarating! I had my right hand (brake hand) so far into the small of my back that my shoulder felt like it was going to separate. Once Dave told me to relax, I did...a little and enjoyed (kind of) a slow, jerky, twisty, bumpy decent to the wonderfully firm ground below. I can still smell the smoke rising from my gloves, which I used to choke the life out of that rope!

The first time was definitely the most scarey, but it was so cool! The second and third trips were much better. I even had Dave go down before me on one of the trips to take a picture of me on the way down.

Well, I'm already planning my next trip. I teach and preach Operational Risk Management (ORM) for a living and was glad to see one of the guys in my unit use it so well. I was also glad for the opportunity to demonstrate a practical use for ORM.

I trusted my experienced teacher and watched him set up. I asked questions about things I didn't know and we checked and double-checked safety gear. More importantly, I knew my limitations and was willing to do a sanity check if Dave got crazy on me. Oh yeah, I also had a friend or two ready to call the local authorities if we hadn't returned by 1600 ... but don't tell Dave.

ORM is not just something to talk about. It has practical uses that can save your life and the lives of others. Don't wait until your headline reads "Airmen killed during the 101 days of Summer ..." Use ORM now.

HELP! I'm stuck on the Wing

By Mr. George G. Sarris, Offutt AFB, Neb.

Standing on the top of a ladder, not using spoiler locks, and performing a task alone that is usually performed by two, are obvious serious safety violations.

I did not use ORM ...

I was dispatched at mid-morning to troubleshoot a hydraulic leak on the left wing. Accompanying me were two traditional guardsmen. We quickly diagnosed the malfunction and determined that both inboard spoiler swivels required replacement. The swivels were of the old "bird cage" type and needed to be replaced with the latest upgrade. The newer variety of swivel required the installation of a flairless hydraulic fitting and provided a good training opportunity for the weekenders.

After removing the hydraulic lines to the shop, I proceeded to instruct the young maintainers on the procedures for cutting off the old fittings and installing the new flairless ones. Despite a warning to follow me step by step, one of the young airmen was a little rambunctious and proceeded at his own pace. With the sound of a crunch, one brand new flairless fitting was ruined. As any KC-135 hydraulic mechanic knows, this also renders

the hydraulic line too short for another attempt.

A search of the supply system revealed that a new line was available at a nearby active duty base. However, by now, the workday was nearly over, so we made arrangements for me to pickup a new line on my way home to be installed early the next morning.

When I arrived at the active base, my counterparts had called and left a message that all was well and that I was to report for work at the normal time because they had located a new line. So, I picked up the new part and headed for home.

That night, I did not have a restful sleep. Over and over again I ran the same scenario through my mind. The two traditional guardsmen who were going to replace the line were not qualified to perform this task. To the best of my knowledge, the shop supervisor also had never performed the installation of a new swivel assembly. In fact, prior to being assigned as the

Help, I'm on the left wing of 276!


Photo by SSgt Cheresa D. Clark


Photo by A1C Stacia M. Willis

headlines, "Senator Dies In Guard Crash." Since I couldn't sleep, I decided to drive into work early and double-check the swivel installation. I had to be covert because I didn't want any one to know that I doubted my supervisor's abilities. At about 5:00 a.m., I passed through the doors and headed for the flight line. Much to my surprise, someone called out my name. Our scheduler was also in early this day and saw me exit the building from his second floor window. After a short conversation, he understood exactly what I was doing and why.

shop supervisor, this man had no experience in the hydraulic AFSC and rarely performed hydraulic system maintenance.

These thoughts worked me into a frenzy — I could see the

It was common practice to find a ladder at the wing tip of the aircraft, as well as a fire bottle and some AGE equipment. The jet in question was prepared for flight, so its flaps were already in the down position. I retrieved the ladder and opened the cove lip doors to gain access to the spoiler swivels. In order to get a clear view of the swivels, the spoilers must be raised. To raise the spoilers manually, it's necessary to depress the bypass valve on each of the two spoiler actuators while physically pushing the spoilers up. This is a procedure that is normally accomplished by two people. However, sometime earlier in my career, I had perfected a method of doing this by myself. I found that by depressing the bypass valve of both actuators, one with my left hand and one with my right hand, and with only a slight discomfort, I could push the spoilers up using my head. Not exactly a smart thing to do.

Now get a good picture of this. Both hands occupied, my head pushing up on the spoiler, and I'm standing on the top of a ladder. You guessed it, the ladder kicked out from under me. Rather than dropping to the ground, I frantically searched with my right hand for something to grab. Imagine my surprise when I felt the spoiler gently come to rest on top my left hand, which had grasped the flap track. Now it was impossible for me to let go with the spoiler resting on my

left hand. There I am, at 5 a.m., in the dark, alone, and hanging from the left wing of a KC-135.

As I hung there, I calmly began to think of a way out. I knew that the crew chief would arrive in about 30 minutes, so if I kicked my feet up and over the flaps, I could sit on the flap and simply wait for help. Well, I just couldn't get my feet up and over that flap, so I continued to hang on.

My arms began to get tired after about 5 minutes. The spoiler resting on top of my left hand also became uncomfortable. I began to wonder how much it would hurt after another 15 or 20 minutes, or how much skin I would lose from the back of my hand if I were to yank it out. I decided to swallow my pride and call for help. I remembered the scheduler's window was open and reasoned that he might be able to hear me.

"Help, I'm on the left wing of 276! Help! Help!" I shouted for a good 2 or 3 minutes. Then I heard a voice call back, "Where are you? Keep yelling!" My hero arrived seconds later. It was a man from the fuel shop who had just arrived for work. My voice must carry well, for the fuel barn was over 300 yards away.


Photo by TSgt Mike Buytas


Photo by SSgt Tony Tolley

I can picture all of you aircraft mechanics rolling on the floor overcome with laughter. I can sense your thoughts, "This guy is a good candidate for the Darwin Awards." It's hard to believe that this is a true story. It is even harder to believe that I would be dumb enough to put it in writing. I'm sharing it because of the very deep lesson it carries. Standing on the top of a ladder, not using spoiler locks, and performing a task alone that is usually performed by two, are obvious serious safety violations. One might also even argue that my judgment was also impaired by a lack of sleep.

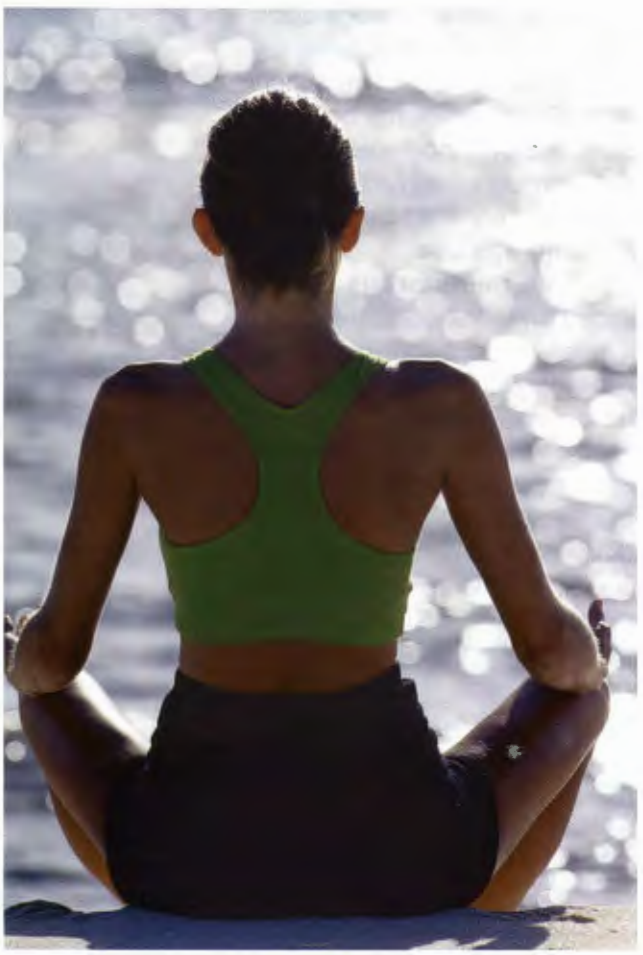
I am no longer a part of the unit concerned, so I can say this freely for the first time. The real lesson is contained within the old Airman Leadership Course 1, Volume 1, lesson 015. The lesson reveals that a supervisor's technical incompetence can negatively affect subordinates. It is well understood that the best mechanic does not always make a good supervisor. However, a good supervisor must have the experience, skills, and knowledge of the AFSC over which he is supervising. My concern about my supervisor did not justify my own stupidity. My own incompetence on that morning could have jeopardized the very flight I was trying to ensure was safe.

Yes, this story is true. I placed myself at risk in the name of safety without considering my own safety violations. Despite all the drama, everything went off smoothly that morning. The headlines in the evening paper could have been, "Sergeant Crushed by Wing," or "Senator Dies in Guard Crash." Thankfully, neither event happened nor was either story written. What will be your safety story? Be safe and remember that the end does not always justify the means, especially, if the means cut corners and put lives at stake. And lives are important, even if it's your own.

taking charge of your Health & Fitness

By Ms. Gale Gendron, Langley AFB, Va.

I am sure you have all heard the expression: "If it's to be, it's up to me." It's a great expression when you apply it to taking charge of your health and fitness. Another good expression is: "You are what you eat." Eight years ago I made a decision to start taking better care of myself and I have never looked back. I believed then and still do that it was a lifestyle change — a permanent change. I could never go back to eating the way I use to. I had to take a hard look at my lifestyle and the bad habits I had developed. I wanted to start physically feeling better and I knew in order to do that I needed to take charge through diet and exercise.



Making a decision to change the behavior, i.e., eating and exercise habits was the easy part but actually working up a plan on how to change the behavior and implementing that plan was "much" more difficult.

My first plan of attack was to begin by lifting weights, but I had never worked out at a gym before. I knew nothing about the exercise equipment and was always intimidated by the whole "**gym thing**." I met with a staff member at a base gym and had her educate me on the weight equipment, adjustments, and how each piece of equipment worked and the muscle group each machine targeted. The next thing I did was attend a 6-week health and wellness seminar put on by the Wellness Center on base. Boy was that an eye opener. I learned that what I thought was a serving was in fact two or more servings. I was consuming too many calories each day and did nothing to burn them off.

Armed with the knowledge about exercise and diet, I began to take charge of my health and fitness. The staff member at the gym encouraged me to begin keeping a journal of my weight training and the educator at the Wellness Center also encouraged me to keep a food journal. Slowly over the next year my journal showed great progress reflecting the gradual weight adjustments I made to each piece of equipment and the weekly tracking I did to document my progress. Not only did I begin to feel better, I had much more energy, and mentally, my attitude about life was "much" improved. I was taking charge and the empowerment of taking back control of my health and wellness felt great. The real benefit of keeping a journal is that it validated my progress (at least visually on paper). Physically I began to see changes in my shape as well. I began to tone up and had a little muscle definition in areas I never had before.

On the nutritional side of this plan, I also began to take a hard look at what I was eating. In the past, when I would eat out, I made the best of it. I was always treating it like I was celebrating something and treating myself to some good ole fattening, delicious, high calorie goodies. I ordered whatever my heart desired and usually made poor nutritional choices. Now, on most occasions (not all) I try to make the sensible choices. My weakness is Mexican food and all my friends know it. I sacrifice the cheese and sour cream (on most occasions). I still eat the chips and salsa but not as many as I use to. My favorite expression is: "If I eat it today, I wear it on my thighs tomorrow." So when I go out to eat now, I think about the high calories in particular foods and try to do my best to select the healthier items from the menu.

It feels good to take charge of my health. I feel stronger, I sleep better, and my attitude about life is "much" improved. Taking charge of your health and wellness is empowering. Make a commitment to change your exercise and eating habits. Make a lifestyle change. You'll be glad you did.

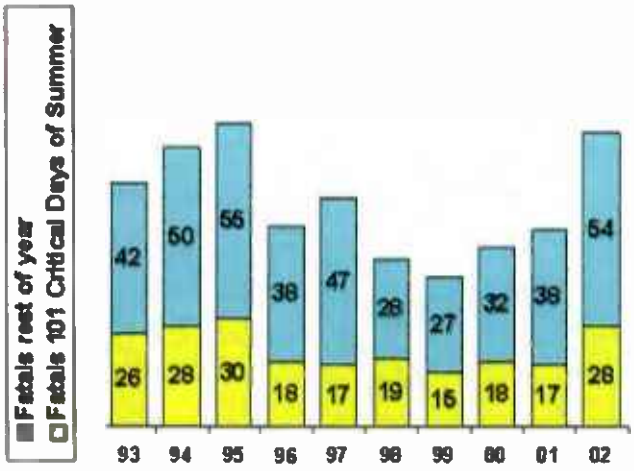

Fleagle
GET TH' LEAD OUT!! YOU GUYS AIN'T NEVER GONNA GIT DONE!!
MOVE OVER. LET ME CHECK IT.
BUT FLEAGLE WE AIN'T...
I WUZ HANGING THESE SUCKERS WHEN YOU WUZ IN KINDERGARTEN.
WHATEVER YOU SAY, BUT...
©STEVE HARDIGON 2003
THUNK!
ACCORDING TO ORM, WE WERE ABOUT HALFWAY THROUGH TH' CHECKLIST.
BET THAT LEAVES A MARK.
HARDIGON

The ACC Lost Squadron

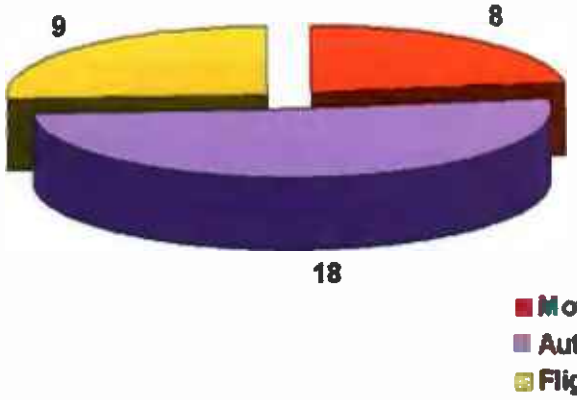
Injuries to Date **475**

Deaths to Dat **36**

Ground Mishaps -- *Off Duty Deaths*



ACC Deaths as of July 31, 2003



A Few of the Mishaps

June 24, 2003: A 40-year-old male Lt Col was returning from a fishing trip with his 13-year-old son while on leave in Idaho. He was traveling southbound on State Highway 55 near McCall, Idaho, at mile marker 121, approximately 156 miles north of Mountain Home AFB, Idaho. The vehicle he was driving departed the paved road surface and struck a tree. There were no skid marks at the scene and the weather was clear and road surface dry and paved. Seat belts were worn by both occupants who died at the scene.

July 6, 2003: A 22-year-old male A1C was traveling westbound on Colquit Road in Caddo Parish, Louisiana, when for an unknown reason his vehicle left the roadway and struck a tree. He died at the scene. The seat belt was worn and alcohol is not suspected.

July 16, 2003: A 37-year-old male TSgt, with hi son as a passenger, was riding his motorcycle off of a Florid Highway when he was struck by a four-wheel private moto vehicle (pick-up) operated by an underage, unlicense driver. The mishap occurred approximately 150 yards fro the member's home on a narrow dirt road with a blind curve The TSgt died at the scene and the son was critically in jured. Personal protective equipment was worn.

July 27, 2003: A 20-year-old male A1C from Rob ins AFB, Georgia, lost control of his vehicle and flipped several times resulting in fatal injuries. The day before th accident, the airman received a written warning for speed ing. He was driving late at night returning to Robins fro Florida when he departed the paved road through a "T" in tersection. The member was wearing a seat belt.

Don't become a member of the "Lost Squadron"

FY03 Aircraft

As of July 31, 2003

	Fatal	Aircraft Destroyed
8 AF		
9 AF		
12 AF		
AWFC		
ANG (ACC-gained)		
AFRC (ACC-gained)		

FY03 Ground

As of July 31, 2003

	Fatal	Class A	Class B
8 AF		6	1
9 AF		9	1
12 AF		10	0
DRU's		3	0

FY03 Weapons

As of July 31, 2003

	Class A	Class B
8 AF	0	0
9 AF	0	0
12 AF	0	0
AWFC	0	2

Aircraft Notes

After an "eventful" month of June with three Safety Investigation Boards in the AOR and one stateside, the Class A mishap-free month of July was a welcomed change for the better. Command wide, we've seen a growing trend in lightning, hail, and "heavy rain" damage to aircraft that have ventured too close to convective storm cells. While, as yet, only causing Class C or B level dollar damage, thunderstorms can easily cause complete losses of aircraft and lives. We have had a very close call in the AOR. Don't press your luck. Mother Nature can be very unforgiving!

Ground Notes

ACC has lost nine people so far during this year's 101 Campaign. It ties last year's total, and there are still 33 more days to go. There have been four PMV2 mishaps and four PMV4 mishaps along with one on-duty fatal industrial mishap. Of the 28 Class A mishaps this year eight have been PMV2, 18 were PMV4 mishaps, one industrial and one property damage mishap which have taken the lives of 26 personnel.

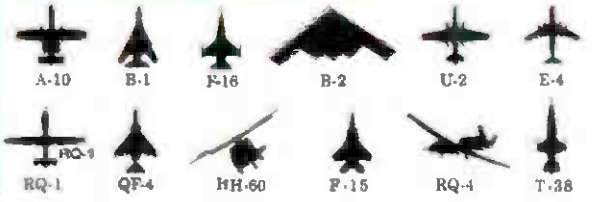
Weapons Notes

Congratulations to all of you weapons professionals out there. We have managed to get through another month with no Class A or Class B mishaps. This means we must be following all of our technical data and explosive safety rules to the letter. Keep up the outstanding work and remain ever vigilant.

Legend

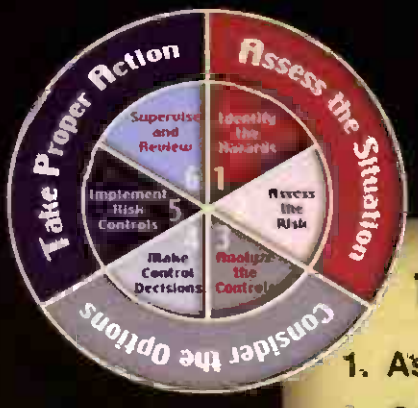
Class A - Permanent Total Disability; Property Damage $1,000,000 or more
Class B - Permanent Partial Disability; Property Damage between $200,000 and $1,000,000
Class C - Lost Workday; Property Damage between $20,000 and $200,000
* Non-rate Producing

Symbols for Mishap Aircraft



Managing risk in a risky business

ORM
Operational Risk Management



THE ACT 3-STEP PROCESS

1. Assess the Situation
2. Consider Options to Limit Risk
3. Take Proper Action

The Combat Edge