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Setting the Record Straight:
The article, "Not Your Routine Commander’s Call," printed in the March 2006 edition was written by 1Lt Tammie Adams with the 4th Fighter Wing Public Affairs office and not Mr. Vincent Dotson. We apologize for the error.
It really is amazing how quickly time passes. After nearly four years in ACC Flight Safety, and 23 in the Air Force, it is time for me to move on. This has been a great opportunity to visit some parts of ACC I might have missed before getting into the Safety business. It has been a pleasure to work with great people doing great things to protect Airmen and preserve resources to support our combatant commanders.

There are a lot of good safety programs out there, but programs are only part of the picture, as even the best programs fall short when individuals choose not to comply with the rules. It takes people to make safety programs work, and those people need to come from both inside and outside the Safety office. Effective programs develop and evolve when there is turnover as the new people bring fresh ideas and enthusiasm to the office. Our transition to an expeditionary force has brought more frequent personnel changes at home and at our deployed locations. With the transition has come the challenge to maintain office continuity and program stability; it's tough to watch any of ACC's "Best Practices" wither and die due to a change in personnel or an extended deployment. Our safety programs need to keep pace with that transition to remain effective when the regular Flight Safety Officer leaves for an AEF deployment or the new Ground Safety Manager arrives in theater. Safety programs need to support the mission, which requires us to be ready to provide safety support anywhere and anytime.

Basic programs that increase awareness and provide people the tools to make sound risk management decisions on and off duty will always support that mission. I've been privileged to work with flight safety and risk management programs in an environment flexible enough for Airmen to focus on both mission accomplishment and helping individuals recognize and avoid unnecessary risk. Thanks for helping make that work in ACC. It has certainly helped make my job more enjoyable. Fly safe.

DANNO

Lieutenant Colonel Dan Surowitz
Deputy Chief, Flight Safety
Birds can be Stupid too!

by Maj Paul L. Lancaster, Ramstein AB, Germany
You have to fly smart when birds are in your area of operations. Birds fly in front of airplanes all the time: on runways or as aircraft are on final or flying low level at high speed. You can’t predict how a bird will react to an aircraft. Large birds may duck their wings and attempt to dive out of the way, but not always. When threatened, groups of small flocking birds will often tighten up their formation, then dart and climb in an unpredictable manner. Just when you thought you were going to avoid that towering mushroom cloud of starlings by executing a go-around, they suddenly appear in a tight-knit group climbing directly in front of your aircraft. What do you expect from a bunch of startled birds? Their reactions are difficult to predict. When confronted by birds during flight operations, what's a pilot to do?

Well, let’s start with step one in fighting birds: pre-flight planning. This is where most of what can be done to defeat a bird strike takes place. This is especially true for low-level flight, where Avian Hazard Advisory System or AHAS and Bird Avoidance Models or BAM can be consulted and followed. Avoid flight below 3,000 feet above ground level in “Bird Severe” areas. Change your low-level route or low-fly area if necessary. If you don’t need to fly through migratory routes, don’t. You know all this, so just do it. It’s smart.

What else can you do? Prepare for impact. Really! There isn’t much you can do to avoid birds when the aircraft is in flight. This has to do with three things: visibility, predictability, and maneuverability.

**VISIBILITY.** It’s tough to see birds. Pilots can fly through a BIRDTAM’ed area and claim to have never seen even one bird. Where were all those winged creatures hiding? Probably just out of sight. Our eyes are very limited in detecting bird hazards. This has to do with physical limitations of our eyes, contrast, and lighting.

An excellent article on this subject was published some years ago in the German book, Flugsicherheit und Vogelschlag (Flight Safety and Bird Strike). “Visually Acquiring Moving Birds” was the title of the article that produced the following facts. Under optimal conditions, the farthest we can hope to detect a very large bird (e.g., a goose) is about 1.3 miles. Buzzards can be detected at 1.2 miles; large gulls at 0.9 miles; small gulls at 0.6 miles; and swallows at 0.990 feet. But these are under optimal conditions, with favorable contrast, good lighting, and good visibility.

Under optimal conditions, it could be 0.3 miles or less before you see a buzzard-sized bird, especially with a low aspect view of the bird. Most low-level jets travel about 660 feet per second (roughly 400 knots true airspeed), so reaction time can range from about 7 seconds at best down to only a couple seconds.

A T-38 bird strike from a decade ago resulted in the death of the front seat pilot during a low-level flight. The reaction time for this mishap was calculated at 3.6 seconds. Unfortunately, the crew didn’t detect this bird until impact. A pilot or aircrew flying at low level should plan to not have more than 3 seconds from visually acquiring the bird until impact.

**PREDICTABILITY.** Okay, now we’ll focus on what to do once you’ve acquired birds visually. To avoid them, we need to know in what direction they will fly. Birds on or near the runway are the least predictable.

If you are taking off, you will not be able to maneuver and avoid the birds. Your only choices are to abort or continue with your takeoff. Therefore, as you taxi out, look for birds in the vicinity of the runway. If you see any, inform tower and have them attempt to clear them from the operations areas. Delay your takeoff unless takeoff is absolutely necessary.

Plan for the worst-case scenario. For instance, if you do hit birds on takeoff, you might not have sufficient thrust for continued flight. This means you will need to select the best available clear area for a forced off-airport landing immediately after takeoff. Not a great option ... neither is taking off with birds on the field.

Birds are a very real hazard, and until that hazard is removed from the immediate runway environment, delay your takeoff. This lesson was learned the hard way by an Elmendorf AFB E-3 in 1995 and a NATO E-3 in Greece the following year. Aircraft and lives would have been saved if they had just delayed their takeoffs.

**DELAY YOUR TAKEOFF!** This is the most important point of this article. You can predict that the birds will attempt to take off during your takeoff; you can’t predict which direction they will fly. You can only assume the worst: they will fly across the runway in front of you.

What about the birds you are confronted with while airborne? This is the most difficult question to tackle. It requires knowledge of bird reactions to aircraft, but like all tactical decisions, the answer is “it depends.”

This is a little researched and often contradictory area of scientific knowledge. The oft-quoted maxim that birds will dive to avoid aircraft is true, but not in every case. Usually larger birds like buzzards or waterfowl will attempt to dive when threatened. But smaller, flocking birds are extremely unpredictable in their reaction. It is often the case that a flock of birds will actually tighten its formation to deter threats from predators (which is how they see your aircraft); however, which direction this flock will fly is unpredictable (another tactic to deter attacks from predators). Normally, if you are close enough to scare up and then see a flock of birds, then you are too close to effectively predict and react to their movements.

**MANEUVERABILITY.** If a flock of birds flies up from the landing area while you are on short final, you don’t have the airspeed to maneuver and avoid them. The only real options are to continue landing or go around.

What is the best option? Again, it depends. A continued landing to a full stop is the correct decision in most cases, particularly if there is no ejection option. Yes, birds may go into the engine, but they may...
also go into the engine during a go-around. If that happens, the consequences will be greater because of the higher power required for the go-around and climb out.

If you are already on glidepath, with a runway in front of you and a low power requirement, I believe the safest bet is to continue landing to a full stop. Two mishaps back up this thinking. In 1996, a Royal Netherlands Air Force C-130 crashed following an attempted go-around due to ingestion of starlings and lapwings in three engines. The crew had intended to make a full stop, but initiated a go-around to avoid the rising flock of starlings. Had they continued to a full stop as intended, they most likely would not have crashed and lost 34 lives.

In the second mishap, a DC-9 making an approach to Kansas City International Airport on March 4, 1999, struck a flock of snow geese that caused $775,000 worth of damage to the engines and airframe. Both engines were damaged to such a degree that a go-around would not have been possible. According to the National Transportation Safety Board report:

"The number two engine went to a sub-idle run condition. The captain reduced the power on the number one engine enough to lessen the surge/stall condition to a rate of once every 2 seconds, which allowed just enough thrust to maintain the approach and to lower the vibration. The number one engine continued to compressor stall/surge to touchdown."

The only change to the "continue to a landing" advice might be if you are flying an ejection seat-equipped aircraft and are in the final turn. Then the best course of action may be a go-around. This would keep you in the ejection envelope should a bird strike occur.

Please don't misconstrue this advice. Aircraft with ejection seats might be smaller and more maneuverable, but that doesn't mean you should attempt to use those advantages to avoid a bird strike. Trying to maneuver and avoid the bird is dangerous in this low-altitude, low-speed regime. A recent mishap in a T-38 demonstrated the futility of this thinking.

The T-38 pilot attempted to bank away from and bunt under a bird as he was on final. He ended up losing so much altitude that he struck the perimeter fence, tearing away a main gear. Fortunately, he didn't impact something less forgiving.

It is more difficult to decide what to do when encountering birds during a takeoff roll. This scenario requires thorough pre-flight planning. The go, no-go decision depends on the particular aircraft and the runway/barrier that is available. Think it over before you step.

Probably the worst case can happen if you are in an F-16 or other single-engine jet. That's because engine damage may not be discernible until after rotation during climb-out, and then thrust may be insufficient to return for a landing. An F-16 at an Air National Guard base recently encountered this situation.

The F-16 pilot encountered a flock of 20 to 30 mourning doves on the runway as he was on takeoff roll at about 150 knots indicated airspeed. Several birds entered the engine intake. He decided to abort and took the departure-end barrier. Although the hot brakes caused the tires to deflate, there was little damage compared to what could have happened if he had continued takeoff (i.e., possible ejection and loss of the aircraft).

It is interesting to note that a tower controller scanned the runway just before
clearing the F-16 for takeoff, but was unable to detect the grey doves on the asphalt runway. This stresses how important it is to think about how you are going to handle bird strike encounters in every phase of flight, especially the critical phases such as takeoff and landing. Take a look at the area next to the runway during taxi out because you probably have a better view than the tower. Inform tower of any birds that you see. Delay your takeoff until tower rids the area of birds. Should you strike a bird, use your emergency training to determine the best course of action.

Finally, birds encountered on low-level and range operations are the most deadly for fighter pilots. They cause, by far, the highest damage per bird strike. Pilots are often distracted from focusing on the sky directly in front of their aircraft because they must often reference a low-level map or view ground references in the range pattern. This leads to minimal time for acquiring and avoiding birds. If there is time, pull up and away from the bird. Don't try to bunt under the bird; the ground is much less forgiving than feathers. Do try to duck down in the cockpit (i.e., below the level of the glare shield, if possible). This will give you the best possible survival chance should the bird penetrate the windscreen.

Sometimes there is only time to duck -- that could still be enough time for you to survive. Outsmart the birds and fly safe.
The Cattle Egret
"ENEMY NUMERO UNO"
IMPACT POINTS
Diego Garcia is a small, isolated outpost in the Indian Ocean at the forefront in the war on terrorism. Smooth, hazard-free flight operations at Diego are essential in order for the aircraft deployed here to support ops “in-country.” But before the aircraft here can be successful on the battlefield, I have to be successful on my own battlefield, right here on Diego Garcia air patch. I’m fighting an ever-changing battle against my arch nemesis: Bulbulcus ibis, better known as the “Cattle Egret.” As the Flight Safety NCO, I’m in charge of the Bird/wildlife Aircraft Strike Hazard (BASH) program here, and I’d like to share what I’ve learned during my last 4 months.

About 3 miles to the south of the airfield, at a trash-burning, smelly dump, there is a very pathetic, garbage-eating mob of at least 70 Cattle Egrets. They constitute roughly 90 percent of the remaining island population of these lanky white birds. They’re a patient, sneaky lot, and they spend every waking hour of their day waiting for their break to get back onto my airfield and catch a free meal. They like to follow the mowers and snatch up grasshoppers and the other insects that get kicked up, and in doing so, they create a hazard to flight operations in and around the airfield. I was on the airfield in my truck when I suddenly heard a familiar hum. The tractor mower had caught me by surprise … in a flash, eight Cattle Egrets swooped down and began following the tractor as it mowed beside the taxiway. These egrets had been all but gone for about a week, but now they were back with a vengeance. I realized it was my turn to make a difference in reducing the bird strike hazards on my airfield, and quickly found myself fighting a pitched battle with a wily adversary. I didn’t have any pyrotechnics or a shotgun with me, so I fought back with the only thing at hand … my truck. It took me about half an hour to chase them off using the truck, but the important thing was that the birds were gone before my jets taxied, and that’s what counts here. I battle birds as the “BASH guy” … it’s what I do.

Before coming here, I had the good fortune to spend a couple of months in the United Kingdom (UK) working with some of the best BASH contractors in the business. While there, I spent every moment I could (including off time) with them in their “Bird Hut.” Watching them work the airfield each day, especially when they were flying their falcons and hawks, was marvelous! Since arriving at Diego Garcia, I have used some of the techniques I learned in the UK. While we don’t have any falcons,
we do have plenty of pyrotechnics, shotguns, a good old 4-wheel drive, and the desire to make it all work. There are only three basic principles to remember; think of them as the “Three Ts.”

1) TRAIN. The word itself means “An activity leading to a skilled behavior” and “To cause something to take a desired course or shape through manipulation.” Everyone has seen trained animals doing tricks somewhere. Well, wild birds are quite trainable too! I have used a classical training method known as “Operant Conditioning.” This involves a harmless stimulus, like a truck horn, paired with a seemingly lethal stimulus, like a pyrotechnic. The object is to honk, then fire. After a while, you should be able to use only the truck horn and achieve the exact same effect. Unfortunately, birds are quick learners. Therefore, I have found that the horn must continue to be paired with the pyrotechnic in order to keep the “Operant Conditioning” strong in the birds. I also vary the type of pyrotechnic used so the birds don’t get too used to any one type. If the birds get to the point where they refuse to budge even with the horn and pyrotechnic, I make them participate in my training by stepping from the vehicle, walking towards them, and throwing my hat in the air or waving my arms. This forces them to take flight, whereupon I sound the horn and fire the pyrotechnic. This reinforces what I was training them to do in the first place. The goal: Make them flee by simply honking the horn.

2) TRUCK. Most of us have seen Stephen King’s movie, “Christine.” It’s about a possessed 1958 Plymouth Fury that has a mind of its own. This movie should be required viewing for BASH men and women everywhere. I saw it for the first time while here on this island. As I watched it, I thought of the Mynas, the Whimbrels, and the Cattle Egrets here and what they see when I am on the airfield: my truck. Do they perceive it to be some big passive cow rolling by or some fierce, unfriendly beast that would like nothing better than to bury them in its grill? Perception is key. Birds just want to quietly eat on their toads, bugs, and slugs. They want stability, tranquility, a good view of their surroundings, and -- most of all -- to be left alone. They definitely are not into some psycho truck coming after them! So that’s what I give them. I rev the engine (a little), turn on my headlight, and “go at them.” I want the very sight of my truck driving onto the airfield to make them feel uneasy. When I turn and head their way, they should flee. Remember too, that if you know your airfield well and advise the tower beforehand, you can go after the birds off-road. The goal: Let your very best BASH tool, a truck, do the work for you.

3): THERMODYNAMICS. The First Law of Thermodynamics states that “the total inflow of energy into a system must equal the total outflow of energy from the system, etc.” This law was not in play when I first arrived. Typically, this is what used to happen on my airfield: I’d flush a flock of Cattle Egrets. They would fly straight out to sea, and I would drive on. They would then return to the exact same spot, as if nothing had happened. “Leave us be,” they seemed to be saying. It wasn’t until I applied thermodynamics and realized that their little “Fake Flights of Fancy” would cost them large amounts of their precious energy with little to no food payoff if I kept them flapping. I knew I could win the battle because I had a good supply of diesel fuel. Now, I keep them in the air and they don’t get a single bug for all of their hovering and circling, looking for a chance to land! They know they can’t win as long as I am out there. After one or two more landing attempts, they usually quit and fly off to some other secondary food source. By keeping them airborne, I am denying them the food they need to replace the energy they have used staying airborne, and they are forced to move on. The goal became: Make them burn precious fuel.

Diego Garcia: It’s the perfect BASH Lab. All the birds live here year round. I have learned from others what works and what doesn’t. What the birds have taught me about themselves is applicable on airfields anywhere in the world. Remember, you have the upper hand. Protect your runway; it is your sacred ground. Make those feathered foes of our aircraft go somewhere else!
Within our new base boundary fence-line, you can find food, water, and shelter - everything required to sustain wildlife. The objective of this article is an attempt to create a safer working environment for all of us here at Homestead ARB. This short editorial will address my concerns with our “Trash and BASH” situation. The Bird Avoidance Strike Hazard (BASH) Program here at HARB has been recognized and emulated for its proactive approach to safety and mishap prevention. One aspect of flight safety that we need to work on is what I call “Trash and BASH.”

This spring, there is an increased number of bird species flocking to and roosting within the boundaries of HARB. Grackles and Mynas are two types of birds that love to get a free snack from open and over filled dumpsters. Free ranging dogs also enjoy a free meal of improperly discarded food refuse. Additionally, the free roaming food wrappers and debris contribute to and help sustain the foreign object damage (FOD) conditions.

Attracting wildlife to an active airfield environment by providing an abundant food-source is never a safe practice. This wildlife and aircraft combination often contributes to aircraft damage and unsafe flying conditions. Please remember this when you dispose of a cup, coke can, even a napkin that you have used. There are very opportunistic creatures nearby that would love to have your leftovers. Proper disposal also includes recycling, and closing lids after disposal in dumpsters.

As members of Team Homestead we can reduce the FOD potential, create a safer flying environment, and eliminate our “Trash and BASH” situation.
One $205 million, 500,000-pound, state-of-the-art cargo jet met its match with a dime-a-dozen, 2-pound bird.

An Air Force Reserve C-17 Globemaster III aircrew from the 446th Airlift Wing at McChord Air Force Base, Wash., safely landed their cargo aircraft after hitting nearly a dozen California seagulls seconds after takeoff at Travis AFB, Calif. Two of the jet’s four Pratt & Whitney F117-PW-100 engines were damaged in the bird strike, which happened at about 700 feet above ground level.

“The pilots did a fantastic job,” said Master Sergeant David Losk, one of two loadmasters on the flight. “Hitting that many birds of that size could have easily brought that plane down.”

First Lieutenant Bryan Parker, from McChord’s 97th Airlift Squadron, was at the controls as the C-17 aircrew left Travis for Elmendorf AFB, Alaska, and Yokota Air Base, Japan, with 20 space-available passengers and 35,000 pounds of cargo. About 45 seconds after takeoff and flying at 170 knots — almost 200 mph — both Parker and Captain Brian Robins, the aircraft commander who is also from the 97th Airlift Squadron, saw they were heading right into a flock of about 30 seagulls.

“We both called, ‘Birds!’ And by the time we said it, we hit them.”

Robins said. “Flying at 170 knots, we had a half second, maybe a full second, to respond. Buzzards, eagles, and even ducks have the self-preserving instinct to tuck in their wings and dive when we fly overhead. But in this case, as soon as we saw them — boom-boom — we hit them.”

Instinctively, Parker, who has about 250 hours flying time in the C-17, pulled back on the yoke to gain altitude when he first saw the flock of seagulls.

“Once I realized what was going to happen, I tried not to get too distracted with the takeoff,” Parker said.

“I knew that a seagull hitting the outside of the aircraft wasn’t going to be a major problem, but a seagull going through an engine is a different story.”

Once Parker leveled out the aircraft at about 1,100 feet, Robins, as

Photo by Sgt Felicia R. Haselby
planned in the event of an in-flight emergency, took over the controls. Together, he and the rest of the Reserve aircrew went through the checklists to prepare for an emergency landing at Travis.

Master Sergeant Jeff Clarke, another loadmaster from the 97th Airlift Squadron, looked out the pilot’s left-side window, keeping an eye on a KC-10 refueling aircraft in the pattern. Major Fran Whiting, a 782nd Airlift Squadron pilot, handled the radio duties with the Travis command post and air traffic controllers.

Losk, in the cargo section of the aircraft, was instructed to look out the two small porthole windows to look for any obvious damage to the engines.

“There was nothing that I could see,” Losk said. “I didn’t hear, or at least I don’t think I heard, that birds hit us. It had to happen at the same time the landing gear retracted. But I knew something happened since there was a very bad vibration coming from the engines.”

As the aircrew scanned the displays that show the status of the engines, they saw the number one engine’s oil, which should have read around 15 quarts, showed only three quarts. As a precaution, engine number one — on the outboard side of the left wing — was shut down. The vibrations stopped, according to Parker, but a strange noise was coming from one of the two engines on the right wing.

“There was damage to one of the two engines on the right side, but we couldn’t tell which one,” Parker said. “We decided not to shut down one of them just in case it was the one perfectly working engine. So, we prepared to land with three engines running.”

As Losk prepared the passengers for an emergency landing, Robins did what he had to do to get the aircraft safely on the ground as soon as possible.

“I did a fairly aggressive turn and nursed the engines to get on final,” he said. “As I added power on final, we had even more vibrations.” Six minutes after takeoff, the C-17 touched down safely on the Travis runway. Since there was unknown engine damage, the aircrew didn’t use the thrust reversers that are normally used to help bring the aircraft to a stop, relying solely on the brakes.

“Everything worked just like we practice in the simulator once a quarter,” Robins said. “The aircrew worked together and did a great job.”

According to Chief Master Sergeant Roy Sheppard, flight chief for the 446th Aircraft Generation Squadron’s Blue Sortie Generation Flight, the damage from the bird strike was limited to six fan blades — three on each engine. Those blades were replaced at Travis.

The C-17 engines minimize fuel burn, and rugged rotating components are designed to tolerate sand, pebbles, ice or other debris found at remote airfields around the world. The engines are the military version of Pratt & Whitney’s commercial PW2000 series, which is used on the Boeing 757 aircraft.

“Looking back, I guess I can say it’s an experience that I can add to my flying history,” Parker said. “This was a pretty serious bird strike incident. I know what it’s like now.”

Reprinted courtesy of Torch Magazine
T-38

Talons don't make good convertibles. But mine turned into one after a bird struck the canopy while the aircraft was in flight.

I was flying on a routine training mission from Randolph Air Force Base, Texas, with 2Lt Joshua Andrews, a first assignment instructor pilot trainee. The Avian Hazard Advisory System indicated the bird hazard appeared low for the entire route. We rechecked this about 35 minutes prior to takeoff to confirm. No change.

The mission flight was uneventful. Weather was overcast at 3,000 feet. We did have to maneuver slightly to avoid a flock of birds and did notice some singletons about 5 minutes before the bird strike.

We saw the ill-fated bird an instant before impact — just enough time to register the hazard and begin a left turn. Josh and I attempted to maneuver the aircraft, but we were unable to miss the thing. I ducked, heard the impact, and felt the wind rush (same as sticking your head out of the car window on the highway, multiplied by about five).

I immediately assumed control of the aircraft and shot out a call to the lead aircraft declaring the in-flight emergency and requesting the lead. I leaned forward, ripped the throttles to idle to slow the aircraft and began a turn to the west.

At this time Josh saw the engines roll back and me apparently slumped forward, so he was preparing to assume control. But then we restored communication.

On throttle up, we discovered that the number two engine compressor stalled at power settings above approximately 80 to 85 percent. The generator crossover was good, so we shut down the number two engine.

We diverted to Seguin Auxiliary Field, in Seguin, Texas. I didn't have a good tactical navigation lock and elected to give the lead back to the lead aircraft for the low-altitude navigation to Seguin while we worked the problems. Lead did a super job supporting us by working the navigation and communication questions.

Josh had great difficulty hearing me above 230 knots indicated airspeed (or a little over 264 mph for you non-aircrew types), so I tried to keep it between 220 and 230. By leaning forward, I was able to catch most of the lead aircraft's communications to controlling agencies. We ran the applicable checklists, with Josh reading them to me.

Windblast was light to moderate, not enough to bother me except when I tried to reference my own checklist. The pages kept flopping around. Cabin temperatures weren't bad enough to require turning up the heat. We took the lead back about 3 miles east of the entry point for the straight-in to Runway 31 at Seguin.

Approach and landing were uneventful. Fire crews were very helpful, as was the Seguin crew.

During post flight inspection, we found the bird apparently hit the windshield just right of center and near the canopy bow. Virtually the entire canopy was gone, with chunks of bird and Plexiglas in the cockpit with me.

There didn't appear to be any damage to the canopy frame, but the glass was shattered on the front canopy. The windshield sustained some damage, but the arch and frame looked OK. There was a small dent (3 inches long) on the leading edge of the vertical stab, about halfway up. The right engine had some damage to the compressor blades.
I took a small hit to the right shoulder, just a scrape and probably a bruise. No clue what hit me. Josh, who was in the back seat, had some bird pieces on him — must have "migrated" through the instrument panel. No damage to him.

Lessons learned: Be prepared, and use your checklists. These are risk control measures that work. Fly safe!

Reprinted courtesy of Torch Magazine
Operation IRAQI FREEDOM
SOUTHWEST ASIA (AFPN) -- Airman 1st Class Benjamin Riley watches third country national contractors build a new structure at a deployed location on Jan. 22. Airman Riley is a third country national escort with the 379th Expeditionary Civil Engineer Squadron, deployed from Barksdale Air Force Base, La. (U.S. Air Force photo by Staff Sgt. Joshua Strang)

Hidden devices
IRAQ -- Staff Sgt. James Richey, Jr., walks Jacco around a vehicle with suspected hidden improvised explosive devices. Sergeant Richey is deployed from the 96th Security Forces Squadron at Eglin Air Force Base, Fla. (U.S. Air Force photo by Staff Sgt. Suzanne M. Day)

Up-armor for troops - Area Lab samples fuel, oxygen for entire AOR
SOUTHWEST ASIA (AFPN) -- Capt. Michael Pope measures the fuel for a jet fuel thermal oxidation test. Capt. Pope is a chemical engineer deployed from Wright-Patterson Air Force Base, Ohio. (U.S. Air Force photo by Senior Airman Cassandra Locke)
Deployed water safety

KIRKUK AIR BASE, Iraq (AFPN) -- Senior Airman Randy Plantenberg adds chlorine to a distribution valve that will mix it into water storage bladders. Airman Plantenberg is a utilities journeyman with the 506th Expeditionary Civil Engineer Squadron. (U.S. Air Force photo by Tech Sgt Ken Sloat)

Clearing the way

BAGRAM AIRFIELD, Afghanistan -- Senior Airman Sabrina Baker, an explosive ordnance disposal equipment troop, helps clear a path through a minefield. The Airman is with the 455th Expeditionary Civil Engineer Squadron Explosive Ordnance Disposal Flight. The EOD troops spent 2 months clearing the area near an old Soviet munitions supply dump. This allowed soldiers from the 23rd Ordnance Company at Miesau, Germany, and 5th Maintenance Company at Kaiserslautern, Germany, to load three 5,000-pound rockets onto a wrecker Oct 15 and take them to a secure site for disposal. Airman Baker deployed from Davis-Monthan Air Force Base, Ariz. (U.S. Air Force photo by Staff Sgt Marcus McDonald)

Maintaining the fortress

ANDERSEN AIR FORCE BASE, Guam (AFPN) -- Mechanics remove the engine ring cowl of their B-52 Stratofortress aircraft during phase maintenance at Hangar 1 here at Andersen AFB, Guam. The Airmen are deployed from the 2nd Maintenance Squadron based at Barksdale Air Force Base, La. The B-52s come here from a forward-deployed location and go into phase maintenance after 300 flying hours. The $34-million hangar is the newest in the Air Force and can house any type of Air Force aircraft. (U.S. Air Force photo by Master Sgt Val Gempis)
Keeping Airmen here safe is not a task taken lightly by the 332nd Air Expeditionary Wing's ground safety office. "Our job is to prevent the loss of life or damage to government equipment," said Tech Sgt Clyde Lathon, 332nd AEW ground safety manager. "We are the Air Force equivalent to the Occupational Safety and Health Administration."

To accomplish these goals, the two-person ground safety shop spends a portion of every day watching the daily operations of Airmen here. "We are always out and about, watching ground operations on the base," said Tech Sgt Bob Brock, 332nd AEW noncommissioned officer in charge of ground safety. "We spend a lot of time monitoring operations on the flight line, looking at the aircraft ground operations. We also watch contracting operations to make sure they don't endanger Air Force people. We conduct mishap investigations. In addition, if someone is hurt at a Balad..."
forward operations base, we will travel there to interview them if they are not medically evacuated here.”

All this and more is done by the ground safety Airmen, who coordinate their programs down to the lowest levels with the assistance of unit safety representatives. “Normally at a wing this size we would have more people to do this job,” Sergeant Brock said. “Because there are only two of us, we rely heavily on unit safety representatives.”

“Unit safety representatives are a vital part of the program,” Sergeant Lathon said. “They serve as an extra set of eyes and ears for us. We have been blessed with very good unit safety representatives this rotation; they helped bring the number of safety incidents down.”

During the most recent air and space expeditionary force rotation, wing safety efforts reduced safety mishaps more than 50 percent compared to the previous rotation. “I believe this is because we have been out of the office talking to people,” Sergeant Lathon said. “We have been around the base asking people what they need to help make their work environment safer.”

Despite the improved safety numbers seen during this rotation, Sergeant Lathon and Sergeant Brock asked those who are leaving not to become complacent and those who were arriving not to forget safety practices just because they are deployed. “Most people who get hurt while deployed do so at the beginning or the end of a rotation,” Sergeant Brock said. “People get into the mindset that while deployed the rules don’t apply and start taking shortcuts they would not normally take. Nine times out of 10, when someone gets hurt, it was because they took a shortcut.”

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Weight

Lifting Safety

by SSgt Jared Averill, Cannon AFB, N.M.
Photos by SSgt Levi Collins
For those of you who aren't familiar with the gym or weight lifting, here are some basic safety tips to use before, during, and after your exercise session is over. If you're really unfamiliar with the gym, but want to start weight lifting or body building, it's a very good idea to get a certified personal trainer to familiarize you with the different pieces of equipment and proper weight lifting techniques, as well as help you start a lifting routine.

You want to make sure you stretch properly before starting any physical activity, including walking, jogging, running or biking, etc. If you're lifting weights, it's particularly good to concentrate your stretching on the muscle group that you'll be working on, as well as the rest of your body. After you're done stretching, get a good warm up by jogging or running. It doesn't have to be a long session, just enough to get your muscles warmed up and ready for the workout. Just like your vehicle needs a little bit of time in the winter to warm up, your body needs blood flowing to and through your muscles.

During your workout, always make sure to use the proper lifting technique. If you're not sure how to do a certain lift, ask a gym staff member. The same applies for many of the exercise machines. It's very easy to hurt yourself if you're doing an exercise incorrectly. Along with using the proper technique, make sure you're lifting a weight suitable for you. Don't try and repeat something you can't lift by yourself. Start with a low weight and if it's too easy, you can move up until you find the right weight. On that note, always use a spotter, especially for squatting and bench pressing. Again, if you don't have one, always ask someone else in the gym to help you. Most people will be glad to help. A lot of people like to have workout partners; that way you can motivate each other, have a spotter and be more inclined to go to the gym if you know that you're supposed to meet someone there.

Ensure you drink plenty of water before, during and after your workout. It's very easy to become dehydrated at the gym, especially if you're doing a cardiovascular workout. Even a little dehydration can affect your strength and concentration.

After your workout is complete, it's good to stretch again. Some body builders even promote stretching the muscle group you're working during your workout in between sets. Eat something that has some carbohydrates to refuel your body like a banana, apple or even a smoothie that's sold at the gym.

Keeping a few safety tips in mind will ensure you have a pleasant workout experience. If you work out and eat properly, and give your body the rest that it needs, you should start seeing results in a few weeks. By that time, you'll be hooked on something good for you: a lifestyle which includes healthy exercise. See you at the gym!
Editor's note: Providing your body the proper hydration, rest, nutrition, and preparation can go a long way toward making your workout a productive one. The following author would probably include setting aside adequate time for your workout, never lifting free weights alone or without a spotter, and a good mental attitude. Too little time, too little attention to safety and a desire to work off his frustration by "punishing himself" with a torturous workout came together with a thud and nearly cost him his life ...

I was in a weight room, training my body and trying to improve my readiness as a warrior, when my quest for strength and agility nearly cost me my life.

It was a standard 100-degree day in Meridian, Miss. I had finished training in a T-2 Buckeye. It was my second formation-flying hop of the day under that magnifying glass the Buckeye has for a canopy. I recall having had only 15 minutes between flights that day, which wasn't much time to hydrate. After my second hop, I was a little disheartened with my lackluster performance, so I headed directly to the gym to work off my frustration.
Once there, I changed into my PT gear, took a sip of water, and jumped into my normal routine. Unfortunately, I didn't consider the fact I was dehydrated, tired, hungry, and upset about my last flight. I had trained under similar conditions before but didn't realize that, when combined with an intense weight-training workout, those conditions would be more dangerous than I thought.

I started with a chest workout, using relatively light weights. I soon became engulfed by my frustration and forgot that I was in a dehydrated and weakened state. I stacked on about 20 more pounds than usual and began the torture session without a spotter. I had planned to do 10 repetitions, but by the time I got to seven, my body had other plans.

I've been training a long time and never before had my body quit in such a cowardly fashion. My chest gave out halfway up, and the barbell slammed onto my chest. I made several desperate attempts to lift the barbell, but it was impossible. I realized my situation and began screaming for help. The problem was that the only other person in the gym was wearing headphones and couldn't hear me squealing like a stuck pig.

The barbell then rolled onto my neck, which immediately stopped my yelling. With no way to remove the barbell, I was choking to death. I lay there for about 45 seconds wondering if I was going to die. The person in headphones, however, finally saw me out the corner of his eye and came to my rescue.

I consider myself lucky to be alive, but this situation never would have happened if I had taken the time to hydrate and rest after my flight. I also shouldn't have been working out without a spotter. Both are mistakes I won't make again.

Reprinted courtesy of Ashore magazine.
Poker 1, a flight of four F-16s, was returning to Nellis AFB. As they approached the base turn, spacing and sequencing appeared normal. The first two F-16s (Poker 1 and 2) had just landed uneventfully. It wasn't until Poker 4 began his base turn that TSgt Kendell Clark, working the Tower's Coordinator position, noticed something was wrong. He voiced his concern to SSgt James Williams, who was working Local Control. SSgt Williams was also watching the situation develop and at almost the same time that TSgt Clark spoke up, SSgt Williams took immediate action. He asked the "last pokers" to confirm they had each other in sight. There was no response on the radio, but the pilots certainly reacted. Poker 3 immediately initiated a go-around. Poker 4, who at the time was descending almost directly on top of Poker 3, also broke off the approach and offset himself to the right. Both pilots reacted instinctively and avoided a collision. The two pilots broke out of the pattern and proceeded to an entry fix where they rejoined and returned for an uneventful landing. After landing, the pilot of Poker 4 relayed that were it not for the controller's immediate action and head's up radio call, it was very likely that both the #3 and #4 aircraft would have collided on the runway. The immediate actions of these two outstanding air traffic controllers prevented a catastrophic collision and resulted in the safe recovery of two pilots and their aircraft.

SrA Ewan was temporarily performing Stockpile Surveillance dispatch duties due to a brief manning shortage. He received a phone call from one of our newest courtesy storage accounts: US Navy Mobile Inshore Undersea Warfare Unit 114. The Naval representative requested the delivery of 581 lbs of munitions assets to their facility for their upcoming unit training assessment weekend. Prior to the delivery, SrA Ewan questioned the Naval account representative as to whether or not they had a valid explosive storage license. The Naval representative was unaware of the requirement to possess such a document. SrA Ewan took it upon himself to contact base weapons safety to verify if the Navy facility, building 751, was on the newest list of buildings licensed for explosives at Whiteman AFB. Mr. Brian Tripp, Chief of Weapons Safety, explained to SrA Ewan that building 751 was not licensed, and commented that it was a great catch on his part. SrA Ewan demonstrated outstanding knowledge and safety awareness in ensuring explosive safety standards were complied with. His actions eliminated risk to unrelated personnel working in the Naval facility and to emergency response personnel who may have been called to the facility.
The crew was returning to home station when a quick and complete failure of the hydraulic number two system occurred just as the B-1 aircraft was maneuvering to a base turn on approach. The simultaneous failure of the hydraulic quantity and pressure led the crew to believe they had a catastrophic leak in the system, which is significant, as the system is the primary system utilized by the main landing gear for retraction and extension, as well as a 20 percent loss of braking efficiency and nose wheel steering. The pilot initiated the emergency action checklists and directed a turn into holding airspace to further assess the situation. Just as the copilot turned the aircraft, they entered Instrument Meteorological Conditions (IMC). After completing the initial emergency actions, the pilot noticed that the heading in his horizontal situational indicator (HSI) didn’t match the copilot’s. At first the HSI was spinning erratically and then drifted aimlessly, setting up a potentially confusing situation. The pilot started an immediate climb to improve their situational awareness (SA). During the climb, the pilot’s Attitude Indicator (AI) also became erratic. Excellent SA on part of the aircrew ensured they maintained aircraft control and remained in their airspace. After a few minutes of holding and burning fuel, the copilot’s Airspeed, Mach, and Altitude instruments failed and went blank. The pilot flew the aircraft, cross-checking heading and attitude information from the standby and copilot’s instruments in order to maintain on course and ensure aircraft control. Meanwhile, the copilot double checked and completed all emergency and normal checklists. The teamwork displayed by the WSOs was also commendable. One WSO backed up the pilot flying by ensuring appropriate heading and airspeed were flown while the remaining WSO coordinated their recovery, and ensured all warnings, cautions and notes were evaluated by the crew. The pilots had to continuously cross reference each other’s primary and standby instruments to ensure the correct aircraft flight data was used. After landing and bringing the aircraft to a full stop, the aircrew egressed the aircraft on the runway because the leaking hydraulic fluid had thoroughly coated the main landing gear trucks and tires. Without a doubt, an excellent landing combined with proper braking (only 80 percent of braking effectiveness available) prevented a potential fire due to hot brakes igniting the hydraulic fluid.

Maj Albert P. Nixon, Capt Vidal S. Garza
Capt John P. Verbanick, 1Lt Jeffrey E. Keim
28th Bomb Wing, Ellsworth AFB, S.D.

Capt Fisher distinguished himself by safely handling a challenging in-flight emergency in which he experienced both an anti-skid malfunction light and a main generator failure in his F-16. While on takeoff roll at night, Capt Fisher experienced an anti-skid malfunction light at approximately 120 knots. During this critical phase of flight, Capt Fisher properly analyzed the problem and elected not to abort the takeoff. Once safely airborne, he focused on flying the radar assisted trail departure. Moments later, he experienced a main generator failure. Capt Fisher demonstrated excellent judgment and focused on maintaining aircraft control and flying good instruments at night, cross-checking his own parameters with that of his flight lead while running checklist procedures for the two different emergencies.

After running the checklist for the main generator failure, he determined that the generator would not reset. Applying solid airmanship, Capt Fisher elected to burn down gas before landing. Once down to a reasonable landing weight, Capt Fisher safely executed a VFR straight in to a full-stop landing. Capt Fisher’s expert handling of this emergency involved simultaneous, accurate, controlled, split-second decisions all of which were necessary to safely resolve the situation. His actions reflect a very high level of airmanship and were absolutely critical in preserving a valuable Air Force asset as well as saving himself.

Capt Kevin D. Fisher
421st Fighter Squadron
388th Fighter Wing, Hill AFB, Utah
Sgt Zimmerman, SSgt Moen, SSgt Ritter, and A1C Blair responded to reports of widespread power outages across Barksdale AFB as a result of severe thunderstorms that rumbled through the area in the late evening hours. The severe storms wreaked havoc on the base, causing tree limbs to fall, electrical poles to snap, and power feeder fuses to blow. The main feeder supplying power to the east side of the base was knocked out of action, leaving the Weapons Storage Area, Airman Leadership School, and two housing areas without electricity. To make matters worse, a broken utility pole in a strategic location had cut power to a quarter of the main base facilities. Acutely aware that a hasty response in the darkness of night with “live” power lines down all over base could be a deadly mistake, the four individuals conducted an in-depth “Tailgate” operational risk assessment before attempting any repairs. The four professionals meticulously inspected their high voltage gloves and other safety gear, double-checked the status of their radios to make sure they could coordinate critical actions beyond visual contact, notified the fire department of their plan of attack, and carefully reviewed clearing procedures for safely reenergizing high voltage overhead lines. Following this deliberate, detailed review, they set out on foot into the damp night to “walk” several miles of high voltage overhead lines looking for blown fuses, open lightning arresters, hanging tree limbs, and other obstructions that might be responsible for the loss of power. After clearing several tree branches, replacing numerous blown fuses, and inspecting and repairing secondary lines to buildings, these four individuals safely coordinated power restoration to the affected areas in less than 3 hours. This team’s selfless professionalism, strict adherence to established procedures, and disciplined application of operational risk management principles under difficult circumstances, minimized disruption to the base and protected critical resources while maximizing the personal safety of every team member and serve as shining examples for all in Air Combat Command.

SSgts Kenyatta Zimmerman, Robert Ritter and Trinity Moen
A1C Cordell Blair, 2nd Civil Engineer Squadron,
2nd Bomb Wing, Barksdale AFB, La.

SrA Gessner was performing the A-man position for hot-pit operations to support a 389 AMU sortie surge. At approximately 1330, an F-16CJ aircraft was marshaled into position and the B-man was directed to hook up the fuel hose, a normal/uneventful operation up to this point. Aircraft hot-pit refueling commenced and was in progress when the fuel hydrant hose coupling at the ground point connection suddenly failed and broke loose. This produced a 2-foot high lethal JP-8 fuel geyser spewing vertically out of the ground. SrA Gessner acted immediately and took charge by informing the pilot in the running aircraft about the situation and the plan for evacuation. SrA Gessner quickly directed the B-man into position to get the fuel hose disconnected from the aircraft while maintaining constant communications with the pilot. The aircraft was safely disconnected from the broken half of the fueling hydrant and marshaled away from the danger area along with the remaining hot-pit personnel. Without pause, SrA Gessner coordinated with the hot-pit supervisor for ground emergency response notification and expeditiously initiated spill clean-up operations. SrA Gessner’s take charge response during a highly stressful situation protected human life and minimized damage to the environment and the F-16CJ aircraft and associated equipment.

SrA Jonathan G. Gessner
366th Aircraft Maintenance Squadron
366th Fighter Wing
Mt Home AFB, Idaho
Due to an extreme deployment schedule, each of the photographed individuals has rotated the Unit Safety Representative and alternate Unit Safety Representative positions, and are responsible for the safety of 130 personnel locally and at four forward operating locations. On average, they deploy twice a year and even with this rotation, they maintained outstanding continuity and have an excellent safety program as seen by their recent “Outstanding” rating for their annual program evaluation. Combined, they have reduced mishaps across the board — reportable mishaps down by 100 percent and Sports and Recreational mishaps by 60 percent. In addition, they have a 94 percent on-time rate for reporting mishap incidents and received an “Outstanding” for exceeding the monthly seat belt check requirements; a benchmark of excellence. They took the lead in squadron Operational Risk Management programs, with all personnel having received the Air Force Operational Risk Management Fundamental Course. Additionally, all supervisors have completed the Air Force Operational Risk Management Leaders Course. These superior individuals have contributed significantly to their squadron being the benchmark organization within the wing for mishap prevention.

9th Physiological Support Squadron
9th Reconnaissance Wing, Beale AFB, Calif.

ACC Safety Salutes
Superior Performance

Maj Jarred R. Evans
Chief of Flight Safety
2nd Bomb Wing
Barksdale AFB, La.

SSgt Martin G. Gonzales
Stockpile Surveillance Crew Chief
355th Equipment Maintenance Squadron
355th Wing
Davis-Monthan AFB, Ariz.

SSgt Elizabeth Nifong-Velazquez
Safety Apprentice
2nd Bomb Wing
Barksdale AFB, La.

SrA David W. Cureton
Crew Chief
9th Aircraft Maintenance Squadron
9th Reconnaissance Wing
Beale AFB, Calif.

Capt Jose A. Lopez
Aircraft Commander
343rd Reconnaissance Squadron
55th Wing
Offutt AFB, Neb.

TSgt Richard E. Davis
Flight Safety NCO
33rd Fighter Wing
Eglin AFB, Fla.

SSgt Trevor K. Laskaris
SSgt Gregory D. Pfeiffer
Armament Systems Craftsmen
4th Equipment Maintenance Squadron
4th Fighter Wing
Seymour Johnson AFB, N.C.

MSgt Paul E. Thompson
Chief of Weapons Safety
2nd Bomb Wing
Barksdale AFB, La.

Maj Darian J. Motivala
Lt Col Albert C. Oesterle
1Lt Robert J. Pettineo
Maj Robert G. McCormack
TSgt Scott E. Lindholm
Lt Col Grover C. Perdue
Maj William H. Smith
Capt Daniel C. Johnson
1Lt David R. Bird
1Lt Hilery L. Ward, Jr.
1Lt Michael P. McNabb
1Lt Ryan T. Ambrose
Capt Jason M. Nelson
Capt Randy A. Fritz
MSgt Stephen T. Kline
CMSGt Scott A. Magoon
SSgt Martin R. Triplett
A1C Brooke E. Torres
A1C Matthew S. Ferguson
SSgt Justin D. Stacey
A1C Christopher A. Sweatman
TSgt Bryant D. Roy
WO Lawrence I. Kazimer
SrA Andrew J. Stine
MSgt Herbert J. Stone
TSgt Travis J. Rockers
A1C Michael K. Pena
965th Airborne Air Control Squadron
552nd Air Control Wing
Tinker AFB, Okla.

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This quarter, MSgt Oswald researched and zealously distributed guidelines for gathering bird remains to minimize the potential threat of avian flu. His proactive efforts expedited the rapid distribution of guidelines through the Air Force Safety Center for DoD-wide use. His Flight Safety Program ensured the 27 FW flew a total of 1,125 sorties and 1,210.9 hours without a Class A or B flight safety mishap despite the high operations tempo of deployments and tasking throughout the world. He was a Safety star performer in the wing receiving the 2006 ACC Commander-in-Chief Installation Excellence and 2005 NM Environmental Green Zia Excellence Awards. MSgt Oswald’s actions during a Danish C-160 emergency divert for an engine malfunction were praised by wing leadership, and he was single out and personally lauded by the 12 AF/CC with a letter of appreciation. A key player in wing Flight Safety’s oversight of airfield construction, he developed a high interest item self-inspection checklist, which ensured zero Foreign Object Damage incidents throughout the completion of the critical $2.4M runway and taxiway upgrade. MSgt Oswald’s phenomenal and dynamic technical prowess was rewarded with 24 AFTO Form 22 Technical Order safety-related changes, and his efforts earned him $10,800 in tangible benefits, as the 2005 27 FW “Suggestor of the Year” Award and nomination for the 2005 ACC Productivity Excellence Award for his innovative achievements. He tracked, reviewed, and edited 12 Class E events, a High Accident Potential, and six Class C safety mishap reports ensuring each investigation was completed well ahead of the 30-day timeline. He also worked with local Airport Managers, coordinating numerous Midair Collision Avoidance (MACA) visits, and was chosen to provide MACA briefings for both Egyptian and Norwegian Air Forces during their orientation visits. He coordinated with Virginia and Tucson Air National Guard squadrons to distribute the benchmarked 27 FW F-16 Hydrazine Response Plan and provided inputs for a Maintenance Resource Management briefing currently utilized throughout Air National Guard Flight Safety offices.

MSgt Kenneth L. Oswald
27th Fighter Wing
Cannon AFB, N.M.

MSgt Thomas J. Kelly II
436th Training Squadron
7th Bomb Wing, Dyess AFB, Texas
Sgt Petelo deployed as the 455th Air Expeditionary Wing (AEW) Weapons Safety Manager to Bagram AB, Afghanistan. His responsibilities also included vital weapons safety training and program oversight for the geographically-separated 451 AEG at Kandahar AB, in support of Operation ENDURING FREEDOM. While deployed, he filled a one-deep SNCO position with astounding results. In his first week, he identified a lack of written "lightning within 5 mile" procedures. He subsequently authored specific emergency procedures guiding safe operations for maintenance personnel to take when electrical storms were in the vicinity. He also collaborated with Army Quality Assurance Specialist Ammunition Surveillance to integrate Air Force and Army explosive safety standards to ensure Quantity-Distance (Q-D) criteria were met for a new Ammunition Supply Point (ASP).

Working in partnership with the 455 AEW Civil Engineering Squadron, he imported real property data into Assessment System Hazard Surveys (ASHS) II software creating a master weapons footprint schematic for Bagram AB. TSgt Petelo’s in-depth knowledge of ASHS II enabled him to expeditiously develop and process an explosive waiver through the US Army Technical Center of Explosives Safety. This process alleviated long-standing obstacles and enabled the use of the new $22 million Joint-use ASP, resulting in greatly enhanced munitions management. While deployed, he also performed over 100 spot inspections and formal assessments on multiple 455 AEW and 451 AEG units, ensuring compliance with explosive safety standards for Bagram and Kandahar AB. His implementation of an Additional Duty Weapons Safety Representative (ADWSR) program and training of 13 ADWSRs ensured knowledgeable, safety-minded representatives at the unit level. His superior program management and leadership was recognized when he was presented the AEW coin by the 455 AEW Commander for exceptional performance during a CENTAF Staff Assistance Visit where an amazing zero weapons discrepancies were noted for either Bagram or Kandahar AB.

THE COMBAT EDGE WEBSITE ADDRESS HAS CHANGED!

Due to mission requirements, THE COMBAT EDGE website has been moved off of the public website server, to a " .MIL" server. As a result, THE COMBAT EDGE will only be accessible from a military computer connection, and will no longer be available to the public. Our new web address is: https://wwwmil.acc.af.mil/combat-edge. If your website has links to the magazine website, please change them to reflect our new " .MIL" address. Additionally, the transition off of the public side of the web to the military side has not been without some growing pains and broken links (roughly 274 single-space text pages of broken links to be exact), but we are working diligently and making headway; please be patient in the interim until we are completely back on line. In the meantime, if there is a particular story or photo you need, but can’t access it, please send an e-mail message with your request to acc.sem@langley.af.mil and we will send you the information.
## FY06 Aircraft
**As of February 28, 2006**

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<th>Fatal</th>
<th>Aircraft Destroyed</th>
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<td>AFRC (ACC-gained)</td>
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### Aircraft Notes
ACC had two Class A mishaps this month and one close call. Two involved aborts and the third was in the landing phase. It's a reminder for all of us to think over what we are going to do in those takeoff and landing scenarios. Ground speed zero is the place to plan actions — not 160 kts full of gas and bombs. At that speed you can travel more than 500 feet in the time it takes you to react. Every second spent deciding what to do next, you travel 267 feet. That could mean the difference between ejecting off the end of the runway, hitting an obstacle or starting a brake fire. Whether you fly a Predator, U-2, or F-16 chair flying, takeoff and landing emergencies just might make the difference between a “there I was story” and a smoking hole.

## FY06 Ground
**As of February 28, 2006**

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### Ground Notes
There were four Class A mishaps during Feb 06. One was a GVO which overturned on an interstate ejecting the operator; an off-duty PMV4 which struck a traffic light post; a sports and recreation mishap involving a snowmobile; and an Airman lost his life in a house fire. All of these mishaps were preventable if the personnel involved had just used the principles of ORM.

## FY06 Weapons
**As of February 28, 2006**

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<th></th>
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### Weapons Notes
This last February our first mishap occurred when we had a sheared umbilical on a CATM-9. What followed were four more Class D reports. All these mishaps occurred to AIM-9 seeker heads. Four of these reports were because of sheared umbilicals and one was a cracked seeker. All of these mishaps were avoidable and all were caused by improper maintenance practices. All of these are simple fixes that could have saved the Air Force tens of thousands of dollars and would have kept five AIM-9s serviceable and war ready. Let’s stay vigilant and make sure we are doing it right.

### Symbols for Mishap Aircraft
- **A-10**
- **B-1**
- **F-16**
- **B-2**
- **U-2**
- **E-4**
- **RQ-1**
- **F-4**
- **HH-60**
- **F-15**
- **RQ-4**
- **T-38**
- **F/A-22**
- **B-52**
- **E-3C**
- **C-130**

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**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
TINY...? WHAT IN SAM'S HILL ARE YOU DOING ON THAT DANGEROUS THING?

DANGEROUS TO YOU, YES. BUT IN THE HAND OF AN EXPERT HANDLER LIKE ME ....

WHO, UNLIKE YOU, HAS ALL THE SAFETY PRECAUTIONS FIXED IN MY MIND. I KNOW WHAT I'M DOING.

HATEFUL THING.

VAROOM!

TINY...

CRASH!

WHY DID I TAKE TH' CHANCE OF TALKING TO FLEAGLE? WHY...?
An effective Bird Aircraft Strike Hazard (BASH) program has an active monitoring element, good strike reporting, and is one that is proactive in aspects of planning. A program that is involved in planning things like new base or community projects which border the base can help stop a problem before it becomes one …

Mr. Thomas Olexa, Langley AFB Wildlife Biologist