

COLONEL CREID K. JOHNSON, DIRECTOR OF SAFETY

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MAJ ANTON KOMATZ Executive Editor

Maj Wendy Hamilton *Editor*

Ms. Barbara Taylor Associate Editor

SSGT CARRIE ATWOOD PUBLICATIONS DESIGNER

TSGT BEN BLOKER Associate Photo Editor 1st Communications Squadron

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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: acc.sem@langley.af.mil

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CELEBRATE SAFELY

We are in the midst of our holiday season and, traditionally, it's a festive time of year spent with family members. It is a time for us to reflect upon the past and make plans for the diverse challenges the future will bring. Within ACC, the accomplishments we made this past year are impressive — the safest year in command history overall. As we celebrate this season, please take the time to remember our fellow Airmen standing alert or on duty supporting various operations around the world.

It is especially important that during this time you practice personal risk management, especially when traveling. There are four stories in this month's issue that everyone needs to read before getting on the road. Each one outlines ways to avoid hazards associated with road travel like drowsiness, nighttime risks, and getting stranded in your car without the basics. In addition, supervisors need to conduct pre-departure safety briefings to ensure personnel make smart decisions, have well thought out travel plans, don't overextend themselves, and consider all the potential risks. If travel plans don't pass the common sense test, don't travel and simply call "knock-it-off."

All commanders, supervisors, coworkers, and individuals need to actively set the proper conditions for a safe holiday season. It is critical that all of our Airmen act responsibly to take care of themselves and those around them. Everyone needs to be very aware of the choices they make. We've seen it time and again where celebrations start off with the best of intentions only to end in tragedy. Through our active involvement we can prevent drinking and driving, can ensure people wear seat belts, can help personnel know the dangers of exceeding posted speed limits, and

can help emphasize the need to stay alert to our surroundings. As professional Airmen 24/7, we have this obligation. We don't want to lose a single Air Combat Command family member during this holiday season. Let's begin 2005 safe and ready for the diverse challenges that lie ahead. Best wishes for a safe and happy holiday!

> Colonel Creid K. Johnson, ACC Director of Safety









ummer has always been my family's favorite time of year. The trees full with leaves, lush green lawns, flowers in full bloom, and the school year coming to an end. This is an exciting time of year — a time for families to share special moments together, and a time for family vacations. Because our lives become so busy with work, school, and children's activities, we all want our vacation time to count. We put a lot of effort into planning a relaxing vacation, trying to make the most of our time together. I know that my family did.

Last year while vacationing with relatives in Boise, Idaho, we lost half of our family in a car accident. My husband Bill and son Nick awoke early one morning to go fishing. Bill and Nick loved to fish together and looked forward to catching salmon that day in one of the beautiful rivers of the nearby foothills. They rose that morning at 3:00 a.m., made the 3-hour drive to the river, fished for several hours, ate lunch, and started the 3-hour return trip. They were driving back to meet us in Boise when Bill fell asleep at the wheel.

After several tours of duty, hundreds of combat hours flying an Air Force F-15 over Iraq, patrolling our nation's capitol on September 11th and for weeks thereafter, I could never have fathomed that Bill would lose his life, and the life of our son, in a single car accident having fallen asleep at the wheel.

I often wonder how this could have happened, and now I realize we lived a lifestyle that pushed us to the extreme. We weren't thrill seekers jumping off cliffs, or skydiving, or driving fast vehicles, but we did what many of you do. We tried to fit too much into a day. We didn't want to waste a minute of time, especially vacation time, since it was our time together as a family.

This has been a very difficult year for us, but we have learned to count our blessings. After our experience last year, we hope to raise awareness by sharing with you the following regarding the dangers of driving while fatigued. It doesn't matter who you are, how strong, how smart, how fast — if you get fatigued you are exponentially raising your chances of being in a car accident. It's the holiday season and many of you will find yourselves trying to visit everyone during your limited vacation time. You will work till the last possible moment, make crazy driving plans to get to "Mom's" 16 hours away by driving all night so you can have one more day there. You figure you will take turns driving and rest when you are the passenger.

Consider the following research and studies:





- 62 percent of fatigue crashes or near crashes occurred when drivers had driven for less than 2 hours, often on everyday trips near home, where most driving is done.
- Nevertheless, long periods of driving are fatiguing in themselves, placing drivers at risk even if they were not tired when they started the trip.
- Taking breaks from driving tend to delay the development of fatigue effects on driving. The benefits of breaks are more pronounced early in a journey.
- Almost half of the drivers

who had a fatigue crash or near crash said they had not had a full night's sleep the night before.

To avoid driver fatigue on long trips, we urge you to:

- Plan long trips in advance so you know where to stop to take a break.
- Take a break at least every 2 hours.
- Plan to stay somewhere overnight if you are go ing on a long journey.
- Share the driving and make sure you rest

when you are not driving.

• Try not to drive during hours when you would normally be asleep (early mornings and late nights).

Watch and heed these warning signs when you are driving on long or short trips:

- You keep yawning
- Your reactions slow down
- You feel stiff or your eyes feel heavy
- You find you are daydreaming
- You wander over the centerline or onto the edge of the road

At one time in his career, Bill served as a safety officer for his F-15 squadron and had briefed fellow pilots on the dangers of driving while fatigued. We knew these facts, but we never thought that it could happen to us. Our hope is that you will heed these warnings so you and your family will have a safe and happy holiday. Please take the time to get enough rest, not only on vacation, but everyday. By doing so you can prevent another death in our Air Force family.





While a kit must be tailored to your individual or family needs, there are some basic items that should be considered mandatory. These include a spare tire, jack, chains (that fit), jumper cables, road flares, some repair tools, and an ice scraper. Next would be a

he top three places people spend most of their time are home, work, and their vehicle. Now for some of us, home and work rank in the top two spots, but our cars always seem to make it to third place. And whether it is going to work, around town, a day off, or on vacation, it's usually our cars that are taking us there. With all this time we spend in our vehicles you would think people would include more safety equipment in their trunks than just a jack and spare tire, but they don't.

Even with all this time spent in our cars, motorists still find themselves poorly prepared for most roadside emergencies, weather hazards, or vehicle accidents that may occur. When this happens, even minor incidents can become life threatening. A few years ago this lack of preparation almost cost a New Mexico woman her life. She was on her way to Santa Fe, N.M., for a ski vacation when her car went off the side of the road. She was stranded for several days in her car, suffering from dehydration, hypothermia, frostbite, and hunger. Purely by accident, she was discovered by a road crew who rushed her to a hospital where her injuries were treated. If she had done a little preparation before her trip, such as making a car survival kit, her life-threatening situation may have turned into just a minor inconvenience.

The first step in preparation is to admit that something could happen. You can't start to solve any type of problem without realizing that there is one. Then look at the risks and possibilities of where you go in your vehicle. I travel a lot between Cannon Air Force Base, N.M., and Phoenix, Ariz. This means my kit has supplies and equipment to handle local emergencies as well as the extremes found in the mountains and desert. Once you have determined your risks, you can outfit your vehicle with the equipment that will make your emergency more survivable.



good first aid kit that can treat both major and minor injuries. A handful of Band-Aids just won't help when a serious laceration or broken bone is involved. Plus don't forget any prescriptions that your family has to have (e.g., an extra asthma inhaler). Finally, there are your survivaloriented items such as a flashlight, wool blankets, candles, matches, heavy rope, folding shovel, work gloves, large trash bags, brightly colored scarf/ handkerchief, mirror or reflective solar shade, and water. Sealed water has a shelf life of 6 months, so date and mark it. Each of these items meets multiple needs in personal protection or signaling. Remember,

these are only basic vehicle survival items. Depending on where you're going and your vehicle's storage space, you may want to add more items. Some nice-tohave items are sleeping bags, extra clothing, billed and warm hats, a brightly colored plastic tarp, personal medications, and foods that are high in carbohydrates (e.g., hard candy and granola bars).

Now that you have some car survival equipment you just need to remember a few safety tips on how to use it all. If you're stranded in your vehicle, do not leave; stay with it. Check and treat any injuries. Tie a signal flag (your bright scarf/handkerchief) to the antenna. To insulate yourself from the cold, use clothing, paper, maps, and any other suitable items. Check and clear your exhaust system of snow before running your heater. In the cold, run your engine for 5 minutes every 30 minutes or for 10 minutes every 60 minutes. Just make sure your timing coincides with news broadcasts on the radio. While running your engine, ensure that you have adequate ventilation (e.g., window open 2 to 3 inches). Ventilation is also important when using a candle or chemical fuel. Do not fall asleep with the engine running. In extreme heat, use your billed hat. Tie a tarp or blanket above the vehicle to protect the passenger area from the sun's rays. This creates a layer of shade above the vehicle and may cool the temperature down by 10 degrees. If you decide to run your vehicle's air conditioner, follow the same procedures for running a vehicle in the cold.

No matter what the temperature or weather is, stay hydrated to help maintain your body's normal temperature. When you have



enough water, food will also help maintain your temperature in the cold. If a vehicle passes, signal it by using your flares, reflective material (vehicle mirror, kit mirror, or reflective solar shade), or horn.

Armed with your car survival kit and little knowledge (cut this article out and put it in your glove box), you should be able to handle most emergencies from Mother Nature or mankind. Whether it's an accident, mechanical failure, or a true survival situation, your attitude will make the ultimate difference. Be sure to include a little positive attitude and a lot of safety common sense in your newly made car survival kit. Finally, be sure to take a moment after an emergency occurs and S.T.O.P. (Stop, Think, Observe, and Proceed) in a safe and logical manner.

NOOZE you

During the holiday season, many will be looking forward to an extended leave period and time with their family and friends. While you may be eager to begin this period of rest and relaxation, don't be in a rush to jump in the car after a long day of work. The extended hours we face and the associated lack of sleep could equal danger on the open highway.

It is difficult to attribute crashes to sleepiness because there is no test to determine its presence, as there is for intoxication. In addition, there are no standardized criteria for making the determination of driver sleepiness, and there is little or no police training in identifying drowsiness crash factors.

The National Highway Traffic Safety Administration (NHTSA) estimates that approximately 100,000 reported accidents annually (about 1.5 percent of all crashes) involve drowsiness or fatigue as a principal causal factor. A conservative estimate of related fatalities is 1,500 annually, or 4 percent of all traffic crash fatalities. At least 71,000 people are injured in sleep-related accidents each year, and NHTSA estimates that these crashes represent \$12.5 billion in monetary losses annually.

Drowsiness or fatigue could play a role in crashes attributed to other causes as well. About 1 million crashes annually — one-sixth of all accidents — are thought to be produced by driver inattention. Sleep deprivation or fatigue makes such lapses of attention more likely to occur.

Unfortunately, a lot of people drive sleepy. In a 1999 National Sleep Foundation (NSF) poll, 62 percent of all adults surveyed reported driving a car or other vehicle while feeling drowsy in the prior year. Of those surveyed, 27 percent reported that they had, at some time, dozed off while driving, and 23 percent of adults stated that they know someone who experienced a sleep-related crash within the past year.

You can't control your own sleep and, if you're tired, you can fall asleep at any time. Just as you can fall asleep at any time, you can also fall asleep anywhere and that includes on the road. While driving, people tend to fall asleep more often on high-speed, long, boring, rural highways. All drivers are at risk of a sleep-related accident if they are:

- Sleep-deprived or fatigued (awake for 20 hours or more or 6 hours of sleep or less in a 24-hour period).
- Driving long distances without rest breaks.
- Driving through the night, the early aftemoon, or other times when they are normally asleep.
- Taking medication that increases sleepiness or drinking.
- Driving alone.

efore e Frequent travelers (e.g., business travelers).

Sleep-related crashes are most common in young people, who tend to stay up late, sleep too little, and drive at night. A North Carolina state study found that 55 percent of crashes involving drivers who fell asleep at the wheel involved people 25 years old or younger, with a peak age of occurrence of 20. Of those accidents, 78 percent of the drivers were male. Shift workers, people with more than one job, and commercial drivers are also susceptible to sleep-related accidents.

Prevention is the key for avoiding sleep-related crashes on the road. Before you begin a trip, you should follow these rules for safe, alert driving:

- Get a good night's sleep. The average person requires about 8 hours of sleep per night, although this figure varies from individual to individual.
- Plan to drive long trips with a companion. Passengers can help look for early warning signs of fatigue or switch drivers when needed. Passengers should stay awake to talk to the driver.
- Schedule regular stops of every 100 miles or 2 hours. Avoid alcohol and medications (over-the-counter and prescribed) that could impair performance. Alcohol interacts with fatigue and increases its effects, just like drinking on an empty stomach.

What should you do if you feel fine when you start your trip, only to get that drowsy feeling just a little down the road? First of all, look for the warning signs of fatigue, which include:

- Forgetting the last few miles driven.
- Drifting from lane to lane or hitting rumble strips, and jerking your car back into your lane.
- Experiencing wandering or disconnected thoughts.
- Yawning repeatedly or rubbing your eyes.
- Having difficulty focusing or keeping your eyes open.
- Tailgating, missing traffic signs, or missing turns.
- Having trouble keeping your head up.
- Impatient, irritable, and restless feelings.

Recognize when you are in danger of falling asleep — you cannot predict when you may nod off. Respond to the symptoms of fatigue by finding a safe place to stop for a break. Pull off into a safe area away from traffic and take a brief "power" nap (15 to 45 minutes) if you are tired. Drink coffee or another source of caffeine to promote short-term alertness, but be aware that it takes about 30 minutes for caffeine to enter the bloodstream. TURNING YOUR RADIO UP AND ROLLING DOWN THE WINDOWS WILL NOT KEEP YOU AWAKE! The only cure for drowsiness is sleep.

Before you get in your car this holiday or any season, make sure you have enough rest to complete your trip safely. Eight hours might seem like a long delay, but it is still shorter than forever.

Article adapted from material found on the NSF Web site, www.sleepfoundation.org

Playing the driving increases of accidents

By TSgt Bart Craven, Robins AFB, Ga.

TSgt Bart Craven Robins AFB GA

Many people dislike working at night, and the reason is usually simple. It can be harder to function at night than it is in the daytime.

Darkness can make driving to and from work a challenging job. It can be dangerous, too. According to the National Safety Council, fatal vehicle accidents increase sharply during the hours of darkness. In fact, statistics show chances of being involved in some type of accident are about three times greater at night than during daylight hours.

There are things to do, facts to know and techniques to use that can be used to reduce the chance of a mishap and ensure safe nighttime operations.

Safety officials recommend the following tips to make trips to and from nightshift safer.

- Before leaving work centers or home, make sure vehicle headlights, taillights, and directional signals are operational.
- Keep an operational flashlight and reflective belt attached to an outermost garment.
- Make sure headlights and windshields are clean both inside and outside.
- When driving at night, use extreme caution because even familiar surroundings may seem different.
- Wait 5 minutes before driving after leaving a lighted building, it takes a few minutes for eyes to adjust to the dark.
- Do not wear any kind of sunglasses at night; there are no glasses designed to reduce headlight glare at night; any lens that reduces the brightness of headlights also reduces the light reflected from dimly-lit objects at the side of the road, particularly pedestrians.
- When following another vehicle at night, keep low beams on so the other driver will not be blinded.

- Switch lights from high to low beams when an oncoming vehicle is about 500 feet away; also, when behind another vehicle use low beams within 300 feet of that car's rear.
- Limited vision at night reduces the amount of stopping time when trouble is spotted; reduce speed accordingly.
- Look ahead into the areas that are only faintly illuminated; the faint glow of a distant headlight or some movement may be an early alert to a possible hazard.
- Never stop on any roadway at night; it is hard for an approaching driver to tell whether or not a stopped car is moving until it's too late.
- Take curves slower at night; headlights point straight ahead and shine off the road which reduces the view of the road considerably.
- Switch to low beams in fog or snow; high beams will reflect more off fog and snow.
- Last, and most importantly, never drink and drive. Besides the obvious reasons, alcohol can drastically slow the direct affect of the eye's sensitivity.

Nighttime driving is risky. In one year alone, there were more than 2 million nighttime collisions in the United States. Of those, more than 18,000 were fatal. While teenagers fare especially poorly at night, more than half of all their motor vehicle deaths occurring between 9 p.m. and 6 a.m., older individuals are also at risk. For every 15 years of life, the amount of light admitted to the eye is cut by as much as half. That means that the average 60 year old needs three times as much light at night as the average 20 year old. Therefore, it is especially important to understand the dangers of nighttime driving, so that you can properly assess the risk and arrive at your destination safely.

By TSgt James Brabenec, Randolph AFB, Texas

Each year, the Air Force communicates the need to stay safety-focused during the 101 Critical Days of Summer, but injury, death, or mission impairment are only part of the reason. Any unsafe act may lead to Line Of Duty (LOD) determinations and considerable consequences for Airmen.

ne od

A LOD determination is an administrative action conducted after an investigation into the circumstances of an Airman's illness, injury or death.

"Along with the Air Force's efforts to promote safety awareness, it's critical to educate all Airmen on the LOD process," said Lt Col Richard Desmond, AFPC judge advocate. "This process is something that affects everyone, not just Airmen who make poor choices or who go absent without leave. If you lead or supervise Airmen, it is imperative you understand this process so you can communicate its intent and possible impact to your troops."

Maj Gen Tony Przybyslawski, AFPC commander, and the officer who oversees all enlisted and officer personnel programs for the Air Force, said administrative actions such as the LOD determination can have far reaching implications on Airmen's lives.

"I believe most people automatically think of punitive responses to misconduct, and certainly these should be remembered," said General Przybyslawski. "But, while unfavorable information files, loss of rank, or reprimands may affect Airmen's careers, a LOD determination may significantly alter their lives, or the lives of their surviving family members if death occurs. This is not something to take lightly."

A LOD seeks to determine if Airmen's actions were outside the LOD or the result of misconduct. The determinant will also consider if the action happened while they were absent without leave.

"Because substantial government benefits are at stake, the LOD determination is critical," said Colonel Desmond.

These benefits may include disability compensation and retirement, Veterans Administration assistance, Survivor Benefit Plan payments and others.

As for the number of LOD instances, personnel from the AFPC legal office determined 24 cases this year included actions either not in the LOD or as a result of misconduct. All told, 11 of the 24 cases resulted in death. Statistics from 2003 show similar numbers as 39 cases provided findings where Airmen's actions were deemed to be outside the LOD, and nine cases resulted in death.

"In these cases, no ongoing survivor benefits were paid to family members," said Colonel Desmond.

But, death is only part of the issue. When concerning illness or injury, Airmen may face lengthy periods of health care or rehabilitation and often at substantial costs.

"All Airmen who become sick or injured on active duty will receive medical care," said Colonel Desmond. "But, once they are discharged, an LOD can prevent them from accruing any further benefits."

For more information on LOD determinants, Airmen can contact their base legal offices or consult Air Force Instruction 36-2910.

Editor's Note: Reprinted courtesy of Air Force Personnel Center Public Affairs.



MONTHLY AWARD WINNERS



On the afternoon of June 9, the crew of Sentry 05 plus one observer had an uneventful takeoff from Cold Lake Canadian Forces Base (CFB). Sentry 05 was cleared to the tactical frequency by a student engineer and directed to the orbit. The mission crew began to power up aircraft mission systems, but were unable to because of a computer malfunction. Sentry 05 continued to a maintenance orbit to attempt troubleshooting and burn down fuel for an eventual return to base. Approximately 45 minutes into the flight, while established in the orbit at 240 knots indicated air speed, the flight crew heard a loud pop in the pilot's overhead panel and noticed severe electrical arcing, smoke, flames and burning debris falling from the panel. The aircraft commander immediately made a public address announcement directing

the crew to get on 100 percent oxygen and called for the FIRE, SMOKE, or FUMES, AIRCRAFT INTERIOR checklist. Due to the location of the fire, the instructor flight engineer was in the best position to combat the fire and prepared the fire extinguisher for use if needed. The student flight engineer continued with the checklist while the mission crew reported all personnel on oxygen. The designated mission crew fire fighters were ready to assist if the fire continued, while the passenger monitor directed the passenger to get on oxygen and strap in. The copilot called the tactical agency to declare an emergency as the navigator computed a direct course to Cold Lake CFB for an emergency recovery. The fire continued to burn for approximately 7 seconds prior to the circuit protection devices removing power. After the appropriate checklist was completed and the flight crew verified that the fire was out, the fuel dump checklist was accomplished. By the time the fuel dump checklist was complete, Sentry 05 was passing 15,000 feet mean sea level, approximately 50 nautical miles from the airfield. With the gear down and all safe indications, Sentry 05 continued the approach with normal configurations to an uneventful full stop. The immediate and correct actions of the entire crew resulted in the safe recovery of a valuable, limited density, high demand asset and 29 crew members.

Maj John Schatz, Maj Joel LaPlante, 1Lt Eric Steele, 1Lt Chris Bray, SSgt Christian Williams, TSgt Bob Davis, Maj Samantha Helwig, Capt Michael Boynton, Capt Canyon Knop, 1Lt Jeffrey Dale, 1Lt Curtis Knighten, 1Lt Shaun Lloyd,Capt Kirk Hansen, 1Lt Michael Sward, TSgt Kelly Clark, Capt Timothy Wilcox, Capt Jennifer Kyseth, Capt John Chambers, Capt Sean Bruce, SSgt Vincent Wittig, SrA David Ebert, SSgt Kristin Odekirk, SrA Edgardo Montoya, SrA Peter Cox, TSgt Philip Barton, SSgt Michael Randazzo, SrA S. P. Quinn, SrA Adam Satnes, SrA Carlos Hernandez, 960th Airborne Air Control Sqdn., 552nd Air Control Wing, Tinker AFB, Oklahoma



S rA Joseph Schmitz was dispatched to phase section to perform a routine F-15 landing gear operational check. During the check, all cockpit indications were normal and the landing gear was operating perfectly. Airman Schmitz continued his inspection of the landing gear and noticed the left main landing gear, lower drag brace was not fully seated on the stop block. Upon further investigation, he discovered a 3/8-inch bolt lodged behind the lower drag brace beryllium stop block. The bolt was preventing the left main landing gear from fully extending to the down and locked position. He re moved the bolt and coordinated to have the beryllium inspected le a qualified machinist. He then had an electrician verify correct adjustment of the landing gear down limit switches. Both sp cialists determined there was no damage and the switches we correctly rigged. SrA Schmitz's attention to detail and impecable maintenance practices resulted in the correction of a co

dition that could have caused a catastrophic landing gear failure and possible loss of a \$36 million aircraft or worse, human life.



SrA Joseph M. Schmitz, 33rd Maint. Sqdn., 33rd Fighter Wing, Églin AFB, Florida



apt Robert Mitchell was number three of a four-ship on an F-15C continuity training sortie. In an over water training area, Capt Mitchell noticed a master caution light accompanied by a PC1-A hydraulic light, indicating one of his hydraulic systems had failed. He immediately made the decision to return to base and directed his wingman to perform a battle damage check. His wingman noticed a significant amount of hydraulic fluid leaking from the left side of the aircraft. Capt Mitchell declared an in-flight emergency with air traffic control and informed the supervisor of flying. After expeditiously returning to the traffic pattern, the emergency escalated dramatically when the F-15's PC1-B and UTL-A hydraulic systems failed. With these failures, Capt Mitchell was forced to fly his F-15 with a "dead" left wing (no left aileron or left flap) and performed an emergency landing gear extension due to the loss of UTL-A hydraulics. Additionally, Capt Mitchell

determined he would need to make an approach end cable arrest ment to stop the aircraft, as the UTL-A failure also results in loss of brakes. He correctly evaluated that the severe hydraulic leak migh potentially lead to total hydraulic failure, which could ultimately force him to eject. Capt Mitchell masterfully flew a straight-in approach with the "dead wing" and a no-flap configuration (since only the righ flap was operational), properly accepting higher than normal air speed to account for the lack of flaps. He lowered the aircraft arresting hook, ensured a good landing gear configuration check with his wingman, and prepared for the approach end arrestment On 3-mile final, the continuing hydraulic leak led to yet another syst tem failure of the UTL-B. In the face of multiple emergencies, Cap Mitchell flew the aircraft to a flawless landing and textbook cable

engagement. Only moments after the aircraft came to rest, the F-15's remaining hydraulic pressure fell to zero as the utility system was fully depleted. Capt Mitchell's quick thinking, composure under intense pressure, impeccable airmanship and detailed systems knowledge prevented the loss of a \$38 million Air Force combat asset and potential loss of life.



Capt Robert K. Mitchell, 60th Fighter Sqdn., 33rd Fighter Wing, Eglin AFB, Florida

MONTHLY AWARD WINNERS



Sgt Bradford Gilley and AIC Richard Jackson discovered a broken P-1 gun connector while performing routine safe for maintenance procedures on an F-15 gun system that had returned from a gun mission. Further investigation revealed sheared bolt heads on both mounting bolts that secured the firing contact to the gun housing, allowing the firing lead to swing freely with the firing contact attached. They also noted the gun system would not rotate and immediately up-channeled a ground emergency. Sergeant Gilley ensured Armament Flight and Rapid Response team personnel were dispatched to the scene. A more thorough examination revealed a 20 millimeter round casing was split into two pieces around its circumference with the breech bolt and casing in the forward firing cam path at about the 7 o'clock or firing position. Later analysis determined this round fired prematurely, causing the gun to jam due to stress on the breech bolt in the unlocked position. Ensuring all safety precautions were taken, Sergeant Gilley and Airmen Jackson and Charles Gilbert removed the gun from the aircraft. Along with Armament back shop technicians' assistance, they disassembled the gun housing to facilitate removal of three live 20 millimeter ammunition rounds. The gun was then taken to the Armament Flight for further inspection. The unfailing dedication of SSgt Gilley, A1C Jackson and

SrA Gilbert to safety and their strict adherence to Air Force directives and manuals averted the potential for further damage to equipment and critical wing assets.



SSgt Bradford C. Gilley, A1C Richard L. Jackson, SrA Charles S. Gilbert, 33rd Aircraft Maint. Sqdn., 33rd Fighter Wing, Eglin AFB, Florida



A s part of their daily preparation for flight operations, 23rd Fighter Group (FG) maintenance personnel loaded an LAU-117 launcher onto an A-10 in order to carry a TGM-65 for local training sorties. After a routine training sortie on July 12, a post-flight inspection by flight line personnel revealed one of the two LAU-117 suspension lugs was broken. The 23 FG Maintenance Armament Flight began investigating the cause of the fractured lug and discovered an abnormal degree of corrosion on the lower side of the lug. The Armament Flight immediately contacted other A-10 units to see if they had experienced similar problems. They discovered

that the 355th Wing at Davis-Monthan AFB, Ariz., had a comparable event several months earlier. The Armament Flight determined the best course of action was to perform a 100 percent inspection on all the base's LAU-117 launcher suspension lugs, so the 23 FG Commander ordered the local one-time Non-Destructive Inspection (NDI). Over a 2-week period, 88 sets of launcher suspension lugs (176 lugs) were painstakingly inspected and two more cracked lugs were found. Eliminating this risk probably prevented serious damage to 23 FG aircraft and personnel and serious damage to civilian personnel or property that could have resulted if a TGM-65 had fallen off an A-10 flying in the local area. The Armament Flight is submitting an AF Form 22 to require NDI of the suspension lugs every 24 months, in addition to the existing inspections. Along with the 23 FG cross-tell, a technical order change will alert the rest of the Air Force of this potentially dangerous situation. The Armament Flight's diligence and creation of the proposed NDI could prevent similar instances across the combat Air Force in units that carry LAU-117s.

23rd Maint. Sqdn., 23rd Fighter Group, Pope AFB, North Carolina



S rA Christopher Barker was handpicked to be the 33rd Combat Communications Squadron's Unit Safety Representative and charged with overhauling and revitalizing the unit's entire safety program. He began with an all-inclusive review of the squadron's nine separate Job Safety Training Outlines which resulted in significant modifications and inclusion of shop-specific safety requirements. He then reviewed 130 AF Forms 55, Employee Safety and Health Records, identifying deficiencies in 35 of them. He personally directed their re-accomplishment to ensure mandatory training requirements were properly tracked, making a clear distinction between "one-time" and "recurring" training. Furthermore, he personally inspected all of the squadron's safety programs, coordinating the correction of 15 identified deficiencies with appropriate flightsafety representatives and supervisors and eradicating all of them within 30 days. As part of that effort, Airman Barker created ar innovative computer-based spot inspection tracking system which he used to complete 25 monthly spot inspections through out the squadron. During the Unit Compliance Self-Inspectior that was done to prepare the Group for an upcoming Operational Readiness Inspection, he inspected six flights and sever work centers. He helped the squadron's three facility managers identify and correct several safety problems from simple trip ping dangers to complex electrical hazards. During one of the spot inspections, he prevented a potential life threatening mis hap by quickly identifying the improper wear of a safety harness in a work center. He followed up by working with the section supervisor to ensure individuals were adhering to training and proper procedures for use and maintenance of fall-protection equipment. Airman Barker also led a hard-charging effort in the "Seat Belt Awareness Program" by coordinating over 200 sea belt surveys. His actions heightened the awareness of over 800 Group personnel and resulted in an outstanding 100 percen seat belt compliance rate. Finally, SrA Barker emphasized off duty safety with an active weekly briefing campaign, containing everything from holiday safety tips to the perils of drinking and driving.

SrA Christopher M. Barker, 33rd Combat Communications Sqdn., 3rd Combat Communications Group, Tinker AFB, Oklahoma

ACC Safety Salutes Superior Performance



Capt Kevin R. Eilers, Upgrading FTU Instructor Pilot 358th Fighter Sqdn., 355th Wing Davis-Monthan AFB, Ariz.

SSgt Daniel C. Penhallegon, Senior Weapons System Coordinator 2nd Maint Operations Center, 2nd Bomb Wing Barksdale AFB, La.



Disconnect By Capt Orrin Pierce, Dyess AFB, Texas

lying long-duration sorties in the B-1, or any airframe, presents numerous challenges to an aircrew – not a few of which are physiological in nature.

Last fall, as our squadron deployed to a Forward Operating Location (FOL) in support of Operation ENDURING FREEDOM (OEF), we all knew we'd be in for quite a shock in terms of flying hours. Normal OEF sorties ranged from 13 to 18 hours, quite a jump from the duration of 3 to 5 hours back home. We prepared the best we knew how for the marathon flying times and the multiple air refuelings required for each mission.

One sortie for my crew started uneventfully, but took a turn for the worse about 18 hours into the standard 24-hour duty day. It was clear for a "breakaway" and the tanker began an ascent. I took the aircraft and maintained the contact position while attempting to disconnect the boom via our system. But again, the disconnect mechanism failed to expel the boom nozzle. As the tanker pitched up and vectored away from us, the boom reached its point of maximum extension and was extracted via a "brute force" disconnect.

Once clear of the boom, we descended to the bottom of the refueling block. We first noticed the obscured windscreen while scanning to find the tanker's position. I liken it to flying through a dense cloud, but as I said, it was a clear night. We quickly determined there would be no more attempted contacts that night unless the view through the fluid on the windscreen



outside and near midnight local time as we prepared for our final air refueling of the mission. We anticipated an onload of 60 - 80,000pounds of fuel, requiring 10 to 15 minutes on the boom.

We were on the boom and receiving gas when our aircraft began to inch forward in the envelope. The tanker attempted an automatic disconnect, but the mechanism failed, and the boom remained latched. The boom operator called dramatically improved. We also needed to determine what the fluid was.

Keep in mind there is no ambient lighting over the ocean so we couldn't tell the fluid's color, a big help to determining the leaking fluid. We noted our current fuel and the time as a preliminary data point for determining if the leaking fluid was fuel. Thus, the troubleshooting began. Discussion with the tanker crew confirmed their boom had been damaged, and our hydraulic system, dedicated to the operation of the air refueling receptacle, was suspiciously low on pressure. We theorized the refueling port on our aircraft must also be damaged, and that the fluid on the windscreen was leaking hydraulic fluid rather than gas.

After 15 minutes, the windscreen began to clear, and once again, we could see the stars and the tanker's position well above us. Whew! Now all we needed to do was recover the jet and explain how we'd gotten into the predicament in the first place. Or so we thought.

About an hour from our intended destination, we detected a distinct fuel smell permeating the cabin, and began to suspect that the leaking fluid was fuel. To complicate matters, the aircraft primary oxygen system (MSOGS) stopped working shortly after we started to return to base, and as a crew, we elected to save our backup oxygen for the final portion of the flight or in case the fuel smell worsened. At this point, the smell was still tolerable.

During the period before we landed, the window repeatedly became obscured and then cleared each time after 10 to 15 minutes. Our plan was to set up for an instrument approach, coordinate with all the appropriate agencies, and then hold until the window cleared enough for the landing. Deteriorating weather to the south forced us to deviate, and during this time, we unsuccessfully attempted contact with the forward operating location on the high frequency and ultra high frequency radios. The best we could do was getting them to understand we had an emergency.

Forty-five minutes from the airfield, the window obscured again, but this time it never fully cleared. As we neared the airfield, the normal lights were not visible at all. In fact, it wasn't until we over flew the fully lit runway environment that we realized the magnitude of the torrent of fluid that streamed across the windscreen. The cockpit side windows were equally useless, and even the Weapons Strike Officers couldn't see from their portholes. We truly had zero visibility.

We asked the tower controller to maximize the intensity of the runway lighting and then flew an instrument landing system to a planned missed approach. Doing so allowed maintenance and the supervisor of flying to get a closer look. Even at 165 knots and at night, both agencies saw a massive amount of fluid billowing from the top of the nose of the aircraft. Now they knew the nature of our problem.

We returned to the holding pattern, and we brainstormed some more. It was 3 a.m., almost 3 hours after the brute force disconnect, 21 hours into our crew duty day. We had 6 hours of fuel on board, and we'd been airborne for 13 hours. We were having great difficulty transmitting and receiving on our radios due to static, and all four crewmembers began to feel the effects of smelling fuel fumes for so long. Our first decision was to begin to use the backup oxygen. We weren't sure if we'd need to hold for another 10 minutes or 5 hours, but it was clear we needed a reprieve from inhaling fuel fumes. It would have been nice to have good radio contact with ground to get a duty pilot's advice, but on this night we were going it alone.

There is no emergency checklist for how to land a B-1 without visual references, and we sure dreaded the thought of potentially being the first crew to do so. We discussed an ejection plan and attempted to continue to query personnel outside the jet for advice. We tried many solutions to get the fuel to stop leaking, but our best bet came when we used the external system for removing ice on the windscreen. The heated blast of air cleared a small portion of the lower windscreen, just enough to be able to see something.

"We've got it!" I said and turned in the direction of the runway.

Within a minute, we got indications of an overheat condition on both sides of the windscreen. Did we care that the window may potentially delaminate and distort? No, but we didn't want to lose our saving grace, so the plan was for the copilot to shut off the anti-ice system and then turn it back on at glideslope intercept.

The B-1 lands in a 7degree angle of attack. This attitude places the nose quite high above the horizon. As we slowed from our holding speed to our approach speed, the jet began its characteristic rearward cant. At the briefed point, the copilot engaged the anti-icing system. This time, however, the cleared portion on the lower windscreen was 4 inches in height at best and slowly decreasing.

With the jet trimmed and the throttles set, we touched down on centerline, on glideslope just as the window, once again, completely

obscured. With only the glow from the runway side markers in our side windows, we brought the jet to a halt 50 feet to the right of the centerline. Not bad for a near zero visibility landing. After some minor snafus during the emergency exit we got the jet safely shut down. The fuel spray out the top of the jet, however, took maintenance another hour to stop.

Lessons Learned

In retrospect, what nuggets can be extracted from this near mishap?

1. The physiological effects of long duration sorties are insidious and cumulative. Once you start taking out withdrawals from your sleep bank, your reaction time is slower. It's essential you recognize this fact and plan accordingly.

2. Did we troubleshoot in the best possible manner? Yes and no. We train to have the help of folks going groundspeed zero. That night, the radios were so garbled we couldn't even get across the nature of our emergency much less get a "hotel" conference going. However, we divided up responsibilities in the cock-



pit so that we could search the books to the maximum extent possible before making our decision to land.

3. "So there I was..." exchanges are beneficial, not simply ego talk. The decision to try the antiicing system originated from a discussion with another pilot earlier in the deployment concerning what their crew did in an unrelated incident.

4. Maintenance can work miracles. They did such an outstanding job after we recovered that both the tanker and our bomber flew again within 24 hours.

5. Don't be afraid to switch runways, winds permitting, to get the best approach for the emergency. The ILS we flew was not to the active runway. The precision afforded by that approach far outweighed the few knots of gained tailwind.

6. And finally, the emergency isn't over for the crewmembers until the engines are shut down and you have safely egressed from the airplane.

Drifting Away

By TSgt Giovanni Abarintos, Nellis AFB, Nev.

he worst thing that can happen during a vacation is for someone to get hurt or injured. Unfortunately, safety often does not take priority when one is on vacation. This incident happened a few years ago on my vacation to the beautiful island of Maui, Hawaii,

It was a beautiful day, the water was warm, the sun was shining, a truly ideal day for some fun at the beach. The resort we were staving at had its own private beach area with all the amenities: personal cabanas. umbrellas, snorkeling gear, and inflatable rafts. For some reason there were very few sun worshipocean. This one particular couple was having a jousting contest with floating noodles while on inflatable rafts. It was obvious they both had limited swimming abilities when one of them fell in and they barely made it back onto the raft. After their joust, the husband swam back to shore leaving his partner sunning on the raft. After some time, my wife noticed that his wife was floating out a little farther and that her partner was nowhere nearby. Though it happened slowly, the woman on the raft eventually realized that she was floating away from shore. We saw a look of panic on her face as she fell into the

water. Did I

mention

wife



pers that afternoon, but a few other vacationers, along with my wife and I, were enjoying the perfect afternoon in the water. Along the short stretch of water, there were signs indicating there were no lifeguards on duty. Having experienced the strong under currents that Hawaiian waters have, my wife and I stayed close to the beach and its shallow ends. Even on the inflatable rafts, we stayed close to shore.

Other folks seemed to want to venture out further into the

I was swimming to get her, it struck me that I had a friend who died trying to save her sister in a swimming pool many years back. I thought about what my swimming teacher said about trying to save someone in trouble in the water. The victim is in a panic mode and will hold on to anything that will float. They will crawl on top of a rescuer and pull them under not realizing what they are doing.

So when I finally got to her, I had decided to keep the floating raft between the girl and myself to avoid her from grabbing onto me. If she stayed calm, she would have had no problem getting back on the raft and paddling back to the beach. But no. It took a while, but as I steadied the raft and talked to her, she eventually calmed down enough and got back on the raft. As she held the sides. I towed her back in with the line attached to raft. It was slower and much more difficult coming back in, but we finally made it back to the beach. Her husband was waiting and thankful. It was not Baywatch material but hey, whatever it takes. It's good to know that all those lessons at the YMCA finally came in handy.

The morals of this story are to "know what your limitations are" and that safety should be a priority even on a vacation. The presence of a flotation device often gives inexperienced swimmers a false sense of security. In this case, the couple took for granted that their raft was a save-all for ocean swimming, but didn't realize that the raft would become useless when they began to panic. The couple could have improved their situation by using ORM to analyze the risks: no lifeguards on duty, strong underwater currents, and admit the fact that they were poor swimmers. They could have then minimized those risks by deciding to wear personal flotation devices, staying near shore and together, and then actually following through with that plan.

Don't allow a simple case of neglect or assumption ruin a time meant for fun and laughter by letting your safety awareness take a vacation while you're on vacation.



From e-mail:

"The first page of **Combat Edge** includes the statement, 'The editors reserve the right to edit all manuscripts for readability and good taste'...take a look at the back page (cover) of the October issue...is this photograph considered in 'good taste'? I'm all for a good laugh and include humor in most presentations, but as the flagship publication of Air Combat Command, this photograph crosses the line of good taste." —A-NON-E-MOUSE

wherev

Our Response:

I'm sorry that you feel the photograph crossed the line of good taste, but I don't agree, so we'll have to agree to disagree.

As for SSgt Stacy L. Pearsall's photo, it was photo number 6 of 10 that she submitted to the 2003 Military Photographer of the Year awards program (MILPHOG) "which recognizes, rewards, and promotes excellence among military photographers, videographers, journalists and graphic ..." SSgt Pearsall won first place with her photo portfolioand the Office of the Assistant Secretary of Defense for Public Affairs prominently posted it on their website at http:// events.dinfos.osd.mil/viap/milphog/2004

The intent of the photo is to catch your attention. When you take it in context, they actually work together on three or more levels.

I view this as an opportunity to explain the thought process behind the action and provide additional information to a reader in a constructive manner — I'm just asking that you return the favor in future correspondence. Frankly, I enjoyed your letter; it's nice to know that people are picking up the magazine. Although I like it more when people respond with a tale of their own because it is a stringer magazine that is dependent upon reader involvement.

On a separate note, did you read any of the other stories? Did you like the full page pull out poster reflecting Spatial Disorientation, which was one of the big issues when I went through the Physiological training block, and which continues to take lives and aircraft today. Considering that you live and recreate in California, one of the places that is a big risk for wildfires, did you find any of that information useful? Was there anything in the magazine, or any of the other editions of the magazine that you have found interesting? "If you're not happy with the Magazine for one reason please tell us. We'd love to publish your article.

I'm also a realist — I know that most people read the magazine in the bathroom during their work hours. Frankly I'm glad they do, I wish more did. In fact, when I was interviewing for this job I commented that I felt **The Combat Edge** was and has always been the best read safety magazine in the bathroom. It's the truth. There's no reason to run from it.

-Editor

P.S., For brevity: the message is that the person is deployed, most likely in Southwest Asia (SWA), we are an ACC publication, but even though you're deployed, you can still receive a subscription to our safety magazine by following the hyperlink. Following are some of the other messages the reader should/could take from our October 04's back cover:

The Combat Edge web link to obtain a subscription for your office.

We will send the magazine to your location, whether you are CONUS, deployed, USAFE, PACAF, CENTCOM, etc.,

Make time for safety. If you're worried about being seen reading a safety magazine at your desk, feeling it sends the message to others that you have "too much free time" and need more work to do, then take us with you, wherever you go, be it the bathroom, dorm or home — just read it!

Make good use of your time — read us in the bathroom because reading the sports section won't save your life.

Finally, we see the magazines in the stalls, why not admit it and give it a positive spin?



| FY05 Aircraft As of October 31, 2004 | | | | |
|--------------------------------------|-------|-----------------------------------------|---------------------|--|
| | Fatal | Aircraft Destroyed | Aircraft Damaged | |
| 8 AF | | | | |
| 9 AF | | | | |
| 12 AF | | | | |
| AWFC | | | | |
| ANG (ACC-gained) | | | | |
| AFRC (ACC-gained) | | • _ • • • • • • • • • • • • • • • • • • | + | |

| FY05 | As of October 31, 2004 | | tober 31, 2004 |
|-------|------------------------|---------|----------------|
| | Fatal | Class A | Class B |
| 8 AF | | 0 | 0 |
| 9 AF | | 0 | 0 |
| 12 AF | | 0 | 0 |
| DRU's | | 0 | 0 |

| FY05 Weapons | | As of October 31, 2004 | |
|--------------|---------|------------------------|--|
| | Class A | Class B | |
| 8 AF | 0 | 0 | |
| 9 AF | 0 | 0 | |
| 12 AF | 0 | 0 | |
| AWFC | 0 | 0 | |

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

Aircraft Notes

Great start on FY05. ACC is on the bubble for only one Class A — an F-16 blew a tire getting airborne. During landing/ barrier engagement, the right main gear collapsed. The pilot egressed and the fire fighters used foam to prevent a fire. There is a good chance this mishap will be downgraded to a Class B, depending on how much work the engine needs. The new fiscal year means "new day, new jet." Remember and employ sound fundamentals; make an objective ORM assesment after each curve ball or last minute change, then aviate, navigate, communicate. Check yourself before you wreck yourself. Fly Safe!

Ground Notes

ACC is off to a great start for FY05. There have been no Class A mishaps and no fatalities.

Weapons Notes

Another weapons Class A mishap-free year! In FY04 we maintained the same number of Class C and D mishaps. Personal error was the main contributor to these mishaps. We can ask, beg, plead, and yell for folks to use tech data, but the ultimate responsibility will be the Airman or Sergeant that decides to deviate or ignore the guidance. The AF is campaigning to reduce mishaps by 50 percent. If tech data had been followed in 2004, we would have reduced our mishaps by 50 percent!

Symbols for Mishap Aircraft 4 A-10 B-1 F-16 B-2 U-2 E-4 U-2 E-4 H-60 F-15 RQ-4T-38



"It is the death of Airmen through other meansavoidable accidents or suicide - that we cannot, and will not accept. These are senseless, tragic losses ... losses that can curtail a vibrant young life, tear at the very fiber of our institution, and more so, permanently scar a family ..." ~ CMSAF Gerald R. Muray

To echo the words of Chief Murray, "Airmen are our greatest resource." Take the opportunity this holiday season to spend time with family and friends, but celebrate safely, make good choices, and watch out for each other. We need every Airman in the year ahead to sustain the fight and maintain our COMBAT EDGE.

~Happy Holidays from the ACC Safety Staff