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October is fire safety month, and while we normally focus on fire safety at home and in the workplace, we often forget to consider where the danger lies for those who are deployed. In our expeditionary locations, many of our folks are working and living in tent cities, on joint bases, or in converted palaces and other buildings that may/may not have electrical service that is “up to code.” Many of the places our warriors are living and working in feature temporary wiring that was strung “in the heat of battle” in the most expeditious manner to get the job done, but maybe not to code standards of safety. While deployed, be aware of hazards, point them out and get them fixed, and help break a chain of ‘bad events’ — the life you save may be your own.

On the home front, there is a short Air Force news story concerning how an Air Force member put out a fire at a neighbor’s house by grabbing a garden hose and entering the home to fight the fire. We are including this story not to pat him on the back, but to point out that although he saved his neighbor’s house, he put himself at great personal risk to save property. Property can be replaced, you cannot; leave firefighting to the professionals.

Check out “A Jolt for Caffeine,” involving a crewmember receiving an electrical shock strong enough to bring him to his knees from a coffee jug on an E-8C aircraft. It’s a great example of how one dedicated safety professional took that extra step to run what seemed to be an isolated issue to ground, and in doing so, uncovered a wider, more serious safety issue. Additionally, take a look at “The Last Wave,” a prime example of how quickly a good time can turn tragic and leave a lasting impression on all involved.

Lastly, time’s up. Defense Secretary Donald Rumsfeld charged the US Military Services with reducing accident rates by 50 percent across the board by October 2005. Within Air Combat Command our aim was zero — zero mishaps across the board for flight, ground, and weapons safety disciplines. There has been some debate as to whether zero was an achievable goal or not. You can continue that discussion at your next safety meeting, as we begin to tally the numbers over the next few weeks, evaluate our successes and failures, and set a course for the future. One fact remains: by eliminating risk during on- and off-duty activities, we can manage and minimize its impact through preparation and by taking a proactive stance toward safety. The goal is still zero mishaps this Fiscal Year — set records during 2006 — let safety be your Combat Edge.
Stuff Happens

by 1Lt Matthew Nowlin, US Army Deployed

Photo Illustration by SrA Alex Solak
Stuff happens when you least expect it. This cliché perfectly describes my experience in Iraq. High operational tempo is no excuse for cutting corners or taking chances, but many times safety considerations are the first things overlooked in combat. Combat itself involves a long list of hazards we can never eliminate fully, and our operational environment is often just as dangerous. Fire is one such hazard I've encountered several times since deploying to Iraq.

There are many potential sources of fire in Iraq, which isn't surprising when you consider the tangle of wires that seem to come from everywhere. Some wires are left from our buildings' former residents (was there no building code before the war?). Most, however, were installed after the war in the most field-expedient—and often haphazard—way. These wires are of mixed type and output quality and were rigged for speed, not safety. When you factor in a potentially wet environment, a fire is just waiting to happen. I'm only a few months into my deployment and I've already...
witnessed several electrical fires in command posts and living areas.

Commanders in theater are also concerned with vehicle fires. Causes of vehicle fires vary, and often people don't have the resources (such as extinguishers, water supplies, or fire vehicle support) nearby to react quickly when they do occur. And, if a vehicle catches fire outside the relative safety of the camp, people are vulnerable to hostile action. Vehicle fires aren't the only concerns, as aviation fires are a serious concern just due to their potential to start without warning and rapidly grow beyond manageable size. We're operating these vehicles — both wheeled and winged — in some of the most dangerous and demanding conditions imaginable and we must anticipate the possibility of fire.

It's true, combat is inherently dangerous, but some people will find ways to make it even more so. We must always use common sense, whether we're in theater or training back home. For instance, if you're on guard duty, don't light trash on fire to stay warm. The fire might suddenly grow larger than you intended, and carbon monoxide poisoning is always a danger with indoor fires. Never light a cigarette, or introduce any ignition source near fuel source or spill. These examples may seem far-fetched, but they all happened recently and each could've escalated into a serious incident.

Many of our remote posts have limited access to firefighting and crash/rescue equipment, which reinforces the importance of fire extinguishers. People need training in the proper use, selection, and placement of fire extinguishers. Units should choose an extinguisher rated for the most likely type of fire to be encountered and ensure it's big enough to be effective.

**Class A** extinguishers are used for ordinary combustibles including wood and paper. **Class B** extinguishers are employed on flammable liquids, greases, and gases. **Class C** extinguishers are used for energized electrical equipment. Portable extinguishers are also rated for the size of fire they can handle. This rating is a number from 1 to 40 for Class A fires and 1 to 640 for Class B fires. The rating is listed on the label — for example, 1A or 2A and/or 5B, 10B, or 20B. The higher the number, the larger fire the extinguisher can handle.

Once the proper extinguisher is selected, it should be placed in an obvious location such as an exit or corridor. Extinguishers should be inspected periodically for serviceability. Leaders must ensure workers are trained to safely use the fire extinguishers located in their workplace. Live training can be performed safely with the assistance of qualified firefighting personnel; however, if this isn't possible, the PASS technique should be discussed at a minimum. It's simple and goes like this:

- **Pull** the pin
- **Aim** the extinguisher nozzle at the flames
- **Squeeze** the trigger while holding the extinguisher upright
- **Sweep** the extinguisher from side to side at the base of the flames

Leaders also should point out that fire extinguishers aren't used as their name implies. They're designed only to suppress a fire long enough for everyone to safely exit the area and until firefighters arrive.

We're constantly reminded that combat is dangerous, and there's little we can do to change this fact. However, we can implement a system of controls — including preparation and training — to handle "secondary" dangers such as fires within the combat environment. Stuff happens when you least expect it, and there's little you can do to deal with it if you're not prepared. I never thought I'd help fight a C-130 post-crash fire with all the extinguishers we could find, but I did (that's a story for a different time). Be prepared and make it home from the fight!

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An Airman recently extinguished a house fire that threatened to destroy a nearby Panama City home.

Master Sgt. Jack Jones, ABC Sq., in charge of plans and programs, used garden hoses to extinguish the fire, saving his neighbors' home and most of their possessions.

“My neighbor's 18-year-old son, John, ran to my house screaming his house was on fire,” Sergeant Jones said.

The sergeant then ran next door to the neighbor's house and saw the living room engulfed in flames with thick black smoke billowing out the front door.

“I first made sure everyone was out of the house, which they were, and asked John's aunt to call 911,” he said. "Then I ran to the back of the house to retrieve a garden hose and entered the house through the back porch, which was the closest to the flames. I crouched as low as I could because the thick smoke and extreme heat were intense.”

Sergeant Jones said he knew he had to act quickly or the fire could potentially destroy the home and possibly spread to other homes because of the strong midday winds.

“I pointed the hose at the base of the flames and told John to get the second hose (from) outside,” he said.

To reduce harmful smoke inhalation, Sergeant Jones ran home and retrieved a respirator he uses to paint cars. After donning the mask, he returned, grabbed both hoses and entered the house.

"I sprayed the fire until everything was extinguished, and I was shocked that I put it all out with the hoses," he said.

Shortly after the fire was extinguished, local firefighters arrived and set up a fan to blow out the remaining black smoke.

Sergeant Jones' actions saved the house from catastrophic damage, but it was a risky endeavor, said Lieutenant Tom Smith, local fire department chief.

"Sergeant Jones got to the fire at the opportune time because if the fire gained any more strength, he wouldn't have been able to put out the fire with garden hoses," Lieutenant Smith said. "He did an outstanding, courageous thing, and I know his neighbors must be happy, but if things had gotten worse, he could have been in serious trouble."

The sergeant, who is also the squadron's safety representative, said he did consider his personal safety but never felt his own life was at risk. He also attributes his success to years of fire extinguisher training obtained through the military.

He said he felt good being able to help his neighbors keep their home and most of their possessions.

"It was just natural instinct to help," he said. (Courtesy of Air Education and Training Command News Service)
Editor's Note: As a member of the 93rd Air Control Wing Flight Safety office with 20 years experience on large aircraft, I thought I had seen everything during my career. Well, everything until August 2000. For the last 4 years as a safety professional, I have investigated incidents and mishaps that were pretty straightforward. Most were in-flight engine shutdowns, dropped objects, and bird strikes. In August, I encountered a different kind of investigation. As soon as I kicked one rock out of the way, three more were lying under it.

One afternoon I received a call from our Command Post that a crewmember on one of our E-8Cs had been shocked and the plane was returning to base. As the aircraft came to a stop, I met the flight crew and discovered that a coffee jug had shocked the navigator. As the navigator was being transported to the hospital, I quickly found out that he did not just get zapped. He got hit by a jolt powerful enough to drop him to his knees. The aircraft commander also told me that shortly after the shocking he complained of light-headedness and shortness of breath.

Immediately after the incident, the aircraft and coffee jug were inspected by maintenance. An Ohms check revealed resistance between the 115 volt pin and the metal case. At first we thought there was a short in the coffee jug when it was hot. A continuity check after it cooled down showed no defects. The next day, one of our squadron commanders reported a mild shocking from a coffee jug a week earlier. The flight kitchen had been informed of this incident and was asked to condemn the jug. With no knowledge of maintenance and inspection requirements, the jug was placed back on the shelf for use at a later date. It is now believed that this same jug is the one that shocked the navigator.

After this discovery, we soon found ourselves in the flight kitchen. As we talked to the flight kitchen personnel, we discovered that approximately 3 years prior to these incidents, the wing had coordinated with
the kitchen to maintain their coffee jugs. When three other units on our side of the base became aware of this, they also coordinated with the kitchen to maintain approximately 50 coffee jugs. We could have just condemned this one jug and pressed on with life, but a team was assembled and began checking the rest of the jugs in the kitchen. As we talked with other individuals within the wing, we soon discovered at least two other mild shocking incidents had occurred involving 93 ACW aircrew members.

An inspection of other coffee jugs in the kitchen revealed approximately five out of the 50 jugs showed suspect continuity between the pins and the metal case. At this point in the investigation, it was not known if a technical order (T.O.) existed for the jugs, which would have shown how to properly inspect the jug. It was later discovered that T.O. 13A15-4-3 covers this type of coffee jug and recommended that each jug be inspected every 180 days. In addition, containers according to the technical manual and the jugs had been routinely submerged in water. After finding the testing procedures in the manual, our electrical backshop personnel began re-inspecting 23 of the original 50 jugs. The result was that 18 of the 23 jugs had enough significant defects to pull them from the shelf.

The inspection of the coffee jug that shocked the navigator revealed that the insulation on the wire supplying 115 volts to the container’s heating element had deteriorated. This had allowed the conductor of the wire to contact the metal case of the container. When the coffee jug was moved around, the wire would reposition and may or may not show a defect when an Ohms check was done. This was just one of two malfunctions required to allow the outside of the container to become electrically charged. The second malfunction was an insufficient electrical ground. When the container was well grounded, the current passed from the wire into the case of the container and out to the ground. There was no voltage potential between the container and the aircraft structure. If the coffee jug was properly grounded, the circuit breaker would have heated up and popped. An inspection of the circuit breakers revealed no defects. Before the navigator touched the jug, it had no ground available so the circuit was not closed and no current flowed through the circuit breaker. When the navigator touched the jug, he briefly provided a current path; however, the relatively high resistance of his body and very small amount of time that he was actually in contact with the jug limited the amount of current, which was not enough to actuate the circuit breaker.

At first, the flight safety officer and I who were investigating this incident were not sure if this would turn into a mishap because we did not know the condition of the navigator for the first couple of days. After he was checked out by the flight surgeon and released for duty, we decided to send out a High Accident Potential message. To our amazement, we have received numerous calls from other bases noting similar problems with these jugs. It seems that others had not been inspecting their coffee
jugs either. Although the navigator has received a lot of ribbing about this incident, I would like to publicly thank him for allowing me to share this story and hopefully prevent future events of this nature. I am totally grateful that this lesson learned did not cost the Air Force a serious injury or death.

Here's the bottom line: Technical orders are written for a purpose. They provide information to disassemble, clean, inspect, replace, repair, and assemble items used in the Air Force. There are hazards associated with not complying with all technical orders, manuals, Air Force instructions, etc. – including T.O. 13A15-4-3. We lose far too many people every year for reasons beyond our control. Let us not lose anyone for factors that we can control. A cup of coffee is just not worth the price this "shocking discovery" could have cost.
The Last Wave

The LAST WAVE
July 25, 2005, was going to be a good day. I was scheduled to roll out this morning and meet up with some friends for a day of motorcycle riding in Northern Virginia. The plan was to meet up with Steve in Ashland Va., head up I-95 towards Quantico, take exit 150, and meet up with David and Sam at the local Burger King. When Steve and I pulled up at the Burger King, we were all smiled, because we knew the ride was about to be one I took the time to snap a few pictures and then we were off to meet up with four other guys at a gas station up the street.

At the gas station, the group of riders I was with exchanged names, and I became a motorcycle brother to Hutch, Barry, and Chris. We filled out tanks with gas and headed out towards Route 211. David told me he was going to make this ride something to remember because I hadn't ridden 2 hours to meet up with them. I don't remember the roads we took, but the smile under my helmet was priceless. I hadn't seen roads like this since I left Germany, hammy filled with sweeping, off-camber turns, left and right hairpins, and decreasing radius turns. The ride would have been a true nightmare for an inexperienced rider, but for an experienced rider, like me, it was heaven. The ride had me smiling from ear to ear, but things were quickly brought back into perspective when I reached the crest of a hill and was surprised to be facing a quick left-hand turn. Quickly regaining my composure, I looked all the way to the
"What?! That's not the road?" I asked him. He just smiled and walked away. I looked around, and everyone was having a great time and truly enjoying themselves, I remember thinking, "this is how motorcycling should be, riding and having a good time with friends."

When the time came to mount up, David once again took time out to tell everyone about the road we were going to take, and he stressed the importance of riding at your own pace and taking your time. He further explained the technical aspects of the road, and cautioned us to be very, very careful of one particularly dangerous turn on the way to the top. With that in mind, we started our bikes and rode off, not realizing that David had just saved our lives.

Route 211 was all that and more; constant switchbacks and two lanes to boot. We had a great time going up, and then came the turn that David had warned us about. By the time we got to it, it was too late and I was already committed. Traveling at a safe speed, I was able to control my entry into the turn and make a clean exit. To put things in perspective, the turn was a 180-degree blind decreasing radius turn. WOW!! We all made it to the top safely and took a quick moment to celebrate and talk about the great ride up.

Once Steve and I made it to the bottom, we talked for a minute and then decided to make one more run up the hill. We started back up hill and were approaching the dangerous turn that David had warned us about, when the cars in the oncoming lane staged flashing their headlights to warn us there was an accident ahead. We slowed down, turned our emergency flashers on, and continued up the hill until we came upon the accident.

At first glance, I thought it was Sean (one of the riders in our group), but it turned out to be one of the riders I had just waved to less than 5 minutes before. I got off my bike and ran over to where he was, but people were already performing CPR on him, so I headed up the hill to slow traffic down, and warn other drivers of the accident. When Sean came up on the accident, the woman performing CPR asked him to take over, and he did. Sean continued performing CPR on the rider until emergency personnel arrived, but later said he saw the rider turning blue, and could feel him slipping away. We learned later on that the fallen rider was an Air Force member out of Andrews AFB, and that he left a wife and two children behind.

By now, I'm sure the accident report has made the headlines detailing how a motorcyclist crashed on Route 211 in Northern Virginia, on July 25, 2005. I was not involved in the accident, nor did I see it happen. But I do remember waving to a fellow motorcyclist as I always do, and never thinking that it would be his last wave.
It's that time again when children enjoy dressing up and roaming the neighborhoods in search of some of their favorite candy. Everyone wants to have a safe and happy Halloween for themselves, their guests, and their children. The following tips were compiled with the help of the U.S. Consumer Product Safety Commission.

In the day, I was a number of characters on 31 October: Casper the Friendly Ghost, a Football Player, Robin Hood, and finally Zorro (more about him later). Growing up in rural Northern Wisconsin in the late 60s-70s, trick or treating involved at least two or more of the following: a car ride from house to house, a costume that would fit over a winter coat, endless stories of how my dad used to bring home pillow cases of candy when he was a kid in Milwaukee (all purchased for less than a penny during the Depression), and snow.

**Treats**

Even in the "old days" we heard tales of people altering caramel apples, popcorn balls, and candy bars with pins, needles, or razor blades, and then as now, it's best to be safe than sorry and not let kids eat handmade treats unless you know the person. Also, don't allow your kids to eat any candy until after an adult has carefully examined them for evidence of tampering. Besides, it takes all the fun out of dumping your candy out on the floor and separating it into keep/trade piles.

If you're handing out treats, make sure you have something for every age to prevent giving a small child something that may present a choking hazard. Make sure all treats are securely wrapped, to avoid handing out a treat that may appear to be tampered with.

**Flame Resistant Costumes**

When purchasing a costume, masks, beards, and wigs, look for the label "Flame Resistant." Although this label does not mean these items won't catch fire, it does indicate the items will resist burning and should extinguish quickly once removed from the ignition source. To minimize the risk of contact with candles or other sources of ignition, avoid costumes made with flimsy materials and outfits with big, baggy sleeves or billowing skirts.

**Costume Design**

Purchase or make costumes that are light and bright enough to be clearly visible to motorists. For greater visibility during dusk and darkness, decorate or trim costumes with reflective tape that will glow in the beam of a car's headlights. Bags or sacks should also be light colored or decorated with reflective tape. Reflective tape is usually available in hardware, bicycle, and sporting goods stores.
Pedestrian Safety

Young children should always be accompanied by an adult or an older, responsible child, and older children should be given a reasonable curfew. All children should WALK, not run from house to house and use the sidewalk if available, rather than walk in the street. Children should be cautioned against running out from between parked cars, or across lawns and yards where ornaments, furniture, ditches, or clotheslines present dangers, cross streets only at the corners. Make sure children know their home phone number, and give them a cell phone or small two-way radio if available. As a minimum, ensure they have enough pocket change to make an emergency phone call from a pay phone. If you are driving to your trick or treating location, or live in a rural area and are driving from house to house, don’t let children exit the vehicle on the driver's side (traffic side), let them out of cars on the curb side of the street (unless there is a huge, water-filled ditch next to the car, then either safely get out on the street side, or in my case, send your sister out first).

Choosing Safe Houses

Children should go only to homes where the residents are known and have outside lights on as a sign of welcome. Children should not enter homes or apartments unless they are accompanied by an adult. People expecting trick-or-treaters should remove anything that could be an obstacle from lawns, steps, and porches. If you like to dress up and “get into character” by appearing scary, or by startling people, be aware that small children can be traumatized, run blindly in the opposite direction, fall off of porches, wet their pants, or all four; creating a very unsafe situation. If you are going to scare people, choose your audience carefully, or better yet, don’t.

Candeleit jack-o'-lanterns should be kept away from landings and doorsteps where costumes could brush against the flame. Indoor jack-o'-lanterns should be kept away from curtains, decorations, and other furnishings that could be ignited. Speaking of pumpkins, let children draw the face on the pumpkin, but leave the carving to the parents. Parents, in the midst of all the excitement during carving, keep track of the knives and other sharp utensils and carve them on a sturdy, flat surface. There are many pumpkin carving kits available in stores that look safe enough, but some of the carving tools are still too sharp or pointed for young children; so give them a hand with the carving chores.

By simply observing a few simple rules, using a little common sense, and thinking before you act, you and your children can enjoy a safe and enjoyable Halloween.

For further information on product safety, consumers may call the U.S. Consumer Product Safety Commission's toll-free hotline at (800) 638-2772. Hearing impaired consumers may use TTY (800) 638-8270.
There I was sitting in the waiting room of the local muffler shop while the exhaust system was being replaced on my '62 Ford Falcon station wagon. After thumbing through all of the available magazines, I struck up a conversation with a lady who was having some work done on her truck. She told me that she was planning on making a trip to Virginia to help her daughter who was 9-months pregnant.

Her daughter had purchased a child's swing set, which she then started to set up in the back yard. Part of the installation process was to pound some pegs into the ground to secure the swing set. The daughter was using a claw hammer to do the job, and because the hammer was small and the ground was hard, the job was going very slowly. So slowly, in fact, that the daughter finally lost her patience and her temper at the same time. She raised the hammer high over her head and swung it downward with all of her strength. Unfortunately, her anger blurred her aim, and she missed the peg, striking her wrist instead and shattering several of the bones. Her hand had to be immobilized in a cast for a period of 6 weeks. Because her baby was due during this time, her mother was taking a 6-week...
leave of absence from her job to help her daughter. This made her employer pretty unhappy. As you can see, this incident caused pain, suffering, and monetary loss to at least two people; all because the daughter became frustrated and lost her temper.

A few years ago, I stopped at a gas station and filled up my tank. After paying for my gas, I drove to one of the entrance ways to the station and stopped, waiting for traffic to clear. After a minute or so, I decided that the place where I stopped might be blocking cars that wanted to enter. I put the car in reverse, backed up a little, and a car did in fact turn in. As the man drove past me, he looked at me and said something. I couldn’t make it out, but from the nasty look on his face, I don’t think it was “Have a nice day.” I pulled out into traffic and began driving. Then I started to think about the incident and said to myself, “I’d sure like to go back there and teach that jerk a lesson.”

At that point, my better judgment kicked in, and I began to weigh the possibilities. First of all, I hadn’t been in a fist fight in years. Even though I had studied karate for a time, I hadn’t kept up with my training, so I doubted that it would do me any good. There was a possibility that if I went back and confronted him, I might be the one who got taught a lesson. Well, no use adding injury to insult! But then the other possibility came to mind: What if I was a better fighter than he was? Or what if I happened to land a lucky punch? What if he were to fall and hit his head on a sharp edge of the gas pump or on the concrete island where the pumps stood? I would pay dearly for a momentary “victory.” I rightly decided to consider the whole incident as not being worth my time, and I continued driving.

If you think that the second scenario I imagined is kind of far fetched, read on. A few years ago, a local, former high school football star went out drinking with some of his buddies on a Wednesday night. Upon leaving the bar, he became involved in an argument with another man in the parking lot. Angry words turned to fisticuffs and, in the course of the scuffle, the football star punched the other man and knocked him down. When he fell, he hit his head on the edge of a concrete slab and was seriously injured. He subsequently died from the injury, and the football star is now serving a long sentence in the state penitentiary for manslaughter.

We hear a lot of discussion today about anger management classes. These can be very helpful for some people, especially for those who were not taught how to handle their emotions responsibly. However, if you have a serious problem with anger, don’t be too proud or ashamed to seek professional help. It takes a strong man or woman to admit that they are in need of help and then actually proceed to get it. What if you are the average person though, not in need of help to manage your anger? Anger can still blur your judgment and cause you to do something that you may regret later.

The next time something (or someone) is pushing you to the boiling point, stop and think before you lose your cool and blow up. What will be the consequences of your actions? At best, you may make yourself look foolish and cause the people around you to wonder when you’re going to grow up. At worst, you may destroy a valuable piece of property, be harshly disciplined, lose your job, or cause physical injury or possibly death to yourself or someone else. Keeping hostile emotions under control is a difficult thing to do, but it is the best choice in the long run.
Site Planning Tips
- Just stick to the basics (Follow the AFMAN)
- Eliminate unnecessary items on the maps
- Provide thorough LPS Design Drawings
- Glass Breakage Assessments
- Explain use of roads, utilities, and support facilities in your transmittal letters
- Keep your leadership informed and involved

Site Plan Priority Processing
- P1 - Expedient
- P2 - New Construction
- P3 - Routine Plans (Older Submissions)
- P4 - Routine Plans (Newer Submissions)
- Active/Worked Packages (On Hold, Awaiting Actions, etc.)

How Well Do You Know Your Explosives Safety?

1. You must submit all clearance remediation plans through MAJCOM/SE and HQ AFSC/SE for Department of Defense Explosive Safety Board approval following the Explosives Ordnance Disposal (EOD) survey and prior to beginning operations.

2. The minimum documentation for a spot inspection will include date, inspector's name, organization or activity inspected, unit POC, and a brief description of what was observed, if there was/was not a discrepancy, and a status of open or closed.

3. Properly maintained Lightning Protection Systems are required for Ammunition and Explosives facilities, with the following exceptions: Explosives operations served by a local lightning warning system to permit operations to be terminated before the incidence of an electrical storm, if all personnel are provided with protection equivalent to Public Traffic Route Distance, and the damage from a lighting strike is acceptable to the Department of Defense Component.

4. Limit EOD training ranges to a maximum of 5 pounds of demolition explosives. Use only non-fragmenting charges (Boot Banger, Bare C-4, Conical Liquid Follow Through, etc.), shaped charges (Mk 7 series, Mk 2, flex linear, etc.) explosive powered tools (Mk-2 Dearner, Percussion Actuated Non-electric Disruptor, etc.) Explosively formed penetrators including but not limited to the Mk 23, Mk 24, and Mk 788 Main Charge Disruptor are not authorized for use.

5. Aircraft Battle Damage Repair Sites. The maximum Net Explosives Weight charge permitted is 2 ounces of HC/D1.1. When using sandbags to cover charges and prevent fragment escape, a 300-foot clear zone is required. For un-sandbagged charges, a 500-foot clear zone is necessary.

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We are authorized by the U.S. Postal Service to use Periodicals postage to distribute The Combat Edge magazine. Certain users of this rating are required to publish their Statement of Ownership, Management, and Circulation annually.

—The Combat Edge
Explosive Internet

by Anonymous

Photo Illustration by SrA Alex Sotak
The computer age has ushered in many changes in the way all of us accomplish our part of the Air Force mission. While computers have helped us do our jobs faster and more efficiently, there are some pitfalls in the area of weapons safety that need to be addressed. During an Annual Ground Safety Inspection, inspectors discovered some improperly stored HILTI Safety Boosters, which are .27 caliber blank cartridges for powder-actuated fastening tools. How did the unit make such a serious weapons safety mistake?

The answer: the Internet and Government Purchase Cards (GPCs). Air Force personnel are allowed to use the Internet to purchase Commercial Off-The-Shelf (COTS) items with GPCs. Freedom to locally purchase from commercial suppliers has opened the door to a very dangerous practice: military members buying COTS explosives or munitions without first receiving proper authorization. This is absolutely prohibited. The reasons for this prohibition can be easily illustrated through this example.

The HILTI Safety Boosters discovered during this inspection have a hazard class of 1.4S. That means initial weapons safety training must be conducted before these explosives devices can be handled. While the personnel who purchased these items had weapons backgrounds and had received certification to handle explosives by passing an exam provided by the supplier, they did not have the appropriate weapons safety training.

If they had, they would have also known that a safe storage location with a suitable container to house the munitions was required. Facilities storing quantities of explosives in excess of 1,000 rounds of HC/D 1.4 require an explosives license. Before the license can be granted, Force Protection, the Fire Department, and Weapons Safety must physically inspect the facility. The room itself must have a locking mechanism to prevent pilferage and unauthorized handling. Fire symbols must be posted on the exterior of the building and interior entrances to small rooms. None of this had been done.

Finally, the explosives were found stored within 50 feet of flammable materials violating the required minimum separation distance. They were also not stored in a cool dry place or kept from excessive heat as directed by the Material Safety Data Sheet.

As you can see, the discovery of the improperly stored HILTI Safety Boosters demanded immediate attention. The requirement to coordinate explosives items with the Weapons Safety office prior to purchase is a critical step in the technologically advanced world we live in. Each unit should ensure there are procedures in-place so that something like this can’t happen at your base. Remember: following written instructions is not optional when dealing with explosives.
Captains Schreiner and Williams distinguished themselves in their handling of a serious in-flight divert while flying a B-2 aircraft. Capt Schreiner and Capt Williams were flying a Global Power sortie to the Mediterranean Sea. The mission progressed normally until the tanker for the first air refueling was an hour late. The crew decided to hold at the refueling start point until the tanker arrived, forcing them to adjust the rest of their mission timing. The crew was able to continue with the mission with no issues until the tanker for the third air refueling off the coast of Spain canceled unexpectedly. Due to thorough mission planning, the pilots knew they could continue back across the Atlantic to the fourth air refueling off the coast of Nova Scotia with adequate divert fuel. The crew's systems knowledge and airmanship allowed them to relay information to the leadership at Whiteman using on-board systems. Exercising sound airmanship, they formulated a plan in case the fourth tanker canceled or had a systems malfunction. The tanker for the fourth air refueling arrived on time, but due to a massive flight control failure of the boom, it was unable to pass any gas. With only 43K remaining, Capt Schreiner and Capt Williams immediately decided to divert, to Langley AFB; 1,000 miles to the southwest. To conserve fuel en route, the crew requested and received a climb to FL320 and coordinated for a direct route to Langley. Capt Schreiner then coordinated with wing leaders at Whiteman and Langley AFB to ready for the unexpected arrival of a B-2. Proactive thinking ensured all information was passed and the ground crew at Langley was well prepared for the B-2 arrival. Capt Schreiner and Capt Williams landed uneventfully at Langley AFB with 20,000 pounds of gas, only a few thousand pounds above minimum fuel. The knowledge, skill, airmanship, and timely actions demonstrated by Capt Schreiner and Capt Williams resulted in the safe recovery of the aircraft and crew in the first-ever low fuel divert of a B-2 aircraft.

Capt Jeffery Schreiner and Capt Michael Williams, 509th Bomb Wing, Whiteman AFB, Mo.

Sgt Skelton led the Egress Section to complete a one-time inspection of the Advanced Concept Ejection Seat II seat rocket catapult mount swivel brackets on 50 F-117A aircraft. The swivel bracket material is susceptible to stress corrosion cracking, and if cracks are present, the rocket catapult can break through the connection point and leave the pilot and the seat in the cockpit during an ejection. TSgt Skelton directed a seven-person team at Holloman AFB, N.M., and at a deployed location, to immediately address the issue. His efforts included working with Holloman's Non-Destructive Inspection (NDI) team, Korea's NDI team, and Egress representatives in Korea, to ensure they had all the necessary equipment and expertise to conduct the inspection. He relayed the importance of this inspection to team members and reiterated that the safety of our aircrews was paramount, which contributed to the team's sense of urgency, and rapid completion of the inspection. Due to his efforts, his team completed all inspections in only 4 days. Thanks to his hard work, efficiency, and dedication to the mission, the wing did not lose a single sortie due to this critical Time Compliance Technical Order and, most importantly, the integrity and functionality of the ejection system was not compromised.

TSgt Patrick Skelton, 49th Maintenance Squadron 49th Fighter Wing, Holloman AFB, N.M.
SSgt Magnuson is Beale's lead dedicated crew chief for the U-2S "Dragon Lady" aircraft. SSgt Magnuson is responsible for mentoring and molding all newly assigned and less experienced crew chiefs on performing sound, competent maintenance. He exemplifies the "safety is paramount" mentality in all aspects of daily maintenance activity. He clearly demonstrated this skill when he identified a warped fifth stage engine bleed air clamp in extremely close proximity to a major hydraulic pressure line during a training session. Further investigation revealed this warping was caused during an engine installation as the engine was rolled forward; the variable Inlet Guide Vane (IGV) ring had contacted the clamp stud. Had SSgt Magnuson overlooked the clamp during his training session, it may have failed during the next flight, possibly causing a hydraulic fire in the engine bay. Without a fire suppression system, the U-2's flight control system and engine bay would have been engulfed in flames, with catastrophic results. SSgt Magnuson recalled reading a safety report of the 1996 U-2 Class A Functional Check Flight mishap where a hydraulic pressure line and bleed air duct failed resulting in an airborne hydraulic fire, destroying the aircraft and fatally injuring the pilot and a civilian. SSgt Magnuson alerted the aircraft maintenance unit's supervisor and led the investigation with specialists assigned to him. After analyzing the clamp, it was determined that the damage was beyond repair and required immediate replacement. The IGV ring sustained negligible damage and did not have to be replaced. SSgt Magnuson's steady persistence and management of the entire operation prevented unnecessary replacement of the $3.7M engine. His commitment to mishap prevention and in-depth maintenance knowledge prevented the loss of life and safeguarded a national asset.

SSgt Todd A. Magnuson, 9th Aircraft Maintenance Squadron 9th Reconnaissance Wing, Beale AFB, Calif.

TSgt Joseph Winfield, 2nd Bomb Wing Barksdale AFB, La.

Winfield developed an outstanding new template for unit-level safety inspection and program assessment reports. His new format provides commanders with a quick reference table to swiftly assess inspection results at a glance and integrates flight, weapons, and ground safety inspection results in one standardized document. TSgt Winfield delivered the safety portion of the wing commander's "Right Start" briefing to over 100 base personnel for the third time, directly contributing to a 10 percent decrease in base traffic mishaps relative to the previous quarter. TSgt Winfield's drive, expertise, and steadfast dedication serve as an example for all in ACC.
Capt Wright displayed exceptional airmanship and flying ability in handling a U-2S emergency divert. Capt Wright was returning from a 10-plus hour night combat mission in support of Operation ENDURING FREEDOM and the weather was deteriorating rapidly. On a 20-mile final, Capt Wright's mobile informed him that the fog had just started to form but to continue with the approach. Just prior to decision height, the mobile informed the pilot that he could no longer see the runway to chase. Capt Wright was unable to see the runway environment at decision height and executed a go-around and began to climb to the holding fix. As the pilot climbed, the SOF advised to continue the climb to 45,000 ft to save fuel. Once at 45,000 ft, the pilot, mobile, and SOF coordinated checklists for bingo fuel, divert locations, and max endurance. Prior to bingo, the SOF sent him to his divert location. Capt Wright remained at altitude as long as possible to conserve fuel and began the descent declaring minimum fuel (125 gallons) for priority. The divert field had a narrow runway (148 ft) and taxiways, so there was little room for error (the U-2S wingspan is 105 ft). The U-2S cannot land over centerline lighting due to damage or failure of the tail landing gear, which is the only method for controlling the U-2S on the ground, and failure or significant damage to the tail gear can cause the U-2S to depart the runway. Despite the complications that create unique landing problems not found in other aircraft (the long duration mission, limited forward vision, and the space suit), Capt Wright flew a flawless night approach and landing, touching down off centerline without mobile officer assistance. The quick thinking, outstanding airmanship, exceptional flying skills, and efficient use of crew resources directly contributed to the safe recovery of the aircraft.

Capt Jeff Wright, 99th Reconnaissance Squadron, 9th Reconnaissance Wing, Beale AFB, Calif.

The 56th Information Warfare Flight (56 IWF) at Hickam AFB, Hawaii, has implemented an exemplary safety program, with continuous devotion that has resulted in no lost time due to mishaps for the past 2 years. Unit Safety Representatives (USRs) SSgt Jason Roberts and SSgt Darren Lim are dedicated safety professionals, who work hand-in-hand with element chiefs and supervisors to ensure they have the tools and knowledge to maintain a safe environment and lifestyle for themselves and their subordinates. USRs have developed and organized an extensive job safety training program, enabling supervisors to implement in-depth training and one-on-one discussions with work center personnel, from arrival in-unit until their eventual PCS. The flight has built a motorcycle safety program that is 100 percent compliant with PACAF's stringent regulations and under this program, all flight motorcycle riders are assigned mentors; complying fully with all regulations. Furthermore, the flight element chiefs and supervisors ensure pre-departure safety briefings are completed prior to starting leave, TDY, or PCS and all individuals are briefed and documented on high risk activities. The 56 IWF's safety program was praised as the "best seen to date" and the "most thorough seen in all my SAVs conducted" by the 8th Air Force's Chief of Safety. Additionally, the 56 IWF's safety program received an "Excellent" rating during the 67th Information Operations Wing's annual ground safety inspection, identifying the safety training program as a benchmark, requesting and adopting the blueprints for subordinate units to enhance their mishap prevention efforts.

56th Information Warfare Flight, 67th Information Operations Wing, Hickam AFB, Hawaii
An "Outstanding" performer during the HQ ACC/SE Program Management Evaluation (PME) of Beale AFB Weapon Safety program, Mr. Toomer was recognized as a proactive Additional Duty Weapon Safety Representative for the 9th Maintenance Squadron (MXS). He took on the challenges of the Maintenance Squadron explosive safety program, and ensured safety requirements met or exceeded the Air Force Standards. On 7 Jul 2005, the 9th Maintenance Squadron’s Weapons Safety Program was inspected by the 9th Reconnaissance Wing Safety Office. The result of the inspection was an "Outstanding" rating; a direct result of Mr. Toomer’s dedication and adherence to Air Force guidance. One of the notable items in both the PME and 9 RW Weapons Safety annual assessments was the Egress shop’s Fire Department notification board, which tracks fire symbol office, and tracked the AF Form 332 process until abatement actions were completed. Sgt Radford addressed concerns of new evacuation routes to the host fire department and Security Forces personnel, as the existing routes created a bottleneck. With the assistance of the 67 IOW, these issues were addressed and fire evacuation routes are being addressed by the host fire department. His efforts have allowed flight commanders to assess the status of their flight’s safety programs and assist or facilitate rapid resolution. Through dedication and devotion to duty, TSgt Radford’s squadron has not experienced a lost-time mishap for the previous 3 years.

TSgt D. A. Radford, 690th Computer Systems Squadron, 67th Information Operations Wing, Lackland AFB, Texas

Note: This award write-up originally appeared in the AUG 05 edition with the wrong photo. It is reprinted with the correct photo. Please excuse our error.

Mr. Charlie Toomer, 9th Maintenance Squadron, 9th Reconnaissance Wing, Beale AFB, Calif.
Sgt Zahnley is an outstanding safety professional – as a direct result of his personal efforts, the 27 FW has enjoyed one of its safest quarters on record. His safety programs helped to ensure the wing successfully accomplished over 1,340 combat training and related missions, representing over 1,540 hours without a Class A or B flight safety mishap. While deployed to RED FLAG, his efforts assured the safe accomplishment of over 1,235 multi-service and multi-national sorties over 2,185 flying hours. He assisted the Indiana Air National Guard during the investigation of three Class E (High Accident Potential) events involving radome damage of costly, electronic countermeasure pods. He identified the cause as a takeoff procedure problem and quickly communicated his finding to the unit; helping to institute proper corrective actions. MSgt Zahnley was recognized by the entire RED FLAG 05-03 staff and awarded the title of “Superior Performer” for his “outstanding leadership and flight safety program management efforts.” His personal efforts directly contributed to the “Excellent” rating and “best seen to date” comments during the ACC Safety Program Management Evaluation (PME), earning him recognition from the ACC Chief of Flight Safety as a “Star Performer.” MSgt Zahnley is also responsible for an ACC “Best Practice” involving the wing mishap response and investigation kits, flight emergency trend analysis, and safety investigation board personnel tracking systems; all improvements which will benefit the Air Force Safety Program for years. He was chosen to lead the effort to reduce airfield wildlife hazards, resulting in yet another zero reportable bird mishaps rating. In fact, he also worked with local airport managers, coordinating several MidAir Collision Avoidance (MACA) visits throughout the quarter to educate local airport civilian pilots on Cannon AFB flying operations and Melrose Bombing Range airspace operations, while revising and distributing MACA pamphlets crucial to making the surrounding areas a safe place to fly.

MSgt Robert W. Zahnley, 27th Fighter Wing, Cannon AFB, N.M.

Sgt Wilson is a highly reliable leader and weapons safety manager. While under constant threat of enemy attack during Operation IRAQI FREEDOM, he identified critical explosive storage issues that ensured the safety of over 750 assigned personnel without a single reportable mishap. His dedicated efforts facilitated the movement of over 5,000 missions, over 10,000 tons of cargo and 80,000 passengers. TSgt Wilson worked directly with the 3d Infantry Division and Multi-National Corps Iraq planners for the short-notice arrival of the 3d Armored Cavalry Regiment with over 5,000 Army personnel at Baghdad International Airport. He developed parking plans allowing for the arrival of 42 combat helicopters, ammunition and support facilities within Air Force explosive safety standards. TSgt Wilson diligently oversaw the 447th Air Expeditionary Group munitions storage area with 42K of explosives items critical to the sustainment of six different agencies assigned to Sather Air Base, Iraq, including the safe download and storage of 20 explosives-loaded cargo missions. He oversaw 30 explosive ordnance disposal team safe detonations of captured ammunition and explosives while deployed. Safety first, TSgt Wilson composed a policy letter for the 99 ABW/CC, allowing a continuous flow of crucial mission items and increased munitions deliveries by 25 percent. His efforts prevented potential mishaps and increased critical delivery times by 10 percent – zero sorties lost or delayed. He created a base Comprehensive D-8 map in 10 days; compiling three wings’ explosive data into one map. TSgt Wilson resolved the Munitions Storage Area lightning protection problems for AFSC/SEW and briefed leadership on explosive restraints. His expertise was instrumental in developing the 57 WG/SEW new inspection data base, which received notable mentions during AWFC/SEW Staff Assessment Visit. TSgt Wilson works the tough issues, gets solid results: a base-wide safety and a zero weapons safety mishap rate.

TSgt Anthony B. Wilson, 57th Wing, Nellis AFB, Nev.
Mr. Watson's superb commitment to excellence led the 9 RW to an “Outstanding” Safety inspection rating 5 years in a row. Dave developed 9 RW’s premiere Hazardous Materials (HazMat) program which leads the wing in performance; relocating 13 existing and new flame and corrosive cabinets, and mapped them on building blueprints – noted as a best practice. He researched Federal, DoD, Air Force, and California Medical Waste/HazMat guidance; replacing 18 clinic chemicals with safer alternatives, allowing the 9 MDG to lead the base for compliance with California’s Green Law. He led interactive inspection training for nine HazMat Tiger Team members which resulted in overall HazMat being reduced by 15 percent. He also coordinated and scheduled 43 personnel to attend California-mandated First Responder HazMat Training program. His team identified and corrected 27 potential write-ups to ensure the 9 MDG was inspection-ready for the July 05 ACC ESOHCAMP. He also led the wing in confined space program implementation; this program was declared the benchmark for Beale by the 9 RW/CV. Dave cares deeply not only about the safety of the 9 MDG personnel but the patients who visit as well. He revamped the Joint Commission for Accreditation of Healthcare Organizations (JCAHO) Self-Inspection guide checklist to seamlessly adapt 42 program changes into the existing program, as well as, streamlined four Environment of Care (EOC) programs. He personally spearheaded the evolution of seven EOC management plans; eliminating 37 superfluous program elements. His “Safety first” attitude resulted in his pursuit to install three cautionary roadway signs and speed bumps around his facility, eliminating the problem of speeding vehicles. His monthly 9 MDG facility grounds inspections identified and eliminated 42 potential safety hazards while his coordination of a $33K fire alarm system upgrade to the 9 MDG facility served to protect 14 lives and $400K+ of 9 MDG assets.

Mr. David L. Watson, 9th Medical Group 9th Reconnaissance Wing, Beale AFB, Calif.
Aircraft Notes

The Air Force had 2 Class A mishaps in August, only one in ACC. A B-1 recovered uneventfully via a 3-engine approach after one of the motors sheled itself. Here’s another CRM lesson ... a good wingman is worth his weight in gold. The other day, #2 calls knock it off for a hydraulic malfunction. As we get the initial actions done (pass the lead and fish out the checklist) the golden wingman (#3) says, “Recommend 240° for the home drome.” Smartly, we turn 40° left. Shortly thereafter, I announce the plan for this single-circuit hydraulic failure ... ILS with chase, controllability check, clear the runway and shut down in de-arm. Chase will approach to the radar pattern and then full stop. #2 acknowledges crisply as does #3 but he adds, “What if the leak doesn’t stop?” Total Hydraulic Failure means we’re looking at a cable, aerodrome closed for 30 minutes, holding and/or diverting. The golden wingman (#3) says, “Recommend 240° for the home drome.” Smartly, we turn 40° left. Shortly thereafter, I announce the plan for this single-circuit hydraulic failure ... ILS with chase, controllability check, clear the runway and shut down in de-arm. Chase will approach to the radar pattern and then full stop. #2 acknowledges crisply as does #3 but he adds, “What if the leak doesn’t stop?” Total Hydraulic Failure means we’re looking at a cable, aerodrome closed for 30 minutes, holding and/or diverting. Then clear 3 off to land first as I had plenty of gas to hold/divert. As we coordinated the RTB, #3 expeditiously got out of the way AND backed up our plan on the SOF frequency. Outstanding job. EP training often degenerates to "What do you do for this light?" Let’s start teaching how to be a good wingman during SEPTs as well. Check yourself before you wreck yourself. Fly Safe!

Ground Notes

Since the start of FY05, ACC has experienced 15 fatal Class "A" mishaps. Five have occurred since the start of this year’s “101 Critical Days of Summer” safety campaign. This FY, private motor vehicle mishaps (PMV-4) account for 67% of the total or 10 of 15 mishaps. The five remaining mishaps involved (1) industrial, (1) PMV-2, (1) sports and recreational, and (2) miscellaneous fatalities. ACC currently stands at a 38% reduction in fatal mishaps compared to the same time last FY. Irresponsible alcohol consumption, fatigue, and the nonuse of seat belts while operating private motor vehicles during the summer travel months, were central factors in a majority of these mishaps.

Weapons Notes

What a great month for the weapons safety community. We didn’t experience any mishaps during the month of August. This is a tremendous achievement and should serve as the standard that we all try to achieve each and every month. Keep up the good work and continue to follow your technical guidance. Remember to apply sound Operational and Personal Risk Management practices. Practicing these principles will help ensure we have the safest explosive safety working environment possible. Thanks for all you do for the weapons community and weapons safety every day!

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
COME BACK HERE AND... WHA TH'HECK?

TURN ON TH' WATER... TURN ON TH' WATER.

PICK UP TH' HOSE, PICK UP TH' HOSE.

CIGARETTE... FUEL SPILL... POOF!... FIRE...?
Careless Smoking Life-Saving Tips

- Don't put ashtrays on the arms of sofas or chairs.
- Empty ashtrays into the toilet or an airtight metal container. Warm ashes dumped in waste cans can smolder for hours, then ignite.
- Don't leave cigarettes, cigars or pipes unattended, and keep smoking materials such as matches and lighters out of children's reach.
- Put out all smoking materials before you walk away.
- If you begin to feel drowsy while watching television or reading, extinguish your cigarette or cigar.
- Close a matchbook before striking and hold it away from your body. Set your cigarette lighter on "low" flame to prevent burns.
- If friends or relatives who smoke have visited, be sure to check on the floor and around chair cushions for ashes that may have been dropped accidentally.
- In case of a fire, stay low to the ground, beneath the smoke, and have an escape plan already worked out.
- Install a smoke alarm on every level of your home. Test the batteries every month and change them at least once a year.

For more information, contact the Federal Emergency Management Administration at: http://www.usfa.fema.gov/statistics/