

May / June 2007

Combat Edge

Air Combat Command's Safety Magazine



WEAPON
& POOL SAFETY

Combat Edge May/June 2007: Weapon & Pool Safety, Crazy Things People Do While Driving

CRAZY THINGS
PEOPLE DO WHILE DRIVING

SPIDER BITES

Combat Edge

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ACCent

ON SAFETY

It Comes Down to Personal Accountability

This issue of THE COMBAT EDGE contains a cross-section of seemingly unrelated hazards to your personal safety and health. All of the stories have something in common; they deal with hazards, acceptance of risk, and the need for mitigation measures. It boils down to personal responsibility, understanding the risks associated and doing the right things. The statements too often heard, "it's not my job" or "the safety dudes worry about that," just won't hack it anymore. The problem is, a Safety Professional is not going to prevent or stop any individual from doing an unsafe act — it comes down to personal accountability and Airmen accepting that they are responsible for safety.

In the coming months ACC will start employing the tenets of the OSHA Voluntary Protection Program (VPP). This is not an additional program but a process to place Safety on the path of continuous improvement — it fits right with our current AFSO21 processes. Also, VPP involves leadership commitment and Airmen involvement, the acceptance of personal responsibility for the safety and health of fellow Airmen and the environment they operate in. Sounds like a match for our Wingman program. The overall goal is to continually improve the safety and health of our Airmen and instill a safety ethos. What's the bottom line of going down this path — the safety and health of our personnel directly affects the readiness of our combat forces — and that responsibility starts with YOU.



Colonel Kelly E. Fletcher,
Deputy Director of Safety

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COVER PHOTO BY AMN KYLE R. FIDEL

DRIVING

DISTRACTIONS

by CMSgt Elbert H. McClain III, Shaw AFB, S.C.

It was a typical June day in the southeastern United States – bright and sunny. I was driving into the most congested part of town where most of the shops, stores, and eateries are located. I noticed a lot of folks out and about, shopping, and going through their daily routines.

Something really caught my eye, but at that time, it didn't strike me as being very important. Next to me was a rather large truck, charcoal gray with a lot of chrome; very nice and clean. A lady was driving the truck, accompanied by at least four to five children. She was trying to tend to the children as she was driving. Some disciplinary actions were on-going, and from her gestures, a few of her orders were obviously falling on deaf ears. I also noticed she was driving somewhat erratically, because of what was going on inside the vehicle. Therefore, I changed lanes because my senses told me she was going to have an accident. You could clearly see she was distracted, which is not a good combination when driving.

However, I continued on with my errands and stopped by a few stores to conduct business. Forty-five minutes later, I was stopped at a light waiting for it to change. While stopped, my focus turned to a blue Ford Explorer that had pulled up from another direction at this same light. Fortunately, I was the second car in my lane and had to wait for the car in front of me to proceed once the light turned green. Rather than proceeding through the intersection when the light turned green, I stayed focused on the Ford Explorer. Suddenly, as I heard a horn behind me from a car whose driver obviously wanted to proceed, I

saw that same charcoal colored truck I had observed earlier smash into the back of the Ford Explorer without even braking. The impact forced the Ford Explorer all the way into the intersection. That Ford Explorer might possibly have slammed into the side of my vehicle, if I had continued through.

Fortunately for the occupants of both vehicles, it was easy to confirm there were no major injuries. The lady, or as I see it, the distracted driver, told me she didn't even notice the light or the Ford Explorer in front of her because she was trying to deal with the behavior of the children in her vehicle. I again made sure she and the children were okay and the two individuals in the Ford Explorer had called the police. After the police arrived, along with an ambulance, I proceeded home.

Perhaps we think distracted drivers are younger. As experienced drivers, we often think we can multi-task. But when it comes to driving, you need to be aware of what you are doing and what is going on around you. We continue to lose Air Force personnel every year because of two- and four-wheel motor vehicle accidents. In fact, according to the National Highway Traffic Safety Administration, "motor vehicle crashes are the leading cause of death for military personnel." Like the mishap I observed, these accidents can be prevented if everyone focused on the task at hand ... driving. The last thing we need is another contributing factor, like distractions affecting our ability to drive safely. For your sake and the people that share the road, continue to master your abilities, be aware of what is happening around you, and don't let distractions get you in an accident. Drive safely. 🗡️

DID YOU KNOW?



80% adjust radio or music while they drive

73% talk on the phone

68% eat

19% text message

5% check e-mail

19% fix their hair

12% put on makeup

2% shave

Here are the top 10 CRAZIEST things people have admitted to doing while driving:

10. Trying to kill a spider in the back seat with my son, while driving car with a manual transmission
9. Study for a test with open notebooks/book, while driving about 75 mph down the highway
8. Holding the phone with one hand, curling hair with the other, while driving using a knee
7. Painting toenails
6. Urinated out the window while going down the road
5. Trying to change shoes to a pair of heels that had straps which were getting tangled on the brakes
4. Feeding a baby in the back seat while I was driving
3. Have a drink in one hand, cigarette in the other hand, and drive with left foot
2. Staring contest with passenger, and the number one craziest thing
1. Shaved legs, eaten a taco, put on make-up, and drank alcohol at the same time

(Survey of 1,200 drivers ages 18-60) Courtesy Nationwide Mutual Insurance

The Dangers of GPS Altitude

by Capt Derek Rutledge, Beale AFB, Calif.

As aviators, we rarely think about the accuracy of our instruments. When you look down at your airspeed indicator and see 200 KIAS, unless you have a specific reason to doubt the equipment (icing, etc.), you can reasonably assume that the aircraft is moving at 200 KIAS. When your VVI tells you that you're descending at 300 feet per minute, that's pretty much exactly what your plane is doing.

But what about altitude? When you look at your altimeter and see 10,000 feet MSL, what exactly does that mean? Obviously the altitude that you're reading is a function of your altimeter setting. If in class A airspace with 29.92 properly set, your true altitude might be off by a few hundred feet, but assuming you have an accurate local altimeter setting, the altitude that you're reading should be pretty darn accurate, right?

As it turns out, that's not the case at all. If that statement surprises you, don't worry – you're not alone.

“A lot of pilots don't fully understand how their barometric altimeter works.”

This issue is compounded by the fact that we're becoming more and more reliant on GPS. Reconnaissance aircraft use GPS altitude to gather accurate imagery. Some unmanned aircraft use GPS altitude to land. Handheld GPS units are commonly included in survival kits and many aviators would have no problem using them in the event of equipment or complete electrical failure. More than a handful of pilots have looked down at their GPS receiver and were perplexed to note a discrepancy between that altitude and the one being displayed on the aircraft's barometric altimeter. Some have rationalized this error, “The GPS altitude feature just isn't accurate at high altitudes,” or “It amazes me that the Air Force buys such cheap equipment.” Neither can be farther from the truth. To understand the difference between these two methods of measurement, we must first understand how the two systems work.



“A barometric altimeter does not measure altitude at all. It measures pressure.”

If you don't believe me, bring an altimeter into an altitude chamber; see what happens. Scientifically, this is called a “geopotential” system — where we estimate an unknown variable based on an accurate measure of a completely different variable. In this case, we estimate altitude based on pressure. The important thing to remember, however, is that this relationship is an estimate based on a model called the International Standard Atmosphere (ISA) — and this model is not always accurate.

The ISA model assumes 15 degrees Celsius and 101.3 kilopascals of pressure at sea level. It also assumes zero humidity and a standard temperature lapse rate (approximately 2 degrees per 1,000 feet) up to 36,000 feet and constant temperature above 36,000 feet. How often does the atmosphere reflect all those assumptions? Almost never. Certainly not in August in the Middle East or in January at Grand Forks. Even if you do get lucky enough to fly in a perfect ISA atmosphere, it won't last long. A passing front or the simple setting of the sun will be enough to invalidate your perfect atmosphere and introduce significant error to your altimeter.

Even with the correct altimeter setting your barometric altitude can differ from your true altitude by as much as 10 percent. That means at 30,000 feet, your altimeter can be up to 3,000 feet off! (Remember, your altimeter setting is based on a ground station, not a point in the air.) Please don't misunderstand what I'm saying here. This does not mean that you'll be off altitude and in danger of hitting another aircraft. It only means that your instruments are not representing an accurate distance above sea level. You and all of your co-altitude traffic will still be flying at a pressure altitude of 30,000 feet.

“GPS, on the other hand, is a ‘geometric’ system.”

Here, when we measure altitude, we're measuring an actual distance. In this respect, GPS altitude is more accurate than barometric altitude. But GPS introduces another source of error that's not as obvious. This error lies in the way GPS estimates sea level. We know that the earth is not flat, nor is it a perfect sphere – fatter at the equator and thinner at the poles. But the level of the sea is not a smooth surface either. In fact, the earth actually looks like a golf ball.



Try to visualize this illustration: Take the entire earth and remove all the continents and land masses so that there is nothing but water. Then remove the moon so that there are no tides. Now remove all forms of weather so that there are no waves. You'd be left with a huge ball of smooth water floating through space. In this example, there is no doubt where sea level is — it's the surface of the water. But as it turns out, this surface would not be a smooth sphere at all. It would resemble a golf ball with numerous dimples and divots all over the surface. The reason behind this is that ...

variations in the density of the Earth's core cause uneven distributions of gravity around the globe.

Just as the gravity of the moon causes tides, these variations in gravity have a profound affect on sea level and create stationary crests and troughs up to 500 feet. Since our traditional methods of surveying measure altitude as a distance above sea level, you can see where this could be problematic — with variations up to 500 feet, you can't guarantee a common starting point.

To alleviate this problem, GPS uses a model called WGS-84 (World Geodetic System — 1984). This model was created to mathematically describe the exact location of sea level around the globe. Although the system dramatically improves our ability to accurately measure altitudes, its guaranteed accuracy is +/-200 feet. Have you ever walked along the beach with a handheld GPS unit and been surprised to notice that the altitude doesn't read "0"? No, your gadget is not broken. The model just happens to be off in that area. GPS altitude can read up to 200 feet different than a known surveyed altitude.

What this means to you as a pilot, is that if you're relying on GPS altitude close to the ground, you probably have a death wish. That tower could be 200 feet taller than you think. Your aircraft could be up to 200 feet closer to the ground than you think.

At higher altitudes, above the terrain, relying on GPS altitude is even more dangerous ...

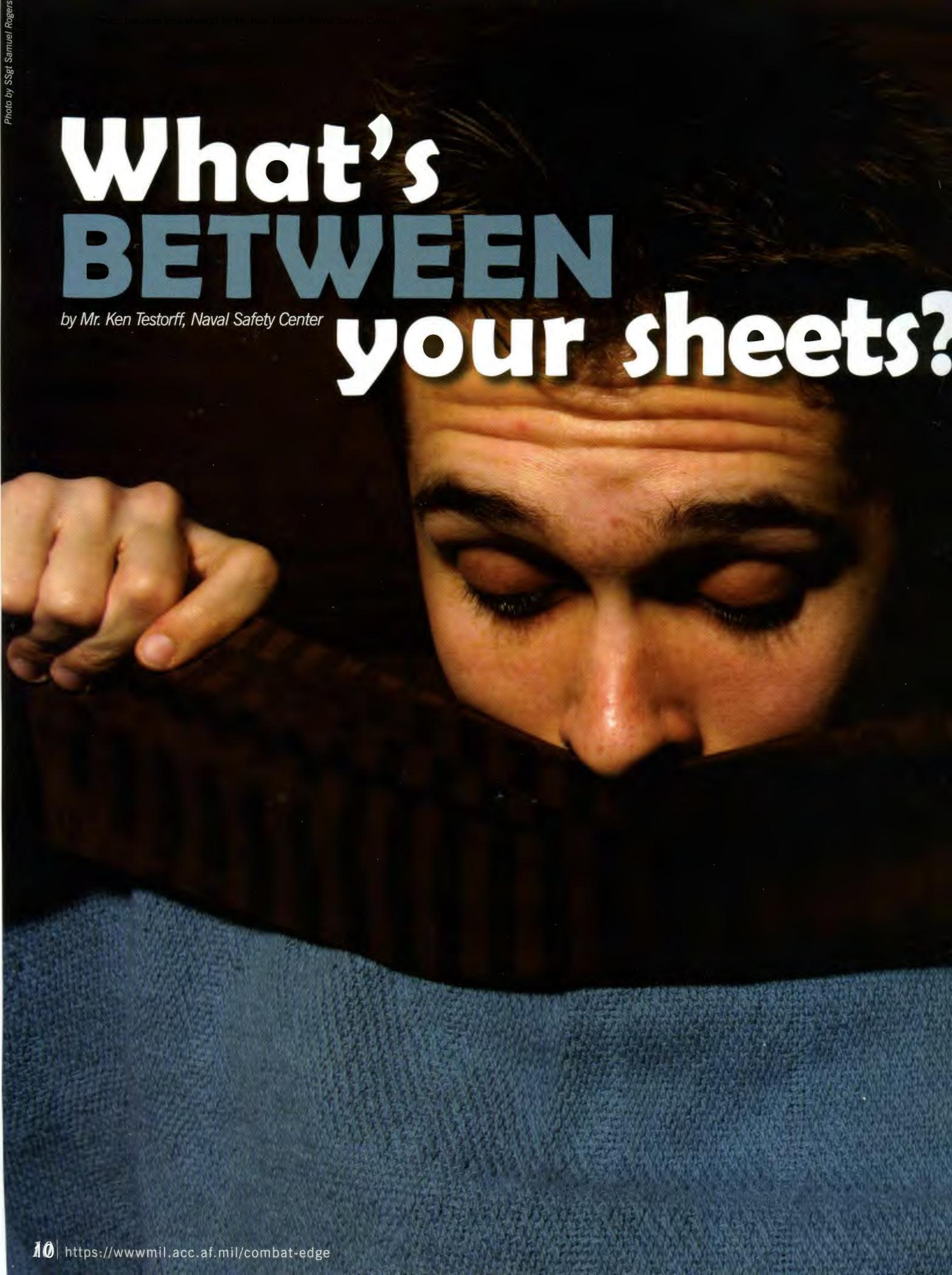
because all the other air traffic is relying on barometric altitude in accordance with FAA and ICAO rules. Even though you might be exactly at your true altitude, the altitude of the other traffic could be several thousand feet off!

GPS is an invaluable tool for horizontal navigation and has certainly contributed to increased aviation safety worldwide. But don't be lulled into thinking that it'll provide an equivalent altitude measurement. Keep you and your crew safe and always use your barometric altimeter for flight. ✈️



What's BETWEEN your sheets?

by Mr. Ken Testorff, Naval Safety Center



It's fairly safe to bet the subject of this story (we'll call him D.L.) checks between his sheets every night now before he climbs into bed. The last time he didn't, he got the surprise of a lifetime. A brown recluse spider had decided to share the space with him.

"I felt a slight tickle on my upper, left thigh and brushed it away," he said. "Then I felt a stinging sensation on my leg and lifted the covers to find a small, brown spider. I ran to the bathroom where I got some tissue, grabbed the spider, and flushed it down the toilet."

D.L. had a feeling of personal victory for about an hour. By that time, the bite area had swollen to the size of a quarter.

"I went to a doctor that afternoon, he said, and the doctor asked me if the spider was a brown recluse." I never had seen such a spider before, but I agreed it could have been after hearing the description of one. The doctor gave me some antibiotics and circled the area with a marker, then sent me home.

Later that evening, a white infected area formed in the bite site.

"I'm told this area is called the 'bull's-eye,'" explained D.L. It's a definite telltale sign of a brown recluse bite. The area around the bite had turned blue and dark red and now extended outside the circled area. My fiancée took me to an emergency room, where I was rushed into surgery. I spent 8 days with an open cut at the bite site to drain the spider's toxins from it. I also spent 24 hours on IV antibiotics and pain medication. In the end, doctors had to cut away an area of dead tissue on my leg — a result of the toxins. The area measured 5 inches in diameter."

In 8 more days, D.L. underwent skin grafting on the area where doctors had removed the dead tissue.

"Unfortunately," he noted, "that area never again will look the same." I'm lucky, though, because if I had waited a day longer, I might have lost my leg.

Like many people, D.L. didn't know much about the brown recluse spider before this incident occurred. He didn't even know the spider existed in central Illinois where he lives. (Although the brown recluse spider is found mainly in Southern and Midwestern states, it isn't

limited to those regions.)

According to entomologists, the brown recluse spider isn't aggressive. Most victims contact them when putting on clothing or shoes they haven't worn for a long period, when using a bed that's been in storage, or when cleaning out undisturbed areas. Fatalities are rare, but bites are dangerous to children, the elderly, and those in poor physical condition.

Adult brown recluse spiders have yellowish-tan to dark brown soft bodies about one-quarter-to-one-half-inch long, and their grayish to dark brown legs — eight of them — are covered with short, dark hairs. The leg span is about the size of a half-dollar. Distinguishing characteristics include three pairs of eyes arranged in a semicircle on the forepart of the head and a violin-shaped, dark marking immediately behind the semicircle of eyes. The neck of the violin points toward a bulbous abdomen. Both male and female brown recluse spiders look similar and are equally toxic. The immature stages closely resemble the adults, except for size and a slightly lighter color.

This spider is most active at night, when it comes out searching for food — mainly cockroaches and other small insects. During the day, it stays in quiet, undisturbed places such as bathrooms, bedrooms, closets, basements, and cellars. The spider sometimes takes shelter under furniture, appliances, and carpets; behind baseboards and door facings; or in corners and crevices. Some have been found in stored clothing or old shoes, on the undersides of tables and chairs; and in folded bedding and towels that have been stored for a long time. Outdoors, you can find the spider in sheltered corners among debris; in woodpiles; under loose bark and stones; or in old barns, storage sheds, and garages. The brown recluse is very adaptable and may be active in temperatures ranging from 45 to 110 degrees Fahrenheit.

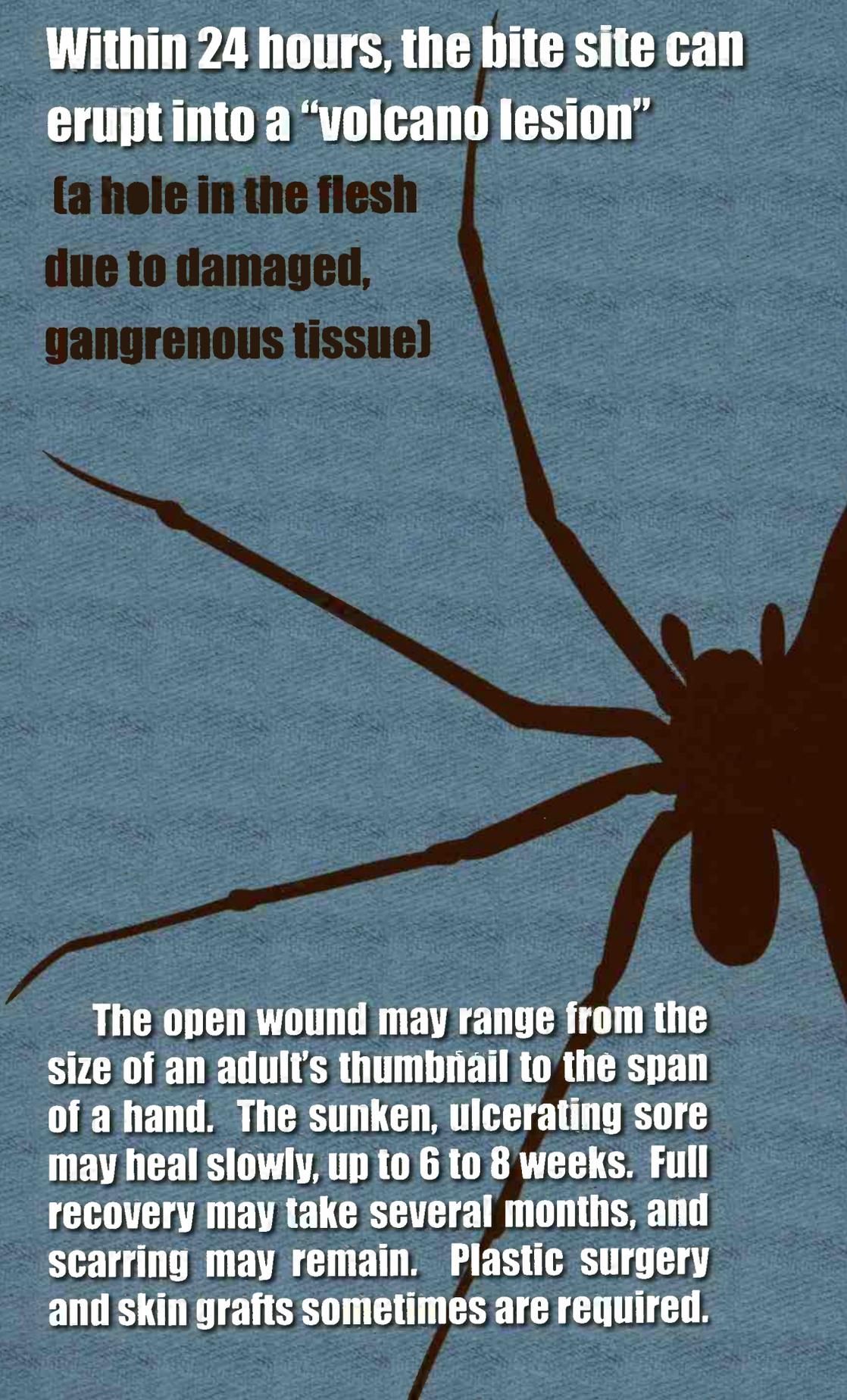
The severity of a person's reaction to the bite depends on the amount of venom injected and the individual's sensitivity to it.

Bite effects may be nothing at all, immediate, or delayed. Some people may not be aware of the bite for 2 to 8 hours, while others feel a stinging sensation, usually followed by intense pain — in cases of a severe reaction. A small white blister usually rises at the bite site, surrounded by a large, congested and swollen area. Within 24 to 36 hours, a systemic reaction may occur with the victim, characterized by restlessness, fever, chills, nausea, weakness, and joint pain. The affected area enlarges, becomes inflamed, and the tissue is hard to the touch. The spider's venom contains an enzyme that destroys cell membranes in the wound area, with affected tissue gradually sloughing away, exposing underlying tissues.

IF BITTEN

Within 24 hours, the bite site can erupt into a “volcano lesion”

(a hole in the flesh due to damaged, gangrenous tissue)



The open wound may range from the size of an adult’s thumbnail to the span of a hand. The sunken, ulcerating sore may heal slowly, up to 6 to 8 weeks. Full recovery may take several months, and scarring may remain. Plastic surgery and skin grafts sometimes are required.

by a brown recluse, remain calm, collect the spider, if possible (for positive identification), and immediately get medical attention (contact your physician, hospital, or poison information center). Apply an antiseptic solution to prevent infection, and put ice packs directly on the area to relieve swelling and pain.

An effective antivenom usually isn't available,

but many physicians administer high doses of cortisone-type hormones to combat hemolysis and other systemic complications. A report suggests that treatment with dapsone (a drug used mainly for leprosy) may reduce the degree of tissue damage.

Here are some TIPS to keep you from getting bitten:

- Shake out clothing and shoes before dressing, and inspect bedding and towels before using.
- Don't go barefoot or handle firewood without gloves.
- Remove trash, old boxes, piles of lumber, old clothing, and other unwanted items. Eliminate cluttered areas in basements, closets, attics, and other outbuildings.
- Dust and vacuum thoroughly and frequently around windows, corners in rooms, under furniture, and in storage areas and undisturbed places to eliminate spiders, webs, and egg sacs. Use a dust mop, broom, and dust pan if needed.
- Install screens on doors and windows to prevent entry. Seal or caulk cracks and crevices where spiders can enter the house. Wash off the outside of the house and roof eaves.
- Use approved pesticides, but always read the label, and follow directions and precautions.

As the author states, these spiders usually are found in dark, out-of-the-way places. This account is the first one I've heard about where someone was bitten in bed. These shy insects normally only bite when threatened, and, as opposed to this case, the bite is painless, and the spider seldom is seen. Although brown recluse bites can become secondarily infected and can need antibiotics, this treatment usually isn't required on the first day, as it was in this case. And, although hospitalization may be necessary for systemic reactions, I never before have heard of hospitalization for 8 days to let toxins drain from the wound. 

— Editor

Reprinted courtesy of Sea and Shore.

CANNON BALL!



by Ms. Elizabeth Nitong-Velazquez, Barksdale AFB, La.

Cannon ball!

FINALLY! They're open, outdoor swimming pools. This is the time of year when I nearly pass out trying to blow up my kid's pool toys. A swimming pool can provide hours of fun and entertainment for the whole family, but are you aware of the dangers associated with swimming pools? Drowning is the second leading cause of death of infants and children younger than 15 in the U.S. In the Southeastern U.S. drowning accounts for the leading cause of accidental death in the homes of children under five years old. Many communities have enacted safety regulations governing residential swimming pools (in ground and above ground), but it's ultimately up to parents and caregivers to comply with these regulations. In addition to these laws, here are some precautions you can take to ensure your little ones have a safe summer in and around swimming pools.

- Never leave a child unattended in the water or pool area for **any** reason. Even if it's only for a few seconds. 75% of drowning victims were only missing from sight less than five minutes.
- Designate a child watcher. Have this individual keep their eyes on the children at all times and know where the children are when they are out of the pool.
- Don't rely on swimming lessons or "floaties" to protect your child in the water. There is no substitute for adult supervision.
- Talk with baby-sitters about pool safety, supervision and drowning prevention.
- Post rules such as "No Running," "No Pushing," "No dunking," and "Never Swim Alone." More importantly — **enforce the rules.**
- Don't have a false sense of security. Don't assume that drowning or a drowning incident couldn't happen to you or your family. Avoid complacency.
- Keep children away from pool filters, as the suction force may injure them or prevent them from surfacing.
- Check the pool area regularly for glass bottles, toys or other potential accident hazards.
- Make sure all adults are CPR trained and qualified.

By following these few and simple guidelines, you can help keep your children safe in and around swimming pools and ensure the swimming pool is your friend, not your foe. 🐸

“Drowning is the second leading cause of death of infants and children younger than 15 in the U.S.”

MORE SAFETY FACTS

- Children ages 4 and under have the highest drowning death rate (two to three times greater than other age groups) and account for 80% of home drownings. These drownings most often happen in swimming pools and bathtubs in the child's own home or in the home of a relative.
- Many parents do not realize that young children tend not to splash or make noise when they get into trouble in the water and frequently drown soundlessly.

When and Where Drownings and Near-Drownings occur:

- Children under one year of age most often drown in bathtubs, buckets, and toilets.
- Children ages 1 to 4 years most often drown in swimming pools, hot tubs, and spas.
- More than 85% of drownings among children ages 1 to 4 are pool-related.
- Children ages 5 to 14 most often drown in swimming pools and open water (lakes and rivers).
- Male children have a drowning rate two to four times that of female children. However, females have a bathtub drowning rate twice that of males.

Courtesy of ENA Injury Prevention Institute

“Daddy Help”

Those were the words I heard as I answered the phone one Saturday morning. As a parent, we look forward to watching our children grow up to become responsible adults: baby's first steps, elementary school graduation, becoming a teenager, and receiving their first driver's license, all of these being milestones in their young lives. I enrolled my daughter in a class at the local college; this class took place at the downtown campus and required her to drive to get there. I ensured she had her license with her and showed her how to get to the school. I couldn't foresee the accident she was to be involved in, but, instilling proper safety practices beforehand prevented her from being seriously injured. This is why the simple act of driving for a teenager is hazardous.

dying

to drive

by MSgt Ross A. Grimes, Shaw AFB, S.C.

statistics

from the National Highway Traffic Safety Administration (NHTSA) show:

- ▶ Motor vehicle crashes are the leading cause of death for American teenagers.
- ▶ In 2001, 5,341 teens were killed in passenger vehicles involved in motor vehicle crashes. Two-thirds of those killed were not buckled up.
- ▶ When driver fatality rates are calculated on the basis of estimated annual travel, teen drivers (16 to 19 years old) have a fatality rate that is about four times higher than the fatality rate among drivers 25 to 69 years old.
- ▶ In 2001, 3,608 drivers 15 to 20 years old were killed in motor vehicle crashes, and an additional 337,000 were injured.
- ▶ Young drivers (16 to 20) were involved in 7,598 fatal crashes in 2001.
- ▶ In the last decade, over 68,000 teens have died in car crashes.
- ▶ Sixty-five percent of teen passenger deaths occur when another teenager is driving.
- ▶ In 2001, 26 percent of fatally injured teen drivers (16 to 20 years old) had high blood alcohol concentrations (0.08 percent or more), even though all were under the minimum legal drinking age and are not legally permitted to purchase alcohol.
- ▶ Two out of three teenagers killed in motor vehicle crashes are males.

What can adults, parents, and experienced drivers do to reverse this trend?

First we can ensure teenagers are receiving proper education. Parents sign permission forms and the school system takes over. Many times the school system is burdened with the number of students so quality time behind the wheel is limited. In South Carolina, new drivers are only required 12 hours of actual time behind the wheel before taking their driver's test, with many drivers only receiving the minimum. The most important things we can do are to take an interest in the well being of the new driver. Safety must be stressed, and you need to lead by example -- the simple act of wearing a seat belt sends a message to the teen driver that it's an important step when entering a vehicle. Obeying the rules of the road, speed limits, traffic signs, and letting the teenager know why they are important, these simple steps can reduce the number of accidents each year. Organizations such as Mothers Against Drunk Driver (MADD <http://www.madd.org/>) or Students Against Drunk Drivers (SADD <http://www.sadd.org/>) exist to encourage teens to use a designated driver or phone their parents if they make the poor choice to drink, and promises an interrogation-free ride home in case they do. Most teenagers can't wait until they're able to drive; let's help them survive to teach the next generation. 🗡️

UNDERAGE

by SSgt Shane Stephens, Holloman AFB, N.M.

Let me set the scene right quick.

It was the last Operational Readiness Exercise (ORE), basically the dress rehearsal before my wing's scheduled Operational Readiness Inspection (ORI). Our new base commander had us on a pretty swift pace, and I believe his goal was to knock the upcoming ORI clean out of the park. I remember it being hot out and the weather forecast wasn't going to show us much in the way of cooling off anytime soon. This last practice would prove to be a bit more challenging than I ever anticipated. But before we go headlong into what transpired during that day, I would like to bring you up to speed on a chain of events that occurred earlier.

Well, when all of this happened, I was an Aircraft Weapons Systems Load Crew Team Chief. I had a couple of really good troops on my crew, good reliable hard workers. For those of you that don't know much about the Aircraft Weapons profession, we're a pretty rowdy bunch. We work hard and play hard, with teamwork being an integral part of our lives. Each

DRINKING

crew has its own personality and way of doing business; we're a bit like family in a lot of ways. Most every aircraft has its own loading requirements and, with it, the required amount of members per crew. Here at "Base-X," and on this particular aircraft, we operated on a crew of three, with me being the team leader and supervisor of my other two crew members. Despite each of our faults, take that as you will, we always got the job done, and done well at that.

What I'm about to tell you involves a few of the aspects involved with life in the military, life on the flight line, and coming of age in a roundabout sort of way.

This particular string of events will focus on my "two-man" at the time. A young man from Alabama, he was every bit the southern boy right down to his accent, and he seemed very mature for his age. He was just 17 when he enlisted, and had his whole life sprawled out in front of him. He had married his high school sweetheart just before entering the service. They were quite the cute couple too. Their assignment to Base-X would be the first time either of them had been that far away from home, and anyone that's ever been privileged enough to supervise troops in this position can

probably guess where this is going, those that haven't read on.

Things went along pretty well for a while. We were winning monthly honors at the Load Barn on a pretty regular basis. Oh, Load Barn is where we go each month for load proficiency training, winning something there feels pretty darn good. Despite things going relatively well, I noticed that my troop seemed to be preoccupied in his thoughts and getting a bit distant. He was starting to slip in his duties, occasionally showing up late for work. Our counseling sessions weren't revealing much, if anything, and he always assured me that he was fine, "just dealing with some things." This went on for a while, a month or so I guess, and we were still doing alright as a crew, but we weren't "clicking" like we used to. Something was most definitely missing. Finally, during yet another of our counseling sessions he let out that he and his wife weren't doing too well. I'm not going to air his dirty laundry here, but nonetheless, the kid had a lot on his mind. Although he was pretty mature, his age started to show through, and some of his habits, that to this point were unbeknownst to me, would start to also rear their ugly heads.

Before coming in the service, my troop spent his days after school flirting with his girl, riding four-wheelers and jet skis, and living a typical teenager's carefree life, all while living with mom and dad. Now that he was in the Air Force, he had to learn a new career and was tasked with responsibilities for which he was com-

pletely unprepared. Along with being newly married and homesick, all this combined to make coping challenging beyond rational thought.

I guess a week or so had gone by after being put on mid-shift, and just when I thought things were starting to come together, he came into work late. Not that it was the end of the world, we were still trying to resolve some of his issues, but that night there was alcohol on his breath. At 18 years of age, and in any state in the country, we all know that's illegal. "Okay," I thought, "things must have taken a turn for the worse." As angry as I was at my troop for drinking underage, I figured now wasn't the time to rip into him. During our previous counseling sessions I realized that there was more there to deal with than I was qualified to handle, so I referred him, through our First Shirt, to the Life Skills Clinic. Unfortunately, the only thing his counselor could ever tell me is that he showed up for the sessions,

but as it turned out, one of my troop's issues was that he was an alcoholic.

Aside from his personal issues, this kid was a pretty darn good troop. Everyone liked him, and he worked his butt off whenever he was needed, usually cracking jokes and telling stories along the way. I didn't want to see him throw away a promising career to a vice like alcohol. We got him

enrolled in the Alcohol and Drug Abuse Prevention & Treatment (ADAPT) program and offered him as much encouragement as we could. There were quite a few folks that readily stepped up to help, and we became his support group, and things were getting better a day at a time.

All right, back in the “way-back-machine,” let’s get to the morning when it all came to a head.

A bit of time had gone by after he had entered the ADAPT program, and my two man was standing tall and looking good, he even had a gleam in his eye again.

Things seemed to be coming together. Our Section Chief put us in the upcoming exercise as a way of getting us “back in the game” before the ORI. The processing all went as usual, and day one of the Phase II came and went pretty much without a hitch. It was a long day and we moved a lot of munitions on and off of a lot of different aircraft that day. That, coupled with wearing all our exercise gear, was enough to wear out even the toughest of troops. When our shift ended, we hiked our tired bodies back to “the world” and went to our respective homes for the evening.

Day two came much sooner than I wanted. The alarm went off and I crawled out of bed, still sore and tired from the day before. We got back to “the war” early, and all three of us looked beaten before we began. Not the greatest compliment being this was only the second day. We signed out all of the gear we needed and headed out to our “bunker,” which was nothing more than a small collection of sandbags laid out on the ground simulating our little safe haven. We’d been on shift just long enough for the sun to warm everything around us pretty well, and a small bead of sweat had formed on

many a brow on the flight line. Then the inevitable happened, that good for nothing alarm started to howl and the announcements started coming over the giant voice system, an attack was forthcoming. We hit the deck, took cover, and donned our chem gear. I could feel the rubber mask slipping on my face as the sweat built up. One of the evaluators came up and asked me to perform a hydration test with my canteen. For all of you out there that have ever done this, I implore you to keep your canteen clean at all times and filled with fresh water as often as the situation allows. Luckily for me everything went fine, and I do keep my canteen clean so the fowl taste of the canteen was minimal. Soon after that we went into a black flag condition and were tasked to begin loading our aircraft. Here’s where things get interesting.

We’re out here in the heat, mission-oriented protective posture (MOPP) gear head to toe, sweating like crazy and loading planes. And they tell me there’s no excitement in the Air Force. We had just finished prepping the first side of the aircraft and starting on the second. The load requirement called for a “slant-load” on the triple ejector racks. My two-man was prepping the stations required for loading when I happened to look over at him. Something wasn’t right and it was getting worse very quickly. As I walked up to him (I was about 3 feet from him at this point), I noticed his eyes starting to roll back in his head. I was able to catch him as his body collapsed into a heap on the ramp, just beneath the wing tank. He was pale, soaked in sweat, unconscious, and non-responsive. It was also his lucky day.

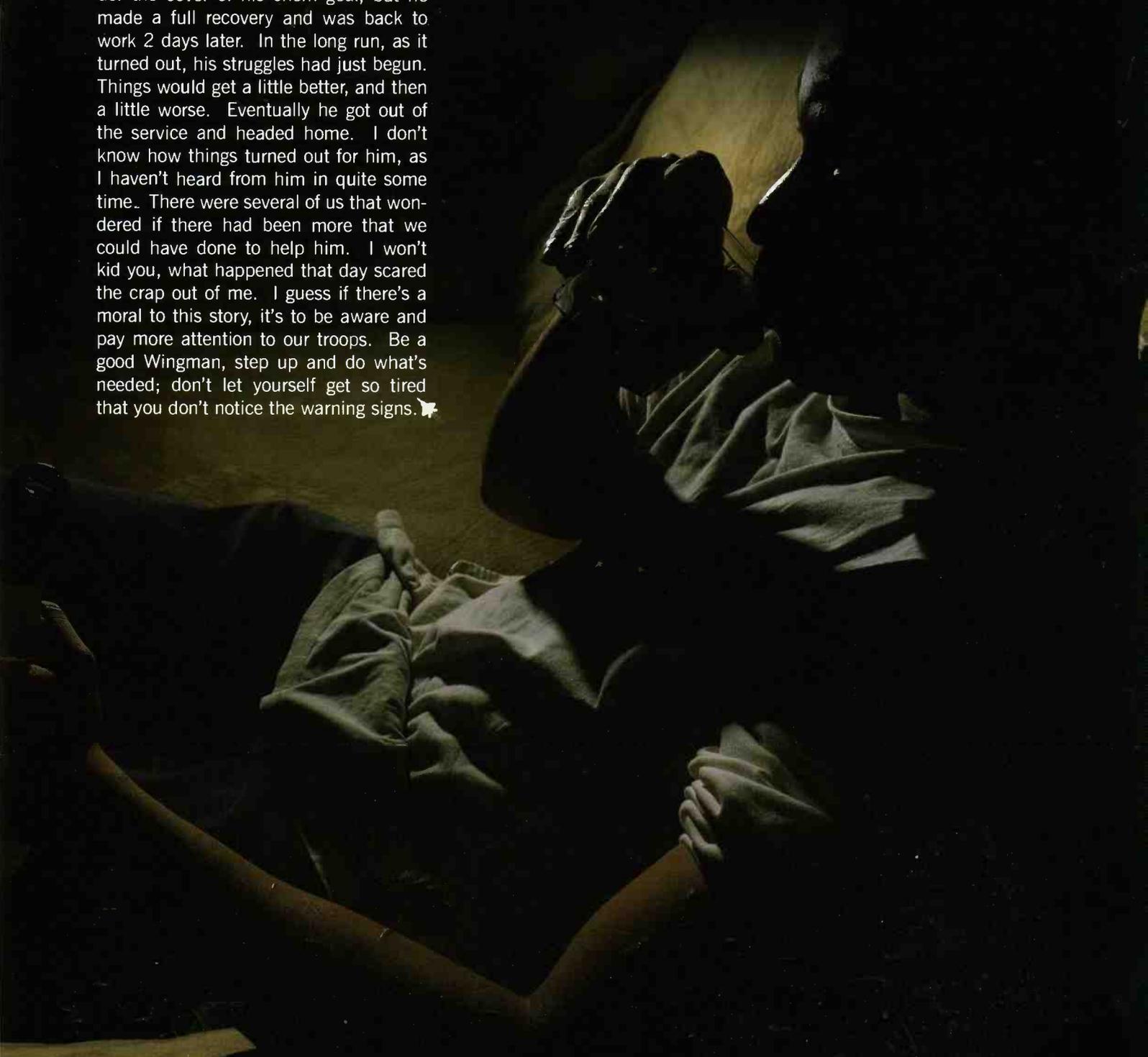
I don’t claim to be the brightest bulb on the tree, but I’ve been in the service long enough to probably teach that dang self-aid and buddy care class, and so had a few of the other troops that happened to be in the very near vicinity at the time. Our “bunker” was less than 75 feet away and our “bunker boss” had seen all of this happen and had called for a truck to take us to the medical shack at the

other end of the ramp. With help on the way, we lit into this kid like he was the dummy we used in class. I carefully peeled his mask off and checked him for all proper vital signs. He was breathing, kind of heavy and his pulse was sporadic. He was overheated and in a serious way too. We pulled his chem shirt open in an effort to cool him off, and we grabbed his canteen and started to pour it on him to help cool him further when the truck arrived. I couldn’t tell you if it took 5 minutes for them to get there or 15, but I was about a half a step away from freaked out. We got him in the truck, a little S-10 pickup, and started down the taxiway. About a third of the way to the medical facility he let out a huge gasp, like he was fighting for air, his eyes rolled again this time even deeper into his head and his body went stiff as a plank. As the medical troops would tell me a little while later, he was bordering on heat stroke. Our efforts to cool him off had probably given us the window of opportunity to get him to the medical facility before a more severe situation could develop.

Apparently, the night before, my two man had obtained a significant amount of alcohol and had gotten exceedingly drunk, which was later determined to be the leading cause of my two man’s collapse that day.

The large amount of alcohol in his blood had accelerated a rapid dehydration of his system and had accelerated the symptoms and eventual onset of heat stress.

The symptoms were hard to detect under the cover of his chem gear, but he made a full recovery and was back to work 2 days later. In the long run, as it turned out, his struggles had just begun. Things would get a little better, and then a little worse. Eventually he got out of the service and headed home. I don't know how things turned out for him, as I haven't heard from him in quite some time. There were several of us that wondered if there had been more that we could have done to help him. I won't kid you, what happened that day scared the crap out of me. I guess if there's a moral to this story, it's to be aware and pay more attention to our troops. Be a good Wingman, step up and do what's needed; don't let yourself get so tired that you don't notice the warning signs. ▶



In any type of job you do, there is always some sort of safety aspect to it. This story is about a weapon system that almost everyone in the Air Force is familiar with — the M16A2 rifle. It happened at Osan Air Base in South Korea, but it never should have happened at all. Why? Because the individuals involved had all been through Combat Arms classes where instructors cover the safe use and operation of the M16A2.

Back in 2001, a group of Security Forces were practicing Emergency Services Team (EST) tactics. This

team is the military's equivalent to SWAT. They were on the range doing tactical movements, learning how to shoot and move. To be as real as possible, they were using live ammunition. When they finished up on the range, they were directed to the cleaning area to break down their weapons and clean them. This should only be done after all weapons have been cleared, which is something that is demonstrated in all classes.

For instance, the M16A2 has four steps to clearing. Step one is to make sure the weapon is on safe. Step two is to ensure the weapon does not have

a magazine in the magazine well. In step three, you check to make sure the bolt is locked to the rear so you can check the chamber. The fourth and final step is to check the safety one last time. While performing all clearing procedures, you should be at a clearing barrel just in case a round should be discharged. This will trap the round inside the barrel instead of in something or someone.

Now that you know the basics of clearing an M16A2, back to the story. The EST moved into the cleaning area from the range and started to break their weapons down. It's not clear

weapon



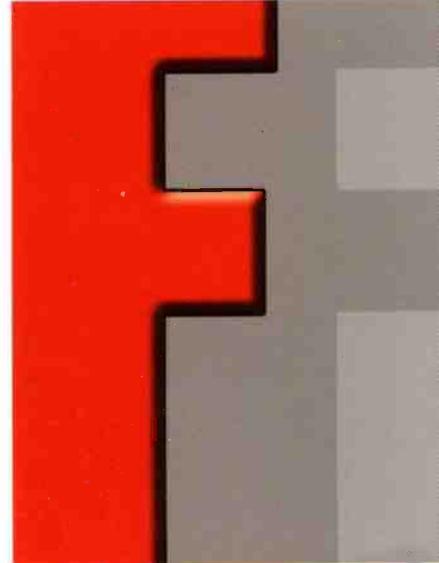
photo by A1C Craig R. Cisek



photo by 1Sgt Heather E. Sharp



photo by SSgt Pamela J. Farlin



whether they stopped at a clearing barrel or if they cleared their weapons on the range. The EST was in the process of taking the weapons apart to clean them when there suddenly was a loud heart-stopping sound.

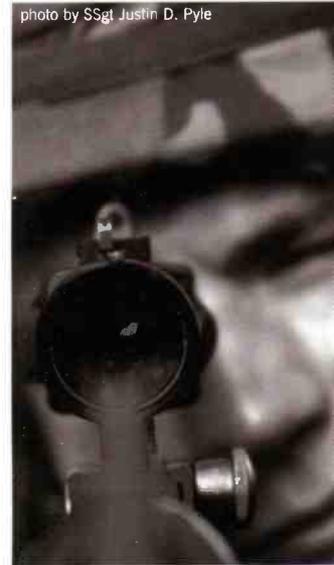
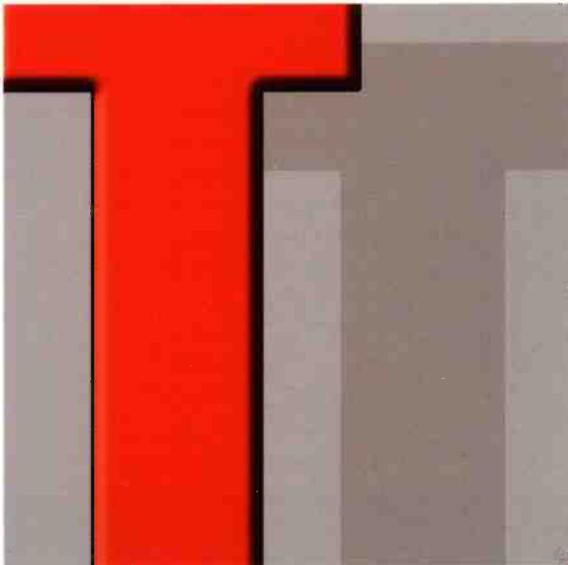
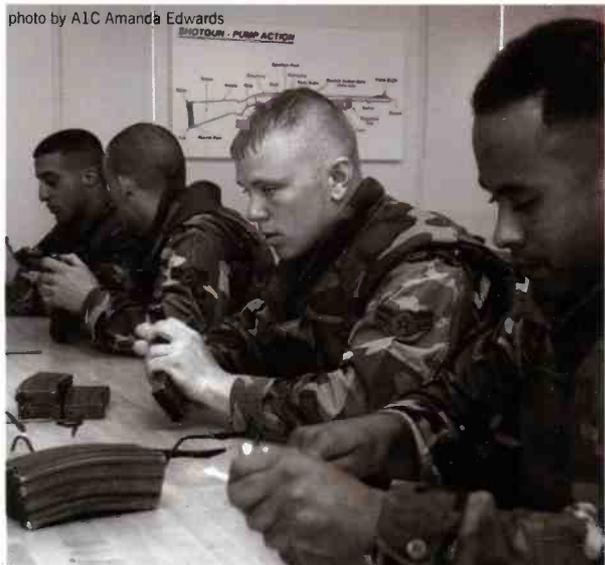
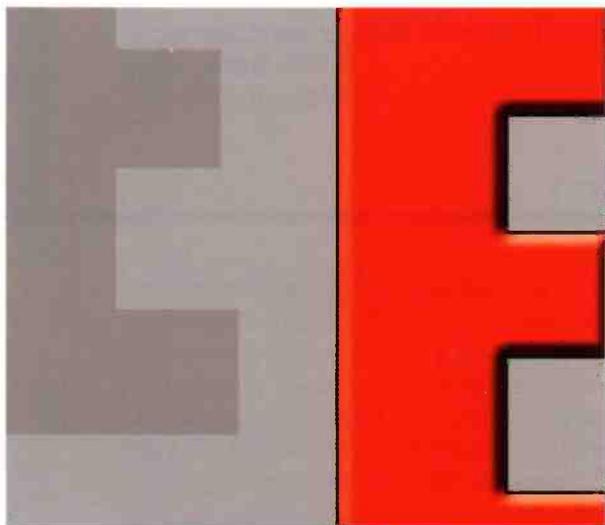
SSgt Smith (not his real name) was responsible for a negligent discharge. He did not follow the four clearing steps and, as a consequence, discharged a round. Additionally, the round did not go into a clearing barrel as it should have. Instead it went right into the left forearm of one of his teammates (who we'll call SSgt Jones). The round entered the bottom

of his left arm next to his elbow and exited through the top of his forearm.

Initially, SSgt Jones did not realize he was injured. He jumped up with the rest of the class and turned to see who had fired the round. When one of the other teammates realized what had happened, he approached SSgt Jones and asked him to sit down. This happened at the same moment that SSgt Jones lost feeling in his left hand and looked down at his arm. When he saw what had happened, he blacked out. SSgt Jones was rushed to the hospital where he underwent major surgery to repair his arm.

We have safety guidelines in place to benefit all of us. They are meant to protect each of us from serious injury or even death. It is very important that each of us become familiar with all of the safety aspects of our day-to-day jobs. It's also important that each of us train all the new Airmen on the importance of safety in each respective work area. If just one person makes the choice to skip a step like SSgt Smith did, the consequences are very serious and can be life altering. Just ask SSgt Jones who has had to go through months of physical therapy to learn to use his arm again. ✈

by SSgt Jack R. Constable, Jr., Holloman AFB, N.M.



MONTHLY AWARD WINNERS – FEBRUARY

CREW CHIEF SAFETY



Award of Distinction

Sgt Hunt was tasked to launch B-2 aircraft 93-1088, the “Spirit of Louisiana,” for a routine training mission. All systems were found to be normal during the preflight, Production Supervisor Exceptional Release, and the aircrew walk-around inspection. The aircrew boarded the aircraft and was cleared for a normal engine start. With all four engines up and running, and dash-one preflight completed, the aircraft was “in the green and ready to taxi.” Sgt Hunt performed a final walk-around inspection; and just prior to the aircraft taxiing out of the maintenance dock, he noticed a puddle of hydraulic fluid on the ground near the number one main landing gear brake. He quickly called for hydraulic specialist support at the scene, who determined that the brake was leaking at the maximum allowable limit specified in the technical data. Sgt Hunt quickly called the Production Supervisor in order to address the possibilities of a brake fire, or even brake failure. He also informed the aircrew of the situation

and instructed them to shut down the engines in order to prevent any possibility of a catastrophic failure in the brake system. Sgt Hunt’s keen observation and analysis kept a questionable aircraft on the ground, which potentially averted greater damage to the aircraft, and placing the crew in harm’s way, had it launched in its ailing state. SSgt Hunt is a fine example of “Mission First, but Safety Always.”



SSgt Eric L. Hunt
509th Aircraft Maintenance Squadron
509th Bomb Wing
Whiteman AFB, Mo.

PILOT SAFETY



Award of Distinction

While on his annual check ride, Lieutenant Varnadore, an E-3 copilot, was in charge of the aircraft as it operated in the ZKC2 orbit area, and was alerted by the navigator to a crack in the #5 pilot side window. This crack quickly led to the shattering of the inside pane, and threatened to shatter the outside pane as well. With the evaluator pilot in the back of the aircraft, he sent the instructor navigator to retrieve him, and also notified the Flight Engineer of the problem. Lt Varnadore quickly called for the “Window Cracks or Arcing” emergency procedure checklist while awaiting the arrival of the Evaluator Pilot. With the Evaluator Pilot back, and in charge of the emergency, he declared the emergency with Air Traffic Control and coordinated for a descent to 10,000 feet in order to decrease the differential pressure on the windshield below 5.0 psi. He then slowed the aircraft to 250 KIAS in accordance with the Technical Order to minimize the hazard of a possible bird strike at lower altitudes on a cold, weakened windshield. The crew concluded that they were too heavy for a normal gross weight landing. To solve this problem, they decided to fly back with the gear down, thereby increasing drag and increasing the fuel burn rate by 50 percent. The aircraft remained at 10,000 feet for the remainder of the cruise portion of

flight, at which point the Evaluator Pilot resumed control of the aircraft and flew an uneventful ILS to a full-stop landing at Tinker AFB. Through effective CRM and solid knowledge of the aircraft, Lt Varnadore ensured that the aircrew remained safe despite a cracked windshield and the potential for the rapid loss of cabin pressure. Due in part to his effective response in dealing with this emergency, Lt Varnadore was awarded a rare “Exceptionally Qualified” rating on his check ride performance. Lt Varnadore demonstrated exceptional situational awareness, advanced E-3 technical knowledge, and crew leadership that led to the safe recovery of the E-3 aircraft and its crew.



1Lt Roger P. Varnadore
963rd Airborne Air Control Squadron
552nd Air Control Wing
Tinker AFB, Okla.

GROUND SAFETY



Award of Distinction

Upon assuming his shift at the Fort Hood Garrison Weather Operations Center, SrA Jaeger recognized the potential for a severe weather outbreak in central Texas, and took immediate action. Amn Jaeger first issued a "Tornado and Large Hail (3/4 inch or greater) Watch," which provided Fort Hood leadership a full 5-hour notice ... a full hour more than Air Force forecast standards ... before actual severe weather commenced. This permitted complete and orderly resource protection battle-drills across Fort Hood, ensuring field units were recalled to their containment areas, and 220 aircraft and 8,000 vehicles were tied down and sheltered prior to the storm's arrival. At this time, the Presidential Support Team at the President of the United States (POTUS) ranch nearby Crawford, Texas, contacted Amn Jaeger expressing their concern over the weather warnings. Amn Jaeger provided a synopsis of what had developed, what was occurring,

and the immediate weather outlook and forecast. Later in the day, he issued a "Tornado Warning" for Fort Hood 31 minutes prior to a confirmed touchdown. This provided ample warning to all Fort Hood personnel to take immediate shelter. Amn Jaeger displayed excellence in initiative by taking it upon himself to keep the Presidential Support Team abreast of the situation by periodically relaying the status of weather developments. Throughout the developing event, SrA Jaeger consistently exceeded every Air Force and National Weather Service standard, ensuring the safekeeping of not only Fort Hood and its over 60,000 personnel, but POTUS as well.



SrA Eric E. Jaeger
3rd Weather Squadron
3rd Air Support Operations Group
Fort Hood, Texas

AIRCREW SAFETY



Award of Distinction

The crew of Sentry 30 was on a training mission when 35 minutes into the flight, the student Flight Engineer (FE) began to experience slight heart palpitations, chest pains, and dizziness. The Instructor Pilot (IP) cancelled the mission and decided to return to Tinker AFB. The FE was assisted to the back of the aircraft where he was placed on oxygen and monitored by crew members. En route to Tinker, the IP coordinated and began an en route fuel dump to facilitate a precautionary landing at normal gross weight. After dumping approximately 30,000 pounds of fuel, the FE's condition worsened and he became nauseous, experienced difficulty breathing, and numbness/tingling in both arms. At this point, an emergency was declared, and an immediate landing was requested. To complicate the emergency, the flight crew suddenly experienced a near NORDDO condition. Through the effective and polished CRM, the flight deck was able to determine that the copilot was inexplicably NORDDO and the IP had a hot microphone due to a short in a communications cord. After handing off radio responsibility to the copilot, who at that point came across the radio as weak and unreadable, the IP began using the IFF identification button to acknowledge Air Traffic Control communication transmissions. Despite these challenges, the crew was able to continually assess the FE's condition and perform a superb emergency return towards home base.

With expertise and a calming candor, the instructor FE assumed the position of his student and executed the fuel dump checklist along with the descent, approach, and before landing checklists, in less than 15 minutes. While the flight crew dealt with NORDDO conditions, two Self-Aid/Buddy Care-savvy crew members from the rear of the aircraft monitored and reported on the status of the stricken FE. After briefing the approach, a visual approach was flown and ended in an uneventful landing. After taxiing clear of the runway and shutting down all engines, the FE was transported off the flight line, via ambulance, to the nearest hospital for further medical evaluation and analysis. In recovering this \$330M high-demand, low-density asset in a safe and effective manner, the crew of Sentry 30 exemplified what we all strive for when we speak of "Excellence in All We Do."



963rd Airborne Air Control Squadron
552nd Air Control Wing
Tinker AFB, Okla.

MONTHLY AWARD WINNERS — FEBRUARY

FLIGHT LINE SAFETY



Award of Distinction

SSgt Madsen was setting up a heater for his working crew. He had heater unit BT-22 delivered by AGE to aircraft 88-0407. The AGE driver had to jumpstart the heater unit and waited to make sure the unit was running. SSgt Madsen turned on the burner switch to produce the heat. The heater unit began to exhaust heavy smoke, and then flames came out of the exhaust stack. SSgt Madsen turned off the heater unit. Noticing flames were still actively burning, A1C Wood ran out of his crew van to assist. SSgt Madsen and A1C Wood pulled the heater unit away from the aircraft. While pulling the heater unit, they noticed fuel leaking at a rapid rate, leaving a large trail back to the aircraft. Once a safe distance from the aircraft, the fuel tank burst into flames along with the trail of fuel. A1C Wood retrieved a halon fire extinguisher, and SSgt Madsen retrieved a fire bottle from the maintenance truck. A1C Wood extinguished the flames that spread on the equipment and ground. Immediately the heater unit once again burst into violent flames that spread throughout the AGE equipment. A1C Wood exhausted the halon bottle to once again extinguish the flames. After the fire was extinguished, they noticed that fuel was still rapidly leaking and had spread over

half the heater unit. SSgt Madsen called production supervision to alert the fire department; meanwhile, A1C Wood retrieved a second halon bottle. SSgt Madsen and A1C Wood stood fast until the fire department arrived to take over the critical situation. The fire department, production supervision, MOC, and QA were all notified to respond to the scene. Their keen sense of urgency and response to an extremely dangerous situation prevented injury or death to personnel and extreme damage to a \$27 million aircraft and \$7,500 heater unit.



SSgt Nathan V. Madsen, A1C Derek B. Wood
27th Aircraft Maintenance Squadron
27th Fighter Wing
Cannon AFB, N.M.

WEAPONS SAFETY



Award of Distinction

TSgt Wisser displayed exceptional weapons safety knowledge and judgment in response to a ground emergency on an A-10 at Pope AFB, N.C. Upon inspection, he determined that a GAU-8 Breech bolt firing pin had failed causing every seventh round not to fire. Assessing the situation he found live 30mm rounds on either side of the system's firing sector and was unable to determine if the damaged firing pin was still partially cocked. He quickly devised a plan to isolate the gun from the feeding chute and rotate the gun in both directions away from the firing sector to remove the rounds. He then had the damaged breech assembly removed and replaced with a new one so the remaining 30mm rounds in the gun system could be safely downloaded. The importance of this decision cannot be over-emphasized as the condition of the rounds was not discovered until the aircraft was back on parking spot putting three other ACC and five AMC aircraft out front in potential danger. The

exceptional weapons system knowledge and quick assessment to plan of action displayed by TSgt Wisser is a model of how weapons safety should be applied.



TSgt Dennis J. Wisser
23rd Aircraft Maintenance Squadron
23rd Fighter Group
Pope AFB, N.C.

UNIT SAFETY



Award of Distinction

Third Weather Squadron forecasters recognized a developing central Texas tornado outbreak, and immediately informed Fort Hood leadership. This ensured field units were recalled to their cantonment areas, and 220 aircraft and 8,000 vehicles were tied down and properly sheltered prior to the storm's arrival. Recognizing a developing tornadic signature, forecasters issued a tornado warning for Fort Hood 31 minutes prior to touchdown, far exceeding the National Weather Service average of 13 minutes. In addition to warning base residents to take shelter, this information was relayed to the Presidential Support Team at the President of the United State's (POTUS) ranch, nearby Crawford, Texas, resulting in POTUS taking protective shelter from the approaching tornado 15 minutes prior to its touchdown. On another occasion, squadron personnel tracked an approaching winter ice storm and provided Fort Hood leadership a 3-day "heads-up" prior to a 4-day holiday weekend. This afforded ample time to notify troops of proper precautions before the holiday weekend. The squadron forecasters' situational awareness during the 3 days of freezing precipitation, icy road conditions, and periodic power outages was leveraged by the Commander, III Corps, and Home Station Operations Center staff to alert troops via local television and radio

media concerning conditions on and off Fort Hood. Weather intelligence was also instrumental in leadership's decision to shut down non mission essential operations for 36 hours and issue delayed reporting instructions on 2 duty days. The squadron's vital weather inputs inevitably helped to prevent vehicle mishaps off post, as well as numerous motor vehicle accidents on post, and possibly saved lives. In support of Army field operations, the squadron established full weather operations and services within 30 minutes of arrival at a field training exercise, and immediately identified an unfolding dangerous weather event. Predicting 3/4-inch hail and 50-knot winds 45 minutes prior to the severe weather's arrival, exercise personnel avoided disaster by recommending the 20 aircraft and 60 soldiers that were already inbound, divert to an alternate landing site out of the storm's projected path. All personnel were able to safely continue their movement and accomplish exercise objectives after the storm passed through the area.



**3rd Weather Squadron
3rd Air Support Operations Group
Fort Hood, Texas**

ACC SAFETY SALUTES SUPERIOR PERFORMANCE

TSgt Kevin L. Guillette
Aerospace Ground Equipment Supervisor
2nd Maintenance Squadron
2nd Bomb Wing
Barksdale AFB, La.

SSgt Anella M. Ortiz
Munitions Flight ADWSM
55th Maintenance Squadron
55th Wing
Offutt AFB, Neb.

MSgt Ryan D. Burley
Flight Safety NCO
55th Wing
Offutt AFB, Neb.

MSgt Gordon G. Tyler
Munitions Flight ADWSM
55th Maintenance Squadron
55th Wing
Offutt AFB, Neb.

Consolidated Dormitory Management Office
2nd Civil Engineer Squadron
2nd Bomb Wing
Barksdale AFB, La.

MSgt Joseph B. Kane
NCOIC 506th Armory
506th ESFS
FOB Warrior

A1C Jesse O. Mullins
Bioenvironmental Engineering Apprentice
20th Aeromedical-Dental Squadron
20th Fighter Wing
Shaw AFB, S.C.

Capt Steven Norris
F-16 Pilot
421st Fighter Squadron
388th Fighter Wing
Hill AFB, Utah

Maj Tonee M. Tonnesen
A-10 Flight Lead
354th Fighter Squadron
355th Wing
Davis-Monthan AFB, Ariz.

SSgt Joshua C. Haight
Phase Inspection Team Member
27th Equipment Maintenance Squadron
27th Fighter Wing
Cannon AFB, N.M.

Maj Jeffrey S. Cohen
57th Wing Chief of Scheduling
16th Weapons Squadron
57th Wing
Nellis AFB, Nev.



MONTHLY AWARD WINNERS – MARCH

PILOT SAFETY



Award of Distinction

Major Means demonstrated exceptional skill as a pilot while recovering a crippled U-2 that suffered total hydraulic failure during a high-altitude, operational reconnaissance sortie in support of the SABLE GAME mission, Osan AB, ROK. As he was climbing thru 52,000', the caution and warning panel lights lit up, indicating total loss of hydraulic pressure. He immediately attempted to set his hydraulically controlled horizontal trim to the landing setting, leaving his crippled aircraft trimmed to a nose-down position. Major Means radioed the Mobile Officer to assist with procedures to safely recover the aircraft. While Major Means flew the stricken jet, the Mobile Officer read him the emergency checklists. The situation was further complicated by two near-simultaneous fighter aircraft also experiencing in-flight emergencies involving unsafe landing gear. The Mobile Officer

suggested that Major Means attempt to engage the autopilot in a manual mode to relieve some of the nose-down force. After the fighter aircraft had safely landed, he flawlessly executed a successful emergency landing gear extension, finished dumping fuel, disengaged the autopilot and returned to base. Major Means calculated the no-flap approach speed and landing distance, which determined that a visual pattern and landing provided the most runway available for a landing rollout maneuver. Dangerously close to the ground to control airspeed, small deviations below the computed approach and landing speed can place the aircraft into a position where a safe recovery or go-around is nearly impossible. If too fast, the aircraft will not be able to be stopped on the available runway. Major Means flew a flight-manual, perfect, visual overhead pattern and landing. Crossing the runway threshold at a mere 2 feet, he demonstrat-



Maj Mike Means
5th Reconnaissance Squadron
9th Reconnaissance Wing
Beale AFB, Calif.

ed extremely precise aircraft control, with the Mobile Officer following close behind in the chase car, talking him down to a safe and flawless tail-wheel-first landing. Major Means saved an extremely valuable national asset and ensured continued mission accomplishment.

CREW CHIEF SAFETY



Award of Distinction

During a daily walk around inspection of the alert E-4B aircraft, SSgt Kent noticed a strong odor of diesel fuel. He quickly investigated the source of the odor and found a fuel bowser leaking profusely from the servicing hose connection. He immediately shut off the hose to stop the leak, acquired the on-site spill kit to contain the spill, and organized nearby personnel to expedite cleanup. Upon closer inspection of the connection, SSgt Kent found the O-ring seals were faulty and required replacement. He contacted Aerospace Ground Equipment and informed them of the problem, leading to a one-time

inspection of all O-ring seals installed on the wing's fuel bowsers. SSgt Kent's situational awareness and presence of mind prevented possible contamination of the local water supply, averted an emergency evacuation of the alert E-4B aircraft, and ensured the safety of an \$850 million Air Force asset.



SSgt Eric R. Kent
55th Aircraft Maintenance Squadron
55th Wing
Offutt AFB, Neb.

WEAPONS SAFETY



Award of Distinction

Since taking over the 4 FS Explosives Safety program, TSgt Earhart and SSgt Ochoa have set the standard for all 388 FW life support sections. They revised their spot inspection program to include a monthly matrix, as well as unscheduled spot inspections. Their spot inspection matrix has been implemented throughout all 388 FW Life Supports and reported no noticeable trends. The 4 FS Life Support section recently completed a 3 month self-help renovation project worth \$13.5K without incident to include \$2.5M of pilot equipment. The revamped section allows for trouble-free accountability of equipment and has increased efficiency of shop operations and explosive inspections over 90 percent. In a

1-month timeframe, the section spent over 150 man-hours completing a 100 percent inspection of their survival vests worth over \$35K resulting in 131.2 flying hours with 99 training sorties during the 4 FS Common Configuration Implementation Program (CCIP). The section converted 95 percent of old Life Preserver Units (LPU-9/P) to the new LPU-38/P resulting in zero explosive mishaps with strict accountability of over 90 inflators. They teamed with the 388 EMS Survival section and 388 CMS Egress section to develop local Acceptance Inspection procedures for all 27 CCIP aircraft returning from depot maintenance. These procedures ensured 66 assigned ACES II survival kits/ACES II parachutes vital to the successful ejection and survival of the F-16 pilots were thoroughly inspected. These procedures will be used to assist additional 388 FW Life Support



**TSgt Dwain N. Earhart,
SSgt Louis A. Ochoa
4th Fighter Squadron
388th Fighter Wing
Hill AFB, Utah**

sections during their CCIP Acceptance Inspections. Their dedication to Explosives Safety reflects a very high level of safety standards to be emulated throughout the Life Support community.

GROUND SAFETY



Award of Distinction

TSgt Davis developed a process to electronically notify commanders of upcoming unit inspections, thus reducing the time expended in the scheduling and tracking of such. He assisted in the investigation of three significant high-visibility mishaps, identifying root causes and devising effective corrective actions. Additionally, he conducted out-briefs with the affected commanders on lessons learned from these mishaps. TSgt Davis delivered three "Right Start" briefings to more than 200 newly assigned personnel and dependents. He was hand-selected from amongst his peers to assist with the planning and execution of the upcoming 2007 Barksdale Air Show, and assisted the 2d Medical Group in developing a heat-stress operating instruction.

In response to an ACC fatality on a Security Forces obstacle course, TSgt Davis provided safety oversight of Barksdale's obstacle course to the base's senior-level leadership. He researched, documented, and put together a comprehensive package outlining the deteriorating conditions of Barksdale's own course, including what it will take to make it both viable and safe. This prompt execution of the ACC directive enhanced the commander's ability to make decisions at the appropriate level. He consolidated base-level quarterly Environmental and Occupational Safety and Health Council's presentations for the commander. While standing in as the Ground Safety superintendent, he re-evaluated the Ground Safety training program and completed a plan to track the



**TSgt Dean P. Davis
2nd Bomb Wing
Barksdale AFB, La.**

training and progress of all 3-level trainees assigned to the office. Additionally, he developed PowerPoint presentations to assist with their upgrade training, ensuring every member of the Barksdale Ground Safety office is on track and contributing to the safety of the men and women assigned to Barksdale AFB.

MONTHLY AWARD WINNERS – MARCH

FLIGHT LINE SAFETY



Award of Distinction

Following heavy storms in the local area, numerous types of wildlife began appearing on the runway, endangering flight operations. MSgt Prymek determined the heavy rain had softened the ground which allowed the animals to dig holes under the perimeter fence and gain access to the airfield. Not having enough traps to catch the animals, he personally designed and locally manufactured additional traps and strategically placed them around the airfield. These traps, along with the local bird watch condition were monitored daily to ensure

no wildlife interfered with local B-52 and A-10 aircraft operations. Along with local operations, Barksdale was also home to a dozen visiting F-15E aircraft for a highly important annual joint force Exercise GREEN FLAG. These aircraft required specific attention by MSgt Prymek since TDY personnel were not accustomed to the local wildlife, and the local wildlife were not accustomed to the powerful engines of the F-15E. His relentless efforts led to the capture, removal, and relocation of 18 animals. He was also solely responsible for monitoring, scaring, and depredating thousands of birds attempting to feed and nest on the airfield. MSgt Prymek is to



MSgt James K. Prymek
2nd Bomb Wing
Barksdale AFB, La.

be commended for his ingenuity and decisive actions that, without a doubt, prevented countless potential flight mishaps, not only to local aircraft, but to high value visiting aircraft as well.

AIRCREW SAFETY



Award of Distinction

The B-52 crew of CHILL 41 was scheduled to conduct simulated missile launches en route to bombing activity in a local training area, followed by aerial refueling before returning to Minot AFB, N.D. Shortly after takeoff, the pilots received a Master Caution and "Hot Air" light indicating an over-temperature of the main bleed air manifold. After running emergency checklists in section III of the tech order, the crew determined that the number three strut bleed valve was stuck open, allowing dangerously hot air to enter the manifold. The manifold's proximity to main fuel tanks required the crew to reduce both engines on the number three strut to idle in order to keep the temperature within limits as they proceeded with the mission. During bombing activity, the pilots noticed engine number four was over-boosting and retarded that throttle as well to keep the engine within normal operating limits. With three of their eight engines in idle, the crew conducted a rou-

tine station check and found the number two main and auxiliary rudder/elevator lights flickering, indicating the possible failure of one of the two hydraulic flight control systems on the aircraft. Shortly afterward, both lights illuminated steadily, indicating a complete failure of the number two system. The navigators plotted a direct course to Minot AFB and advised the pilots on headings and altitudes. In order to be able to use all eight engines on final approach, the pilots shut down the air conditioning pack to prevent hot air from entering the bleed air manifold, forcing the navigators to shut down all avionic systems for lack of cooling air. The pilots commenced a heavier-than-normal approach. During the approach, the winds shifted direction and the pilots executed a circling maneuver to avoid landing on a less-than-dry runway with a tailwind. The crew's quick and effective response to multiple in-flight emergencies reflected exceptional airmanship and were key to the safe recovery of a \$67-million resource.



Lt Col Darren Wilson
Capt Jess Melin
1Lt James Stewart
1Lt Greg Borschowa
Lt Col Max Mitchell
Lt Col Robert Dreyfus
Maj Steve Benning
23rd Bomb Squadron
5th Bomb Wing
Minot AFB, N.D.

USAF ANNUAL AWARD WINNERS

Congratulations to the following 2006 ACC USAF Annual Award winners:

**COLONEL WILL L. TUBBS MEMORIAL
AWARD FOR GROUND SAFETY**

CATEGORY I

AIR COMBAT COMMAND

COLOMBIAN TROPHY

27th Fighter Wing
Cannon AFB, N.M.

CHIEF OF STAFF INDIVIDUAL SAFETY AWARD

Mr. James Gregoire
29th Test Support Squadron
Eglin AFB, Fla.

**AF EXPLOSIVE SAFETY OUTSTANDING
ACHIEVEMENT AWARD**

MSgt Edward Story, Jr.
27th Fighter Wing
Cannon AFB, N.M.

**AF CHIEF OF SAFETY OUTSTANDING
ACHIEVEMENT AWARD FOR GROUND SAFETY**

CATEGORY I

5th Bomb Wing
Minot AFB, N.D.

**AF CHIEF OF SAFETY SPECIAL
ACHIEVEMENT AWARD**

Eighth Air Force
Barksdale AFB, La.

**NUCLEAR SURETY PLAQUE
CATEGORY I**

5th Bomb Wing, Minot AFB, N.D.

MISSILE SAFETY PLAQUE

27th Fighter Wing, Cannon AFB, N.M.

EXPLOSIVES SAFETY PLAQUE

33rd Fighter Wing, Eglin AFB, Fla.
9th Munitions Squadron, Beale AFB, Calif.
7th Munitions Squadron, Dyess AFB, Texas
388th Fighter Wing, Hill AFB, Utah
27th Fighter Wing, Cannon AFB, N.M.
28th Bomb Wing, Ellsworth AFB, S.D.
366th Fighter Wing, Mt Home AFB, Idaho
23rd Fighter Group, Pope AFB, N.C.
1st Fighter Wing, Langley AFB, Va.
86th Fighter Weapons Squadron, Eglin AFB, Fla.

FLIGHT SAFETY PLAQUE

23rd Fighter Group, Pope AFB, N.C.
552nd Air Control Wing, Tinker AFB, Okla.
366th Fighter Wing, Mt Home AFB, Idaho
23rd Wing, Moody AFB, Ga.
9th Reconnaissance Wing, Beale AFB, Calif.

AERO CLUB SAFETY CERTIFICATE

Langley Aero Club, Langley AFB, Va.

We would also like to recognize

CHIEF OF STAFF SPECIAL ACHIEVEMENT AWARD

SMSgt Steven Benoit, 435 ABW,
Ramstein AB (USAFE)
now at Ninth Air Force Ground Safety



QUARTERLY AWARD WINNERS

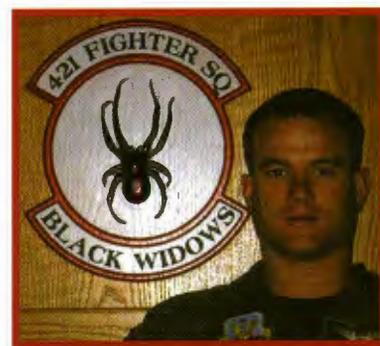
FLIGHT SAFETY



Award of the Quarter

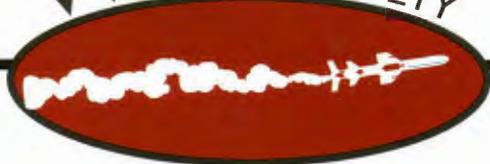
After returning from his AEF rotation, Capt Seiver revamped and updated his squadron's safety program. It was recently recognized during a 12 AF Staff Assistance Visit where the inspectors highlighted his program, commenting, "The 421 FS program is absolutely outstanding; the best seen by this individual since doing safety SAVs." Accordingly, his program is being spotlighted by 12 AF as the benchmark for all other Squadron Flight Safety Offices. Capt Seiver remains the consummate professional and has the highest level of trust within the wing Safety office — twice selected to investigate Class C/E flight mishaps. While deployed in support of Operation IRAQI FREEDOM, Capt Seiver maintained his staunch safety focus, starting with an insightful pre-departure safety briefing that incorporated lessons learned from historical mishaps in theater. After identifying a variety of FOD hazards, he coordinated with 332nd Expeditionary Operations Squadron personnel to institute repairs, and he was instrumental in improving Balad Air Base's airfield lighting. Through these and other efforts, the 421st Fighter Squadron was able to complete 5,200 sorties and over 11,000 flight hours with only six minor mishaps, striking a balance between mission ac-

complishment and risk management. As a result, Capt Seiver was named the 332 AEW/CC's #1/6 squadron safety officers for AEF 1/2. A gifted communicator, his briefs are always insightful, interesting, and educational. Committed to the 388 FW safety program, Capt Seiver has spent numerous days as the wing flight safety officer and completed a variety of wing inspections. Capt Seiver is an all-star within the 421 FS and was critical in the squadron being selected as the 388 FW Squadron of the Quarter.



Capt Kenneth C. Seiver
421st Fighter Squadron
388th Fighter Wing
Hill AFB, Utah

WEAPONS SAFETY



Award of the Quarter

Following an unfavorable review by Headquarters Air Combat Command (HQ ACC) during a Nuclear Surety Staff Assistance Visit, TSgt Robbins was handpicked to lead a quick-action response team dedicated to program improvement. Sgt Robbins and her team audited over 1,900 personnel records in synchronization with medical, dental, and Life Skills documents, resulting in corrections of over 500 personnel errors. An additional 100 errors were corrected in the Military Personnel Database System as a result of their efforts. She continued to display exceptional program knowledge as she guided her team through the review and improvement of training, Temporary Duty orders, certification actions, database purges, and filing systems. For every systemic problem encountered, she ensured the team researched, developed, and implemented a corresponding solution to ensure a legacy of base nuclear reliability. Sgt Robbins' astonishing efforts resulted in an outstanding rating for program management

by inspectors during the HQ ACC and Defense Threat Reduction Agency 2006 Joint Nuclear Surety Inspection. Inspectors lauded the Personnel Reliability Program as "unusually good ... no notable discrepancies." Sgt Robbins' selfless dedication and commitment to program integrity will long serve to keep strong the 509th Bomb Wing Base Personnel Reliability Program in support of our nuclear mission to "kick down doors" and eliminate our nations and freedom's enemies.



TSgt Shannon L. Robbins
509th Maintenance Squadron
509th Bomb Wing
Whiteman AFB, Mo.

GROUND SAFETY



Award of the Quarter

First Lieutenant Davenport's aggressive travel safety program contributed to an outstanding duration of time without a single government vehicle rollover (over 450 consecutive days). Rollovers are a problem that continually plagues most Northern Tier bases due to the treacherous, winter road conditions. Members of the 200-person unit are dispatched several times each day to perform maintenance at various sites, spread across 8,500 square miles of prairie, under rapidly changing road conditions, with ambient air temperatures often dropping below -20, and occasionally, -40 degrees Fahrenheit. Lieutenant Davenport organized monthly safety briefings covering not only basic topics for those new to the unit and the Air Force, but also subjects particularly relevant to the local climate and working conditions. Not a single service member fell victim to frostbite or other cold-related injuries in large part due to her comprehensive winter safety campaign. She led regular meetings amongst work center Safety representatives and conducted monthly no-notice inspections on random work centers to ensure compliance with Environmental Safety and Occupational Health standards (ESOH). Lieutenant Davenport personally reviewed the Air Combat Command safety checklist with each work center Safety representative in preparation for an upcoming Unit Compliance

Inspection. After allowing appropriate time for internal reviews, she spearheaded an in-depth, inter-flight staff assistance visit to ensure compliance with all applicable Department of Defense and Government ESOH requirements. She led the 5th Communications Squadron's portion of a \$2.5M upgrade to the land mobile radio system, ensuring reliable communications within the 8,500 square-mile missile complex so that no team is isolated during a weather-related emergency, or if attacked while transporting Intercontinental Ballistic Missiles, thus improving safety for more than 2,700 personnel. Finally, during the unit's annual inspection, the 5th Bomb Wing Safety office lauded her unit safety program, awarding it an "Excellent" rating.



1Lt Sarah E. Davenport
5th Communications Squadron
5th Bomb Wing
Minot AFB, N.D.

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Comm (757) 764-8975
Attn: Maj Brad Robinson

Or send a letter to:
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175 Sweeney Blvd
Langley AFB VA 23665-2700
Telephone: DSN 574-8868, Comm (757) 764-8868

FY07 Aircraft

As of April 1, 2007

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

Aircraft Notes

ACC experienced two MQ-1 and two ACC-gained F-16 losses in February and March. Fortunately, all pilots concerned are safe! ACC also experienced Class A damage to an F-15E in the AOR. The new AFSAS for mishap reporting is running, but the old recommendations and comments section is still being used (<https://afsas.kirtland.af.mil>). BASH continues to be an emphasis item. Despite aircrew's best efforts, bird strikes happen; but we can arm ourselves with a good understanding of local bird problems. Resources are available: AHAS and BAM forecasting tools (http://afsafety.af.mil/SEF/Bash/SEFW_avoidance.shtml), Airfield Operations, and your local Flight Safety professionals. The majority of bird strikes occur in the landing or takeoff phase, but 31% of the time the pilot didn't know where he/she took the bird and hence didn't see it! Only 13% of the strikes occur on low levels, but they make up 54% of all damage. Careful BASH planning and ORM will help reduce bird strikes.

FY07 Ground

As of April 1, 2007

	Fatal	Class A	Class B
8 AF		2	2
9 AF		4	0
12 AF		3	2
DRU's		3	0

 = Fatal  = Fatal due to misconduct

Ground Notes

ACC experienced four Class A ground mishaps in March 2007. Speed and alcohol were contributing factors in two of the mishaps. Results are still pending on the other two. As we approach nice weather, all of us must strive to practice personal risk management and also take care of our Wingmen.

FY07 Weapons

As of April 1, 2007

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

Weapons Notes

ACC is starting a trend that we need to stop as soon as possible. Our last three mishaps have had some type of actuation of an explosive device. No one was injured and very little property was damaged, but we need to stop this trend before there is a serious injury. All of these mishaps were preventable because each mishap was caused by personnel error, i.e., not following tech data, complacency, and attention to details. You need to step-up your spot inspections on explosive operations ensuring personnel are following tech data and paying close attention to the task at hand. We can stop this trend with your help. Thank you for all you do for weapons safety everyday.

Legend

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

Symbols for Mishap Aircraft



Fleagle



NOW AIN'T THAT A PICTURE. ALL RELAXED AN' PLUGGED IN TO HIS FAVORITE MUSIC.



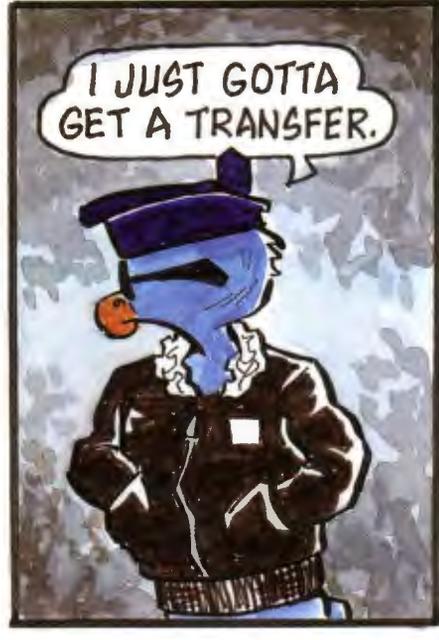
MAN! THIS IS GOME MACHINE.



GOT TH' LITTLE HEADSET FER EASY LISTENING.



WUNDER WHAT THIS BUTTON IS FOR?



I JUST GOTTA GET A TRANSFER.



101

critical

days
of summer

28 May – 3 September

- Keep speed reasonable
- Have a designated driver
- Drive well rested
- Always wear your seat belt