



### **Features**

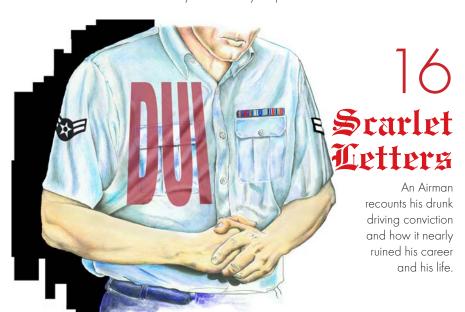
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### 8 Breaking Out of 'Empty Shells'

With the war on terrorism and ever increasing demands on troops worldwide, basic military training has put more "ammo" into its weapons instruction. The move is already paying dividends as Airmen deploy better prepared than ever. Also, see "weapons safety tips."

### 14 Smoking Up in Military

Despite the negative effects, smoking is on the rise in the military. While an estimated 25 percent of Americans smoke, the military's numbers hover at 34 percent, according to the Air Force Medical Support Agency. That represents an increase of 4 percent for the military over a four-year period. Is the stress of war a factor?



### 18 Binge Drinking

How harmful is binge drinking? Alcohol abuse reduces one's life expectancy by 10 to 15 years. According to the 43rd Medical Group, alcohol is responsible for 50 percent of all fatal traffic accidents, 50 percent of all homicides and 25 percent of all suicides.

Learn even more ways you could be affected.

### 20 The Right Stuff

Air Education and Training Command has ushered in a new era in flying training as Initial Flight Screening operations began at Pueblo Memorial Airport in October.

### TORCH TALK

Readers discuss motorcycle rider photograph, the Air Force Academy's parachuting course, F-35 Lightning II photo, seat belts, the Torch Calendar and more.

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Unusual circumstances lead to Airman's death ... Vaccines can cause adverse reaction ... Motorcycle tragedy shapes life's work ... Three big reasons for motorcycle deaths.

### 's

### TALES OF THE STRANGE

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**Cover** photo by Staff. Sgt. Matthew Hannen **Back cover** composite by David Stack

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### Meet the New Director

While working his way through college as an emergency medical room technician in San Angelo, Texas, during the early '80s, John Blumentritt saw a lot of people severely injured and even killed. Nobody had to tell him what happens when you drink and drive or play with a gun. He witnessed it firsthand through the patients he helped treat.

"I wanted to help people, to protect them," he said. "But I also learned from their mistakes."

Four masters degrees and more than 3,000 flying hours later, those attributes have served him well in a 22-year Air Force career. Now a colonel and the new director of safety for Air Education and Training Command, Colonel Blumentrith has held numerous flying, staff and command positions worldwide. He is a command pilot, logging his flying time in combat rescue and special operations aircraft.

"My attitude about safety today isn't much different than when I was in college," the colonel said. "I still want to help and protect people. And I'm still going to learn from people's mistakes."

The big difference is as director of safety, he has to help ensure that the rest of the command also understands the importance of safety and risk management.

It's not a responsibility he takes lightly.

"Protecting our people and our resources is a top priority," Colonel Blumentritt said. "I want people to be able to look at the AETC Safety Directorate and know we are committed to them. I want them to be able to count on us and,



"I want people to be able to count on us and, hopefully, emulate the policies and programs we put in place to prevent mishaps and save lives."

- Col. John W. Blumentritt, AETC Director of Safety

hopefully, emulate the policies and programs we put in place to prevent mishaps and save lives."

The colonel's vast and varied experiences in his Air Force career should serve him well as the new director of safety.

After graduation and commissioning in 1983, and earning his pilot wings in 1985, he served as a helicopter pilot in Japan, Iceland, Alaska, Nevada and Florida. He also served as an HH-60G aircraft commander for the 4412th Rescue Squadron in Kuwait City, Kuwait, in 1993. He has flown many rescue and special operations missions worldwide, and earned the U.S. Air Force MacKay Trophy for commanding the most meritorious flight

of a U.S. Air Force aircraft in 1994. During this mission, featured in the February 1999 issue of Reader's Digest, he and his team fought ocean waves of 30 feet and winds of 70 knots to rescue six Icelanders stranded on top of a ship battered by an intense storm.

He also served as a strategist in the Pentagon, where he and his team developed crisis response options and advocated for the effective employment of air and space power. He subsequently took this real-world expertise to the U.S. Air Force Academy in Colorado, and commanded a squadron that impacted 4,000 cadets annually through 10 academic courses, airplanes, jet simulators, war gaming facilities and a planetarium.

During his assignment to Randolph Air Force Base, Texas, he served for two years on the personal staff of the AETC commander. As such, he directed a 12-person action group that orchestrated the efforts of 81,500 men and women in providing academic education to more than 130,000 people, training to about 250,000 students, and recruiting of more than 36,000 officers and enlisted members into the Air Force per year. He then served as the 19th Air Force chief of safety, and flew the Diamond DA-20 as part of the decentralized initial flight screening program in San Antonio (related story on page 20). While at 19th, he led mishap prevention programs for 31,000 people, who are responsible for training more than 20,000 aircrew members in 1,850 aircraft at 26 locations per year. He served in that capacity until he was assigned as the AETC director of safety in September.

"I'm excited about serving as the command's director of safety," Colonel Blumentritt said. "As we head into the New Year, I look forward to working with and meeting military and civilian members from all of our AETC bases. Together we will strive to reduce mishaps, injuries and fatalities."



### PHOTO STIRS MEM

As I opened the September/October 2006 issue of Torch Magazine, I was saddened by seeing the article entitled "Traffic Fatalities Rise" on page 8. Articles such as these always rip open the wound of losing my best friend to a motorcycle accident three years ago.

To my chagrin, there is a photo of an Air Force member on a motorcycle with no helmet. He's also wearing a black T-shirt, battle dress uniform pants and boots. As the motorcycle mentor for my organization and an avid motorcycle rider for all 12 years of my career, I was horrified!

This picture goes against all of the instructions and directions explained to members as they meet with their commanders for their high risk activity briefing even before they are allowed to ride. Air Force Instruction 91-207, USAF Traffic Safety Program, reguires the following protective equipment for operators and passengers:

- Department of Transportation approved protective helmet.
- Impact resistant goggles or a full-face shield on their helmet.
- Brightly colored or contrasting vest or jacket as an outer upper garment during the day and reflective during the night.
  - Long sleeved shirts or jackets.
  - Full-fingered motorcycle gloves or mittens.
  - Long trousers.

■ Sturdy footwear. Leather boots or over-the ankle shoes are strongly encouraged.

As a former member of the 1st Combat Camera Squadron, I realize that this was a staged picture, cut and pasted for dramatic effect. However, as a military training instructor, I have learned the importance of "practicing like you play."

Many of your readers will see this picture and think this is the norm, possibly injuring or God forbid, killing themselves because of a lack of proper personal protective equipment. All I ask is that in the future you take the time to accurately portray situations such as this to set the example and maybe, just maybe, traffic fatalities will see a decrease.

Thanks for your time, and keep up the good work! — Tech. Sgt. Garrett D. Rosier Lackland Air Force Base, Texas

The photo illustration you refer to intentionally depicts the safety violations referred to in the story. If you refer to the bold text to the right of the photo, it says, "Motorcycle fatalities rose 13 percent from 4,028 in 2004 to 4,553 in 2005, and almost half of the people who died were not wearing a helmet." That was a main focus of the story - motorcycle riders who aren't wearing helmets are dying. Nevertheless, we appreciate your concern about reducing mishaps. The important information you sent in your letter, along with sharing your own personal loss, should help further that cause.

Have a comment or complaint? Letters to Torch may be sent via e-mail to: torch.magazine@ randolph.af.mil. Or mail to Torch Editor, HQ AETC/SEM, 244 F Street East, Suite 1, Randolph AFB TX, 78150-4328. or fax to DSN 487-6982 or commercially to (210) 652-6982. For customer service, call DSN 487-5818, or commercially at (210) 652-5818. Please include your name, address and phone number.

**LETTERS TO TORCH** 

Great job on the story "At the U.S. Air Force Academy's parachuting course, there's only one season ... Fall!" (September/October 2006 issue, page 12). I especially enjoyed the photographer's firsthand account of his skydiving experience on page 18 ("A Leap of Faith"). The pictures were great; the story made me laugh ... very entertaining. Thank you for giving us such a high-quality magazine. You are consistently informative and entertaining from issue to issue, and I'm able to use a lot of the articles for my own unit safety program.

Kurt Kennedy Via e-mail



### **RCHCALENDAR**

Glad to see your 2007 Torch Calendar is coming out. Your calendars are the best! Everybody scoops them up when they come in, and everybody who sees them wants one. It's the only calendar I display. Thanks!

> Perry Squires Via e-mail

### DOING A



F-35 Lightning II

The aircraft picture at the top of page 24 in your September/ October 2006 issue "Clear the Runway" section is incorrect. The caption says "F-35 Lightning II Joint Strike Fighter pilots and maintainers will train at Eglin AFB, Fla." However, the picture shown is of a Boeing X-32 (an experimental joint strike fighter jet that lost the contract bid to the Lockheed Martin F-35). The two jets do look similar and I had to do a double take to verify what I was seeing. I just thought that you would like to know. Thank you for the great magazine, and please keep the great articles coming.

> Senior Airman Joshua Brown Luke Air Force Base, Ariz.

You're right. We obtained the misidentified file photo from a military aircraft photo archive we frequently use and did not catch the mistake. We have since contacted the site manager, and the photo has been removed from the F-35 (at left) photo archive. We also have included a photo of the actual F-35 with this letter. Thank you for the correction and for your interest in Torch.

For the past 20 years I've heard many stories about how wearing seat belts can save your life. I have seen PowerPoint slides and attended several safety briefings on the subject. However, until a sunny October afternoon, it seemed that I would never see these benefits

On this particular day, I was on my way back to my house. The weather was fair, and traffic conditions were very good. Traffic was flowing normally, and the road was dry. But faster than a blink of an eye, several years of safety training were put to the test.

At approximately 3:30 p.m. I was traveling southbound in the left lane of San Antonio's Highway 1604. Vehicles in the right lane were slowing down as they approached the Bandera Road exit ramp. Just as I was passing this line of cars, a driver traveling in the right

lane swerved into my lane hoping to avoid rear ending the vehicle in front of him. Just as he pulled out of his lane, I slammed on the brakes; however, I could not avoid crashing into the left side of his vehicle.

After initial impact, my vehicle rolled three or four times. When my vehicle finally stopped, it was upside down in the grassy median just off the left lane. At this time I found myself still in the overturned vehicle, still on my seat, and still holding onto the steering wheel. Then, I reached for the door handle, opened the door, unbuckled my seat belt and walked away from the vehicle.



photo courtesy of Master Sgt. Cesar Rivera

My vehicle was a total loss. The roof had collapsed, one rear wheel had sheared off from the axel, and the front windshield was shattered. Despite that tremendous vehicle damage, I managed to walk away from this incident with only a bruised shoulder and ribcage, along with a superficial cut to a middle finger.

Some will say that I was lucky. However, I do not consider the lack of severe injuries just pure luck. This was the result of several years of safety training. This was the result of PowerPoint presentations on seat belt safety and the result of monthly seat belt checks. Had it not been for such rigorous training and an aggressive program, the outcome of this accident could have been much different. Because I was wearing my seat belt, I was not thrown out and away from the vehicle, nor was I thrown around within the car.

> I remained conscious and able to walk on my own.

Safety training saves lives on duty and off, at home station or thousands of miles away in the middle of combat. In my case, I was within 2 miles of reaching my house.

In spite of this terrible accident, I walked away. Why am I alive today? Lucky? Maybe. All I can say is that I am alive, thanks to the many years of safety training. I am alive because I listened. I am alive because I buckled up.

> — Master Sgt. Cesar R. Rivera Lackland Air Force Base, Texas

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### UNUSUAL CIRMCUMSTANCES LEAD TO AIRMAN'S DEATH

RANDOLPH AIR FORCE BASE, Texas (AETCNS) — In September, the Air Force released a report of investigation into the May 4 death of Senior Airman Abby J. Bilbrey, citing the cause of death as accidental.

Bilbrey was assigned to the 56th Communications Squadron at Luke Air Force Base, Ariz., as an airfield systems journeyman. She and Airman 1st Class Isaac Acosta, also assigned to the 56th CS, were tasked to repair a radio audio quality discrepancy at the White Tank

Mountains transmitter site. During the drive to the transmitter site, Bilbrey encountered a tire slippage on a steep section of the road.

Acosta recommended she stop the vehicle and they exchange places to allow him to complete the drive to the transmitter site. Bilbrey stopped the vehicle, placed it in park and while Acosta was walking around the front of the truck, slid across the seat to the passenger side.

The investigation board determined that when Bilbrey released the brake pedal to

slide across the seat, for unknown reasons the four-wheel drive shifted to the neutral position, which in this vehicle overrides the transmission to place it in neutral.

This caused the vehicle to begin rolling backward, and Acosta was unable to gain entry on the driver's side. The vehicle knocked him down, rolled over the edge of the road and tumbled nearly 368 feet down the mountain. Bilbrey, who had unfastened her seat belt to move across the seat, was ejected from the vehicle and died from blunt force trauma injuries.

### VACCINES CAN CAUSE ADVERSE REACTIONS

LACKLAND AIR FORCE BASE, Texas (AETCNS) — Although vaccines are usually safe, some adverse reactions do happen. That's why the Department of Defense Vaccine Healthcare Center network has several ongoing research projects concerning adverse events surrounding such vaccinations as smallpox and anthrax and reminds Air Force beneficiaries of the many services the network offers.

"The VHC network provides consultation, education and adverse event reporting services," said Army Col. (Dr.) Renata Engler, the DOD Vaccine Healthcare Center director for the regional office located here. The primary focus of the network is to enhance vaccine safety, efficacy and acceptability.

"Vaccines are the most important medical intervention of the last century," said Dr. David Hrncir, medical director. "Next to sanitation and clean drinking water, vaccines are the reason our country is safe from many infectious diseases."

However, some adverse reactions do happen. When they do, military beneficiaries need to contact their healthcare physician or regional VHC office.

"Vaccines may cause side effects such as itching, burning, redness or puffiness at the site of the injection," said Tom Rampy, a VHC health educator here. "Other side effects may include weakness, fever, headache, joint pain or body aches. These effects tend to go away quickly and can usually be treated with over-the-counter medication such as Tylenol. We get involved when there are more serious adverse events and longer lasting side effects that may contribute to disability, loss of work or hospitalization."

The Centers of Disease Control and Prevention created a Vaccine Adverse Event Reporting

System as a method of monitoring adverse events. Anyone suspecting or experiencing a serious problem after a vaccination can complete a report.

"If a patient is unsure about making a report, they should consult their healthcare provider," Rampy said.

Medical exemptions can be given by healthcare providers to individuals who have experienced adverse events after vaccines, or when a serious condition is suspected as attributed to a vaccine. The exemption stays in the medical records and prevents against receiving that vaccine again unless an individual is exposed to that particular disease and the vaccine is the only way to provide effective treatment.

For information, or to participate in research programs, call the Walter Reed Army Medical Center point of contact at 202-782-8429/9472/6848 (DSN 662). All clinical findings will be part of a larger surveillance system that ensures the safety and efficacy of vaccines.

The VHC offers outreach and education on vaccines and vaccine-related adverse events for both healthcare providers and service members at <a href="https://www.vhcinfo.org">www.vhcinfo.org</a>. Healthcare providers and all DOD beneficiaries are invited to use the one-access-to-care point via the secure Web site at <a href="https://askvhc.wramc.amedd.army.mil">https://askvhc.wramc.amedd.army.mil</a>, the confidential DOD Clinical Call Center at 1-866-210-6469, or by visiting any of the four regional sites.

The centers are located at Walter Reed Army Medical Center in Washington, D.C.; Lackland Air Force Base; Fort Bragg, N.C.; and Portsmouth Naval Medical Center, Va.

— Master Sgt. Kimberly Spencer 59th Medical Wing Public Affairs

### **MOTORCYCLE TRAGEDY** SHAPES LIFE'S WORK

WASHINGTON — Specific moments in life can shape our perspective on certain things, define who we are or ultimately change us forever.

One phone call did just that to me.

Six months into my tour of duty on Guam, I received a phone call from my mother. She said, "Terrance (my cousin) was seriously injured riding his motorcycle, and he wasn't wearing his helmet."



Instantly a wave of emotions went through me. I got sick to my stomach and blamed myself for his accident.

When Terrance was 13 and I was 17, I taught him how to ride. I thought I taught him the right and responsible way to ride by always taking it slow and riding with caution. Terrance was a natural and handled a bike like an experienced rider in no time. During the time I was mentoring Terrance, I stressed to him the importance of putting on a helmet before getting on a bike.

Wearing a helmet was something he did reluctantly. We'd ride with our older cousin Chris who often rode without wearing a helmet.

A few years later, Terrance purchased his first bike. The motorcycle was smaller and less powerful than mine, but he rode the bike hard. We rode our bikes every day, and by summer's end, I left for military training.

After completing training I came home to spend time with family and ride some more with my cousins. I reminded Terrance about riding within his personal limits and wearing his helmet at all times. He assured me he would, and I left for my assignment with no worries.

Unfortunately, he didn't hold to his promise. So when the phone call came in that day in Guam, the news was not good. As a result of Terrance's crash, he spent three months in a coma, suffering a

fractured skull, brain swelling, a badly damaged hip and slurred speech, which all led to months of rehabilitation.

Making an already difficult situation even

#### THREE BIG REASONS FOR MOTORCYCLE DEATHS

- Driving at excessive speeds.
- Not wearing a protective helmet.
- A lack of training.

harder, when Terrance woke up from his coma, he was told his girlfriend of two years did not find him to be the handsome young man he once was and couldn't handle the condition he was in. So she decided to leave him.

Despite the physical and emotional obstacles everyone in our family felt, Terrence was making tremendous progress with his recovery. But about three months after being released from the hospital, Terrance got up one morning and decided to take his life.

After years of feeling guilty, I decided to do something to honor the memory of my cousin. I became a certified Motorcycle Safety Foundation instructor. This gave me the opportunity to mentor young Air Force riders and to be an advocate for safe motorcycling.

In my line of work, I have to investigate tragic motorcycle fatalities. Excessive speed, no helmet and lack of training remain the primary causes for these accidents. We lose too many of our youngest and brightest troops to these types of tragic mishaps. Leading by example, using personal protective equipment correctly, and riding smart, will keep you and those you ride with safe.

It shouldn't take an accident or the loss of a loved one to think safety first when riding. I never would have thought it could happen to me or anyone I rode with, but the likelihood is real. Terrance's death changed my life forever.

> — Troy Armstead Air Force District of Washington Safety

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### **BEAR BAIT**

A 25-year-old man was supposed to meet some friends in the Colorado Rocky Mountains to go on an elk hunting trip. He was going to be late getting up there, so on the way he bought a bucket of Kentucky Fried Chicken that could feed him and his buddies after the day's hunt. When he arrived at the site, he donned all his hunting gear, grabbed his rifle and set out to find his friends and to stalk elk.

When the hunting party returned later that evening, the man noticed the rear and a side window to his sport utility vehicle had been smashed in, and there were dents and scratches along the back and side of the vehicle.

It turns out, a black bear sniffed out the KFC and couldn't resist it. He mauled the vehicle inside and out, to include tearing up the vehicle's leather upholstery as he clawed his way to the yummy drumsticks.

The forest ranger later told the man that bears would be able to smell a bucket of KFC from 20 miles away, and the temptation would be irresistible to them. It was the perfect bear bait. Too bad it didn't work on the elk.

### A PAIN IN THE NECK

A 29-year-old man had been driving an all-terrain vehicle in an area with which he was unfamiliar. As dusk approached and visibility became poorer, he decided to wrap it up. He drove the ATV back to his vehicle, taking a shortcut. Little did he know that directly in his path was an old barbwire fence.

The fence needed maintenance and only had one strand of barbwire

left hanging between two poles along his path. At dusk, the barbed wire became nearly invisible against the landscape. The ATV driver drove right into the barbwire strand, which impacted him directly in the neck.

The sudden impact flung him off of the ATV, and blood gushed from his neck, drenching the front of his shirt.

He made it back to the truck, where horrified friends immediately

drove him to the emergency room. He received 21 stitches to close the slash to his neck, which left him with an 3-inch scar as a glaring reminder of the mishap. But the doctor said it could have been much worse. Had the spike on the barbed wire hit him just an eight of an inch to the right, it would have severed his jugular vein, and he probably would have died.

### MANI DOWN!

A utility worker arrived on the job site and backed his government vehicle up to a manhole. Using the lift on the back of the vehicle, the worker removed the manhole cover.

He then walked to the driver's side of the vehicle and retrieved a tool he needed to work with inside the manhole. While proceeding toward the rear of the vehicle and talking with a coworker, he was not paying attention and fell into the manhole, injuring himself.

A coworker called 911, and the injured man was transported to a local Army hospital. The worker was diagnosed with a dislocated shoulder and bruised knee. He was released later the same day and placed on quarters.

## CONSTRUCTION OF THE PARTY OF TH

### NOTEBOOK SAFETY HITS HOT BUTTON WITH MILITARY SHOPPERS

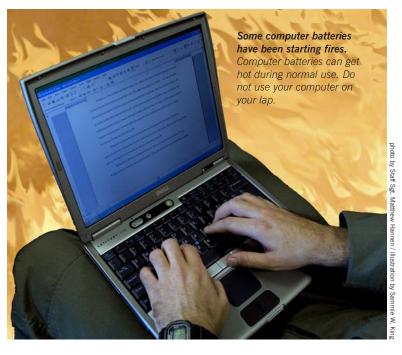
DALLAS – In the past six months, four Army & Air Force Exchange Service electronic suppliers have issued recalls on notebook computer batteries. Furthermore, the U.S. Consumer Product Safety Commission is aware of at least 47 incidents involving smoke or fire associated with notebook computers, from January 2001 through August 2006.

"Our Soldiers and Airmen regularly work with the latest technology available," said AAFES' Quality Assurance Director Joan Scheffler. "Because of their comfort level. AAFES sells a lot of hi-tech merchandise and is generally affected by most industrywide alerts."

With more than 200,000

notebook computers sold to military shoppers since 2004, AAFES, in conjunction with CPSC, offers tips (below) to encourage the safe use of notebook computers and batteries.

More than 40 AAFES associates provide troops and their families the world over with the highest level of customer protection through a combination of five broad programs: inspection, supplier



quality assistance, product testing and analysis, social responsibility, and food and drug safety. As a result, AAFES' team of technicians, veterinarians, inspectors and even a graduate gemologist have visibility of products from assembly line to check out.

The AAFES quality assurance team defines quality in terms of "fitness for use;" i.e., if an item is not fit for intended use, then it is not a quality item. Anything that adversely affects appearance, serviceability or salability of an item is considered a defect.

"Safety of an item is an integral part of quality because if an item is not safe to use, it is not fit for use,"

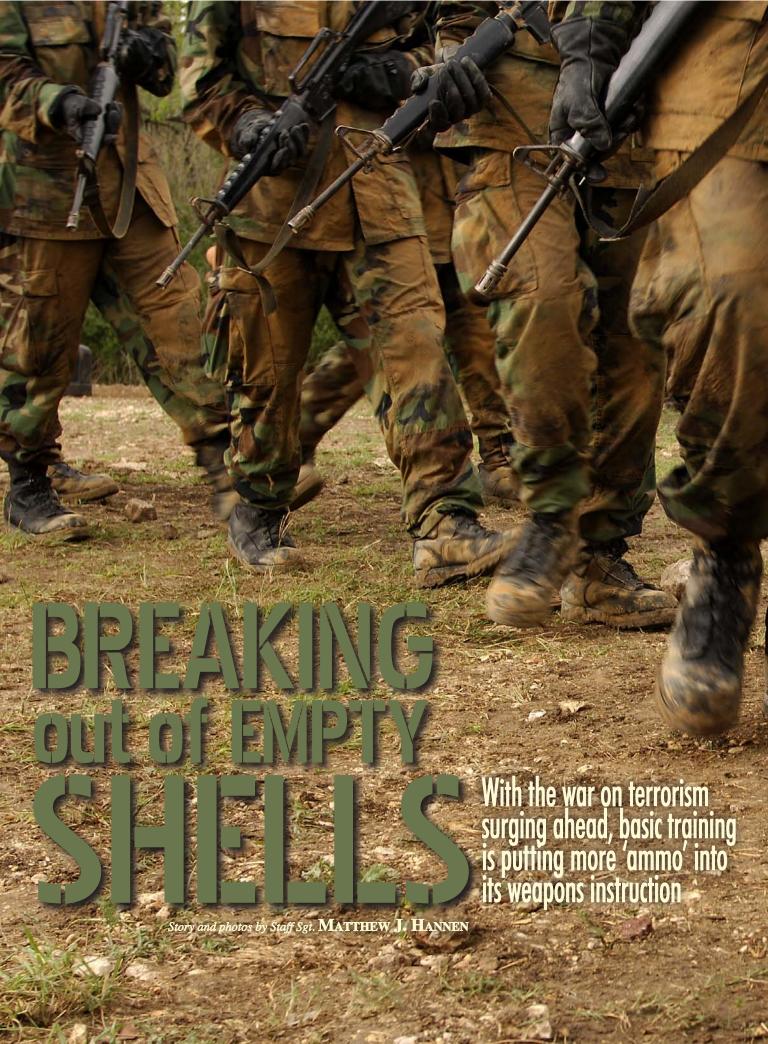
Scheffler said. The quality assurance team must monitor that.

Once merchandise in AAFES' stock assortment is identified as unsafe, the quality assurance team immediately issues a recall or alert in conjunction with federal agencies. All product recalls and alerts relevant to AAFES are posted and archived online at http:// wwwaafes.com/pa/news/QA Recall.htm.

### BEWARE OF COMPUTERS, BATTERIES

- Do not use incompatible computer batteries and chargers. If unsure about whether a replacement battery or charger is compatible, contact the product manufacturer.
- Computer batteries can get hot during normal use. Do not use your computer on your lap.
- Do not use your computer on soft surfaces, such as a sofa, bed or carpet, because it can restrict airflow and cause overheating.
- Do not permit a loose battery to come in contact with metal objects, such as coins, keys or jewelry.
- Do not crush, puncture or put a high degree of pressure on the battery as this can cause an internal short-circuit, resulting in overheating.

- Avoid dropping or bumping the computer. Dropping it, especially on a hard surface, can potentially cause damage to the computer and battery. If you suspect damage, contact the manufacturer.
- Do not place the computer in areas that may get very hot.
- Do not get your computer or battery wet. Even though they will dry and appear to operate normally, the circuitry could slowly corrode and pose a safety hazard.
- Follow battery usage, storage and charging guidelines found in the user's guide.
- Regularly check the AAFES website at <a href="http://www.aafes.com/">http://www.aafes.com/</a> pa/news/QA Recall.htm to view the latest product recalls and alerts relevant to PX/BX.







Dear the beginning of the Iraqi War, an Army unit from Balad Air Base, Iraq, headed for Baghdad International Airport. Along the way, enemy troops ambushed the convoy. Armed with an M-16 assault rifle, a female Soldier returned fire. ... Suddenly, her weapon jammed!





Basic trainees shoot nearly **50 rounds** and fill several magazines with ammunition during live-fire qualification training at the range. Below, Field Training Instructor Tech. Sgt. Christopher Irvin of the 737th Training Squadron corrects Airmen on how to report a munitions attack.



She said because of the annual training she had received from the Lackland Air Force Base, Texas, Combat Arms Instructor Course, she immediately fixed her weapon and completed the mission.

"She didn't get hurt, but she said she believes she would have been had she not been able to fix her weapon so quickly," said Staff Sgt. Jermaine King, a 342nd Training Squadron combat weapons flight instructor. "She credited going through the course as helping her get through the battle, fixing the jam, and ultimately saving her life and others."

It's stories like those that have evolved Air Force basic military training from one day of weapons training to handling a rifle from the first day to the last. In addition to actual live arms training at the armory, they carry a mock M-16 with them throughout basic, to include keeping them in their dormitories. The idea is to get used to the weight of the weapon, as well as its safe and proper handling.

"One of the horror stories we got coming out of the theater of operations was that our Airmen weren't prepared for what they were encountering out there," said Chief Master Sgt. Steve Sargent, superintendent of Air Force basic training. "They did not feel comfortable with the M-16. They were not proficient with it. They received justin-time training as they were going out on deployments ... too little, too late."

When you give inexperienced people a weapon in a stressful environment, it could be a recipe for disaster.

"Inexperienced weapons handlers tend to break the first rule of firearm safety: 'Treat the gun like it is loaded at all times," said Tech. Sgt. Christopher Irving, NCO in charge of the 737th Training Support Squadron's field training exercise. "They'll put their finger on the trigger and accidentally fire the weapon. They demonstrate no situational awareness.



Inching his way through an obstacle, an Airman struggles to keep his imitation M-16 out of the dirt lest he face the wrath of one of the field instructors, who watch his every move.

"Here if we see your finger on the trigger and you are not pointing downrange with site alignment ... then you are going to get corrected. We will not let that go. Because if you make that mistake, maybe you just put a round into the dirt. But, maybe, you put it into your wingman. If we can prevent just one friendly fire incident from happening,

then my whole five years working here will have been worth it."

In November 2005, integration of training with M-16s began. Weapons training slowly evolved into part of the everyday life at basic.

"The progress made in the last six months compared to where we were last November is unbelievable," said Senior Master Sgt. Steve Colbert, 331st Training Squadron training superintendent. "When trainees handle a weapon for the first time, they go from apprehension and a scared look on their face to confidentally breaking

down and assembling an entire M-16 in 2 minutes or less."

Trainees learn to identify all the parts of an M-16 in just a few short weeks, Colbert said.

"Just the look of it, the feel of it, just hearing the bolt being racked ... now it

is very realistic to them," Colbert added. "You can't fake it with weapons."

That's important because many of the new troops have never even touched a gun before.

"Some didn't know what an M-16 looked like," King said. "With us they learn what each part of the gun does.'

Now they handle the mock M-16s so

much they are almost like having an extra appendage.

"I came in with very little weapons knowledge," said Airman Basic Ryan Bruce, a new trainee. "I had some experience with BB guns, but that was about it. So if I had been thrown into a heavy combat situation with all the stressors, I don't know how well I would have held up in that. That's why I'm glad to get more experience with the M-16 — putting it together, taking it apart and shooting it."

It's a matter of getting that warrior mentality

with the training to back it up. Basic training is "not like the program you and I went through," Chief Sargent said.

Perhaps King summed it up best: "The trainees realize quickly, 'OK, I didn't just join the Air Force; I joined the Armed



No, not even with the

ing process for trainees.

mock M-16, is it acceptable

to let the barrel get packed with

sand, but that's part of the learn-

During tactics training, Airmen are taught to keep an eye out for the enemy and to wait for their wingman.







**Using a practice dummy,** Airmen learn they don't need to shoot their rifles to inflict pain with them.

#### **Gun Guidelines**

- Treat all guns as loaded. Any time you handle a weapon/gun, don't assume it's not loaded; check it and confirm it.
- Do not point the muzzle at anything you are not willing to shoot, injure or damage. People constantly violate this rule because they think the gun isn't loaded.
- Keep your finger off the trigger. Until your weapon is on target, your finger should not be on the trigger.
- Don't shoot anything you can't positively identify. Friendly fire can be a real problem.
- Know what is behind your target. Know what will stop your bullet if you should miss your target or the bullet goes through your target. Situational awareness is key.
- Do not horseplay with a gun in your hands. People need to show discipline and give a lethal weapon the proper respect.
  - Tech. Sgt. Charles E. Thompson
     342nd Training Squadron armory NCOIC



Trainees answer questions prior to marching.

By SAMANTHA L. QUIGLEY Photo by Staff Sgt. MATTHEW J. HANNEN Digital image illustration by SAMMIE W. KING

he death of broadcasting icon Peter Jennings from lung cancer last year again brought smoking and its dangers to the forefront of public consciousness.

Before his death on Aug. 7, 2005, Jennings admitted he was a longtime smoker.

While an estimated 25 percent of Americans smoke, the military's numbers hover at 34 percent, said Col. Gerald Wayne Talcott with the Air Force Medical Support Agency in Falls Church, Va.

That represents an increase of 4 percent for the military over a four-year period. According to the same data, 27 percent of the active-duty Air Force smokes, an increase of 1.3 percent over the same time frame.

"We do have a higher prevalence of smoking for our youngest people in the military," Talcott said. "Now, if you look at officers, that's not the case. But for our youngest members, that's our E-1s through E-4s ... the overall prevalence is a little bit higher than the national average.

"It's a good suspicion" that the war is a factor in the increase of military smokers, he said.

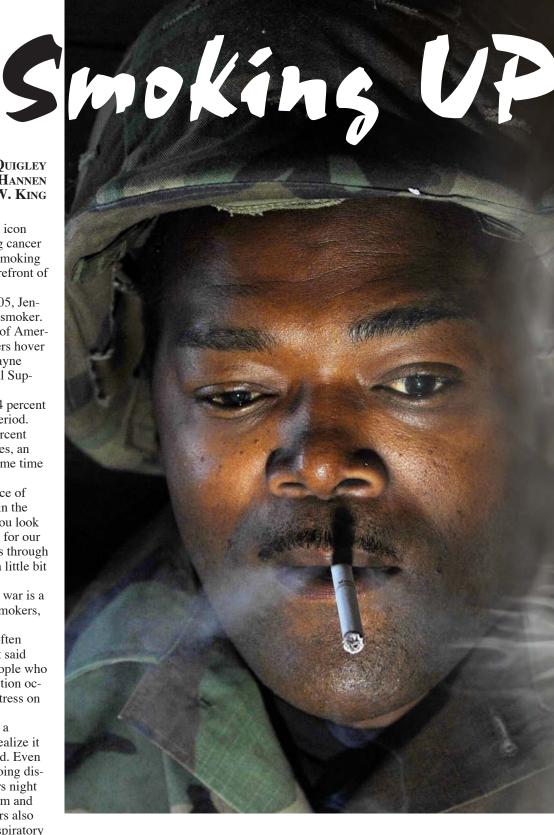
Service members who smoke often claim it is a stress reliever. Talcott said that might be true, but only for people who already are addicted. Before addiction occurs, smoking actually increases stress on the body, he said.

Smokers may see their habit as a personal risk, but many may not realize it affects force readiness, Talcott said. Even among smokers who have no ongoing diseases related to smoking, it impairs night vision, weakens the immune system and can lengthen healing time. Smokers also may have more frequent upper-respiratory ailments.

Tobacco use also affects families, the colonel said.

"We have a lot of young people (who) are just starting families," Talcott said. "It has an impact on those young children as well. If you're smoking around them, their risk for upper-respiratory infections goes up as well."

Smoking is a deceptive risk for younger people, since they do not necessarily feel the immediate ramifications. But, if a smoker quits, as more than 50 percent of Defense Department people who smoke have expressed a desire to do, there are ben-



Even among smokers who have no ongoing diseases related to smoking, it impairs night vision, weakens the immune system and can lengthen healing time.



efits to be reaped ... not the least of which is an extended life.

"Your body has a very recuperative ability," Talcott said. "We have a very young population, so the sooner you quit and the less amount of time you smoke, the faster your body repairs itself. Within 10 to 15 years (of quitting smoking) your risk for cancer, if you quit early enough ... is almost the same as it would be for a nonsmoker.'

Service members have multiple excuses for not quitting. The fear of failure or a failed first attempt often keeps smokers from trying to quit again, Talcott said. However, he said a failure

- Each year, 390,000 Americans die from the effects of smoking.
- OCigarette smokers have more than twice the risk of heart attack.
- OCigarette smokers have two to four times the chance of cardiac arrest.
- O Giving up smoking rapidly reduces the risk of heart disease. After a number of years, the risk of heart disease diminishes to the same level as a person who has never smoked.
- A pregnant woman who smokes increases her baby's chances of infant crib death.

— Information courtesy of the American Red Cross

does not mean that a second, or even a third, attempt is going to fail.

"You aren't always successful the first time," he said. "What we know is that it seems like the more people try to quit, the more likely they are to quit successfully."

Some smokers, especially women, are afraid to kick the smoking habit out of fear that they will gain weight. That is not a good enough excuse, Talcott said. A person would have to gain 100 pounds to equal the negative health effects of continued smoking, he said.

The weight-gain theory also is not necessarily true. Among recruits in basic training — where smoking is disallowed, meals are controlled and exercise is a must — there is virtually no weight gain, Talcott said.

Help is available for those who wish to quit but. Most base health and wellness centers offer smoking cessation classes, and nicotine-replacement therapies are available.

The Department of Defense is working with primary care physicians to help them spot tobacco use early and provide messages about quitting. Visit the Tricare Web site at www.tricare. osd.mil also offers information on why kicking the habit is a good idea and how to quit.

Ms. Quigley is a staff writer with the American Forces Press Service.



### Scarlet Letters.

### DUI Driving drunk nearly wrecked my life, career

By Airman 1st Class MARK BANNERT Illustration by SAMMIE W. KING

y palms are sweating. I got caught driving drunk and must face the consequences.

I enter my commander's office. My face flushes uncontrollably. As my reporting statement leaves my lips, my mouth feels as if I just swallowed a cup

"What were you thinking?" he asks. Before I can speak, my mind floods with the memories of that night ...

The night is cold, and rain is falling all around me like little liquid spears. The fight I was in with my girlfriend has my blood boiling and my mind racing. The alcohol in my system does nothing to help calm me or collect my thoughts. There are 85 miles between where I am and where I need to be. I could call Airmen Against

Drunk Driving or one of my co-workers, but I foolishly do not.

The ignition is difficult to find in my drunken stupor, but I am finally able to find it and turn the key. My music is blaring, and I feel quite drowsy.

I'll just roll down the window. The cool air and rain hitting my face wakes me momentarily. I find my way out of the neighborhood and hit the freeway. The next hour and a half I go in and out of consciousness a few times, scaring myself.

I'm singing at the top of my lungs to stay awake. Finally the alcohol and humming of the road take over.

Slam! My world is rocked by a loud crash and a plume of chalky air. My nose hurts. The airbags have deployed, I'm in a ditch, and I am confused about what exactly has happened.

I instantly try to restart the car. ... Nothing.

The car is totaled. Both the front and back of the vehicle are smashed into the cabin. Miraculously, I am uninjured.

I turn off my headlights and decide that I will just walk to a nearby frrend's house.

No one will see the car, and I'll get a tow truck to pick it up in the morning. I stagger down the road upset and confused until a black car stops and the driver asks me if I need help.

I get in his car and he asks, "Are you OK?"

"Yes," I answer.

Then he asks if I was involved in the car wreck. Again, I answer yes. Then, he tells me he has both good and bad news.

"What's the good news?" I ask hesitantly.

He tells me that the good news is he picked me up.

"What's the bad news?" I ask with a sense of dread.

"I'm an off-duty police officer, and I'm taking you back to the scene," he answers.

My heart races, and the only thing I can think of is how to get myself out of this.

Next thing I know we are back at the scene. I only made it five miles before I was picked up. The police are amazed to see me unscathed after seeing the car and tell me I'm lucky. As they are putting me in cuffs and reading me my rights, I am not thinking that I am lucky. I'm thinking, "I'm screwed; my career is over." And in a way all that was true.

Any trust I had developed with my co-workers over the past six months is gone. There are going to be repercussions from this for the rest of my career.

I want to be that same troop I was when I joined — full of promise and honor, morals and virtue guiding my everyday decisions. I must now try twice as hard to get half the distance

In the end "A man's character is his fate." — Heraclitus.

So keep your path filled with character that expresses our core values — "Integrity first, service before self, and excellence in all you do." If so you will lead a life of no regret.

Airman Bannert is with the 13th Intelligence Squadron at Beale Air Force Base, Calif. (AFPN)

### Facing the Consequences

#### For Airmen, possible consequences of drinking and driving include:

- Arrest and incarceration
- Increased insurance rates ■ Fines/lost wages
- Loss of driving privileges
   Loss of security clearance
   Death
- Official reprimand ■ Article 15



f two friends drink six beers every night for six months, do both have the same risk of becoming alcoholics or substance abusers?

"Anyone is at risk for alcoholism, but studies have shown that individuals who have a family history of alcoholism are more prone to it," said Tech. Sgt. Michelle Wilson from the 43rd Medical Group at Pope Air Force Base, N.C.

She said social drinking is defined by having a couple of drinks one to two times a week. Drinking five or more drinks in a 24-hour period is considered binge drinking.

A person is considered an alcoholic after showing signs of alcohol dependence. Those dependent on drinking alcohol can show any of the following signs: tolerance; withdrawal symptoms; drinking excessively or for longer than intended; giving up aspects of life if drinking can't be a part of it; persistent unsuccessful attempts to quit despite their intentions to cut down or control alcohol use; or continuing to drink despite it hurting a medical or mental health condition.

The 0-0-1-3 Philosophy

Wilson recommends using the Air Force's 0-0-1-3 philosophy when drinking. The first "0" stands for zero drinks for those younger than 21. The second "0" stands for zero alcohol-related incidents. The "1" stands for one drink per hour to give the liver enough time to process the alcohol. The "3" stands for a maximum of three drinks per night to keep the body's blood alcohol level below .05 percent.

"The one drink an hour philosophy is not to be able to drive safely," Wilson said. "If anyone has had anything to drink, they should not drive."

She said the guide is to help people avoid consuming large amounts of alcohol in a short period of time — putting them at risk for injury to themselves or others.

Wilson said it takes almost two hours to completely eliminate the first drink's effect on the body.

Once someone finishes an alcoholic drink, it takes a while for it to enter the blood stream and hit peak blood alcohol



levels. The liver processes one ounce of alcohol an hour. Ninety percent of alcohol is processed by the liver, and 10 percent comes out through one's breath, urine and sweat as the alcohol is burned up as energy.

She said it takes women longer to metabolize alcohol because they tend to have more body fat. Also, things like birth control pills can affect the rate at which alcohol is processed.

### Increased Tolerance

Many who have been pulled over for drinking and driving said they felt fine when they were driving. How did they have an increased blood alcohol level and feel fine?

"Because of tolerance, a person who normally does not drink can feel the effects after drinking one drink and be intoxicated at three or four," Wilson said. "If they started drinking a six-pack each weekend, give that person a month or two and they will build a tolerance to that much alcohol. It will get to a point that a six-pack will not affect them. But the blood alcohol level continues to rise no matter what their tolerance is."

Most people pass out at a .21 blood alcohol level, according to Wilson. She said even when a person has

stopped drinking and goes to sleep, their blood alcohol level continues to rise for one to two hours after they stop drinking.

"If the poison receptors are activated when a person is passed out, they can choke on their own vomit," Wilson said.

The alcohol acts as a depressant. The more alcohol consumed, the more it slows down the central nervous system.

If too much alcohol is consumed, the central nervous system could come to a complete stop. If that happens, the person will not only pass out, but cannot awaken. At that point, an ambulance needs to be called.

"They cannot guess how much their blood alcohol level is going to continue to rise, and they may be in danger," Wilson said.

### Blackouts and Abuse

Some people who drink a lot may experience blackouts. The part of the brain called the hippocampus stops working when someone has had too much alcohol. According to Wilson, the

hippocampus acts like a VCR. It records what a person does and gives the person the ability to play it back again in their mind. A drunken person can still walk, talk and make decisions — they just won't have memory of it the next day.

"The danger of this is they will have no memory if they had sex, if they were safe, if it was with someone they wanted to have sex with, or if they hit someone while driving home," Wilson said.

There are different ideas of what constitutes alcohol abuse, Wilson said.

Some warning signs of alcohol abuse include not meeting responsibilities; not meeting family obligations; doing things that could be physically hazardous after drinking, such as drinking and driving or unsafe sex; or legal, work or relationship

If someone is late to work because they are suffering from a hangover or still under the influence, it not only negatively affects their social and work life, but it also can have negative biological effects.

### Health Issues

Drinking alcohol can cause pancreatitis, a fatty liver and cirrhosis of the liver. It also can affect one's blood cells, heart, kidneys, endocrine and reproduction system, nervous system, brain, stomach, intestines, mouth, throat and esophagus. Additionally, it can lead to psychiatric conditions.

"Basically alcohol can affect every part of a person's body," Wilson said.

Alcohol is absorbed through the blood stream, which touches every system in the body. It can cause cancer, memory problems, nutritional deficits and fetal alcohol syndrome.

Alcohol abuse reduces one's life expectancy by 10 to 15 years. According to the 43rd Medical Group, alcohol is responsible for 40 percent of all fatal traffic accidents, 50 percent of all homicides and 25 percent of all suicides. Two hundred thousand deaths each year are related to alcohol use. Alcohol is the third largest public health problem, after heart disease and cancer.

"If anyone is experiencing any of the warning signs, I would recommend that they come in to (the Alcohol and Drug Abuse Prevention and Treatment program, or speak with their (primary care manager) about their use and the symptoms they are experiencing," Wilson said.

She said a person cannot get into trouble for visiting the ADAPT office.

"It's only the behavior that usually goes along with alcohol abuse or dependence that can get a person into trouble — like drinking and driving, underage drinking or being drunk and disorderly," she said.

Airman Locke is with the 43rd Airlift Wing Public Affairs Office at Pope Air Force Base, N.C. (AFPN)

### The Low-down on Alcohol Abuse

- \*Alcohol abuse reduces one's life expectancy by 10 to 15 years.
- Alcohol is responsible for 40 percent of all fatal traffic accidents.
- Alcohol is involved in 50 percent of all homicides and 25 percent of all suicides.
- Two hundred thousand deaths each year are related to alcohol use.
- \*Alcohol is the third largest public health problem, after heart disease and cancer.

- Courtesy of the 43rd Medical Group

Story and photo by TIMOTHY BARELA

earching for the next generation of great aviators is not a task the Air Force takes lightly.

That's why officials decided to change the Initial Flight Screening program as they take a close look at young lieutenants and seek out the ones who demonstrate an aptitude for flying. On Oct. 13, a new centralized IFS program launched at Pueblo Memorial Airport in Pueblo, Colo.

The IFS program evaluates candidates hoping to enter Air Force aviation training either as pilots, combat systems officers or unmanned aerial vehicle operators. Doss Aviation is the contractor responsible for providing the facilities, flight instruction, Diamond DA-20 aircraft, maintenance, emergency services and more for the program. The Air Force oversees IFS from a quality assurance perspective and also provides the aviation candidates with the military rigor and physical training portion of the course.

The new program affects applicants coming from Officer Training School and the Reserve Officer Training Corps. The Air Force Academy in

"Initial Flight Screening was designed to screen for aviation aptitude but also provide the military rigor and camaraderie missing in some general aviation programs."

Colorado Springs, Colo., has its own flight screening program, which will likely remain in place. The centralized IFS program at Pueblo will replace decentralized IFS that had applicants doing their flight screening at civilian flight schools across the nation. The decentralized program will still exist, but will draw down over the next 18 months until, eventually, all applicants coming from OTS or ROTC will go through the screening at Pueblo.

"Even though we are moving toward the centralized Initial Flight Screening program, the process will take nearly two years," said Air Education and Training Command Director of Safety Col. John Blumentritt, who flew DA-20s as part of the safety oversight of the decentralized IFS program. "In the meantime, we haven't forgotten about the students who will still be going through the decentralized program."

The colonel said as the decentralized program draws down, AETC officials are just as committed to the safety of their aviator candidates dispersed nationwide as they are to the ones going through IFS at Pueblo or the Academy.

"We will not let even one of our lieutenants fall through the cracks," Blumentritt said. "All are equally important to us no matter which program they are going through. We will do everything we can to protect them."

# New flight screening program looks



Outside their DA-20 aircraft in Pueblo, Colo., initial flight screening instructor pilot Cliff to discuss what went right, what went wrong and how Wiersch can improve his next flight.

Eventually, consolidating the program at Pueblo for nearly 40 days of training should standardize flight screening across the Air Force, according to Lt. Col. John Tomjack, commander of Detachment 1, 306th Flying Training Group, which has oversight responsibility of the program in Pueblo.

"IFS was designed to screen for aviation aptitude but also provide the military rigor and camaraderie missing in some general aviation programs," Tomjack said. "IFS graduates will arrive at Undergraduate Flying Training with a broader understanding of military aviation and more accustomed to the rigor found in military flight training programs."

# for best pilot, aircrew applicants



Helzer of Doss Aviation and student pilot 2nd Lt. Jordan Wiersch do a post flight briefing

Tomjack said the flight screening process is important because Undergraduate Flying Training is so expensive. Every effort needs to be made to minimize attrition. He expects the new program will reduce attrition rates, saving the Air Force millions of dollars over time.

'Civilian flight school training is good training; it simply lacks the military environment we can provide here," Tomjack explained. "The net result is some candidates would find themselves in advanced Undergraduate Flying Training programs and then decide they didn't want to be there. That translates to wasted dollars. We needed a better filter."

They seem to have already achieved that goal to some degree.

"The training is exactly what it needs to be; rough but fair," said 2nd Lt. Jordan Wiersch, a student pilot in the first IFS class at Pueblo. "Of course, going through as the first class is bitter-sweet. I'm honored and do think I'll be better prepared for UPT. But I've talked to friends who are going through the decentralized program, and they seem to be having more fun – it's less structured, less militarized."

Wiersch said that in the new program, they train from 6 a.m. to 6 p.m., and then still study until 10 p.m. Then they wake up and do it all over again.

"I didn't study this much in college," said the 22year-old Texas A&M graduate. "Not all people can handle that, which is why they self-terminate. It's an eye opener. But I'm gung-ho, and this is an opportunity of a lifetime. The ups outweigh the downs."

Tomjack expects students to range from the "gung-ho" mentality of Wiersch to those who discover a military flying career isn't their cup of tea.

"Our program cuts both ways ... students are evaluating their future career choice, while we evaluate their attitude, aptitude, adaptability and motivation to be a professional military aviator," Tomjack said. "Some don't like the pressure, and that's OK ... better to find out here than at UFT."

During the flight screening process, a big concern for Tomjack is the safety of the students. He said a lot of thought went into the airspace around Pueblo, which features low-volume air traffic that is simple and reliable. That's a plus. But they do have some potential hazards to overcome.

"The number one safety concern we will have to deal with here is the skill level of the students that we are dealing with, combined with the volume of flying," Tomjack said. "At the height of the training, we will have 1,300 to 1,700 inexperienced aviators coming through here each year filling the Colorado skies. The average student is 23 years old and has never flown before. If our procedures aren't highly reliable, it's a recipe for disaster."

He also worries about the rate at which weather conditions can deteriorate in Colorado.

'Colorado Springs has the highest lightning risk next to Tampa (Florida)," Tomjack said. "And Pueblo is close behind. Thunderstorms can move in here very quickly, and with them, heavy lightning and very strong winds. Resource protection, both on and off the flight line, must be closely monitored at all times. Our intramural program will have 150-plus aviation candidates outside at any given time."

Because of that, the colonel is pushing for dedicated weather support at the Pueblo operation. In

the meantime the contractor is responsible for weather support.

Tomjack says rounding out his top safety concerns is the reality of dealing with 23-year-olds who still think they are invincible.

"One of our primary goals here is to ensure these young adults not only survive their flying experience, but their off-duty activities as well," Tomjack said. "It's just another reason why standardized flight screening makes a lot of sense."

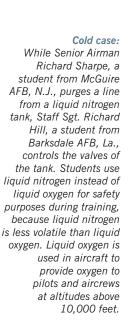
Tech. Sgt. Mike Hammond of Air Education and Training Command Public Affairs contributed to this article.

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### IN THE AIR FORCE

CRYOGENICS COURSE KEEPS PILOTS, PLANES ON TARGET

> By ROBERT FOX Photos by JOHN INGLE





Cryo maintenance prevents fatalities and helps ensure the mission doesn't suffer.

SHEPPARD AIR FORCE BASE, Texas (AETCNS) — Cryogenics sounds like some future way of recreating life or a search for a cure of an unknown plague ... like something you'd see or hear about on "Star Trek" or "Star Wars."

For the Air Force and the 366th Training Squadron at Sheppard AFB, it means keeping pilots and aircrews alive when they're flying above 10,000 feet.

"The main thing I teach my students is without us, fighter pilots can't fly," said Staff Sgt. Fred Whitted, an advanced cryogenics instructor at the 366th TRS. "Without us, pilots can't fly because after 10,000 feet, if they decompress, they need oxygen."



Airmen in the cryogenics career field use liquid oxygen, or LOX, as the source for the much needed element to allow pilots to continue the Air Force mission.

Whitted said the course is important because, in a deployed situation, the Airmen in charge of issuing LOX containers are also the only ones available to make repairs.

"If they don't fix them, then the mission suffers," he said. "If we don't give them a quality product, a fatality can happen. That's our job as cryo maintenance people — to make sure the quality of the product is high."

Cryogenic maintenance is a 10-day course designed to prepare Airmen to store, issue and maintain cryogenic containers. It graduates an average of 140 students annually.

The course begins with safety and moves quickly through technical orders, how to issue liquid oxygen, quality control, and components and maintenance of the different parts of the system.

The second week of the course is spent learning to operate vacuum pumps, purge units and troubleshooting.

The safety aspect of the course is essential because of the nature of cryogenics. Liquid oxygen, aside from being -297 degrees Fahrenheit, is shock sensitive.

"LOX is very, very shock sensitive, meaning it does not take much to make it go boom," Whitted said.

Liquid nitrogen is also dangerously cold, -321 degrees Fahrenheit, and can cause asphyxiation in a closed environment.

Associated dangers aside, some find the field rewarding. Senior Airman Ronald Ritter said he wanted to be in cryogenics when he enlisted in the Air Force. He said he looks forward to going back to Anderson Air Force Base, Guam, and teaching others on the job the skills he has learned here.

Anderson AFB has a 5-ton cryogenic production plant that runs a minimum of 16 hours a day. Ritter said he hopes to apply the things he has learned here at the pacific island's plant.

Staff Sgt. Bradley Childs, from the Delaware Air National Guard, was selected to attend this course. He said he does not mind because it will make him a better-rounded Airman.

"I volunteer for as many deployments as possible," he said. "(After this course) I can work in cryo, if needed. Without it, I would be more one dimensional."

Regardless of who the Airmen are or where they are stationed, there is one thing every cryo Airman knows. The Air Force, or its aircraft, doesn't leave home without them.

The safety aspect of the course is essential because of the nature of cryogenics. Liquid oxygen, aside from being -297 degrees Fahrenheit, is shock sensitive, meaning it doesn't take much to make it go boom.



A pipe frosts over as Staff Sgt. Richard Hill works the valves on a liquid nitrogen cart. Liquid nitrogen reaches -321 degrees Fahrenheit.

### **RAPTORS**

### FLY SAFELY THROUGH FIRST 5,000 HOURS

TYNDALL AIR FORCE BASE, Fla. (AETCNS) — When the F-22 Raptors of the 43rd Fighter Squadron here collectively reached the 5,000 flying hour mark Sept. 20, they did so with a sparkling safety record.

Squadron maintainers and pilots have prevented extensive damage and loss of aircraft here since the Raptor arrived, said Master Sgt. Michael Rabb, 43rd Aircraft Maintenance Unit production superintendent, who has been with 43rd AMU since the Raptors arrived. He added that this accomplishment was achieved because focus is put on one mission — training world-class Raptor pilots and crew chiefs.

"We train the best pilots and maintainers to do the job right the first time," Rabb said. "Without proper training, accidents could happen."

Tyndall is the second base to reach the 5,000 hour milestone with the Raptor following Edwards AFB, Calif.

This feat may seem insignificant compared to the many hours of other fighter aircraft, but the Raptor's journey here has been an intricate balance between tactical progression and discovering the full capabilities of the advanced weapon system technology.

"Initially, the ratio was about six pilots to one jet, and the jet didn't have all the capabilities the pilots needed for effective training," Rabb said. "Since then, with all the modifica-



With all of its modifications, the F-22 has truly become the cream of the crop, according to its maintainers at Tyndall AFB, Fla. They say the more time they have to work the bugs out, the better the jet gets.

tions, this jet has truly become the cream of the crop. As the old saying goes, 'it's like fine wine — it gets better with age.' The more time we have to work the bugs out, the better the iet gets."

The Raptors here are first production aircraft, and as with any new vehicle, they are the initial models used to determine future upgrades and advancements.

"The F-22 is the new kid on the block," said Mike Cabiness, F-22 site manager. "It's a leap in technology compared to anything flying today. In a way, it's like comparing the P-51 to the F-4."

Regardless of inevitable obstacles, Tyndall's crews have continued to mature the planes to match the configuration of later production models like those at Langley AFB, Va. Since standing up as the only F-22 flying training squadron, the 43rd FS has produced 74 F-22 pilots.

"Achieving 5,000 flying hours is an important milestone for our operation here," said Lt. Col. David Krumm, 43rd FS Commander. "The 43rd AMU has performed magnificently in bringing the airplane from the test environment to a normal flying operation. Last year we increased our flying hours by over 50 percent from the previous year. We are planning an even larger increase for fiscal year 2007 and will continue to increase our flying operations and train more Raptor pilots to meet the needs of the Air Force."

> — Staff Sgt. Stacey Haga 325th Fighter Wing Public Affairs

### PILOT ERROR CAUSES B-1B CRASH

LANGLEY AIR FORCE BASE. Va. (ACCNS) — Pilot error caused a B-1B aircraft to crash while landing on the runway at a forward deployed location May 8, according to an aircraft accident investigation report released in September.

The copilot suffered a minor back injury, and the other three crew members were not injured. Damage to the aircraft totaled nearly \$7.9 million. Damage to the runway totaled approximately \$14,025.

The aircraft is assigned to the 9th Expeditionary Bomb Squadron, 7th Bomb Wing, Dyess Air Force Base, Texas.

Investigators concluded that

the cause of the mishap was both pilots' failure to lower the landing gear during the aircraft's approach and landing. Contributing factors for the pilots' failure to lower the landing gear were the copilot's task over-saturation; the copilot's urgency to complete a long mission; both pilots' inattention to instrument readings and the Descent/Before Landing Checklist; and the copilot's false belief that the pilot had lowered the landing gear.

According to the report, the pilot unexpectedly turned over aircraft control to the copilot on the final approach. The pilot reported to the air traffic

control tower that the landing gear was down despite the fact that the Descent/Before Landing Checklist was never completed and the landing gear was never lowered. The red warning light in the gear handle, indicating all landing gear was not down

and locked, was illuminated for more than four minutes during the approach. Additionally, at the time the aircraft landed, the three green position lights, which illuminate after the landing gear has locked in the down position, were not illuminated.



When two pilots failed to lower the landing gear, the Dyess Air Force Base, Texas, B-1B bomber they were flying crashed on the runway.

### MEETING IMPEDES MID-AIR MISHAPS



Pilots must maintain vigilance during flight to avoid the potential for a mid-air collision, as shown in this photo illustration. The No. 1 cause of mid-air collisions is the failure to use the "see and avoid" concept, which was discussed at a recent meeting between Moody AFB, Ga., and local-area pilots.

MOODY AIR FORCE BASE, Ga. (ACCNS) — Several Moody members met with local-area pilots this summer at Valdosta Regional Airport, Ga., in an effort to eliminate mid-air collisions above Southern Georgia.

The potential for mid-air collisions is a constant hazard during flight, and research shows the most critical times are three minutes after take-off and eight minutes before landing, according to Moody's Mid-Air Collision Avoidance Handbook.

"Our main goal was to pass out our handbooks and to discuss our flight patterns in the Moody air space," said Capt. Brian Kelly, 347th Rescue Wing flight safety officer. "We decided to have a meeting with the local pilots so we could talk with them and get their feedback.

More than 50 people gathered to discuss the No. 1 cause of midair collisions, which is the failure to adhere to the "see and avoid" concept. Pilots must maintain vigilance during flight to avoid other pilots within their air space by constantly scanning for other aircraft.

"We told them where we normally fly so they know where to look to find us," said Capt. Roy Bentley, 479th Flying Training Group T-6A Texan II flight safety officer. "We share the air space, so we want to work together."

One tip offered in the handbook tells pilots if an aircraft doesn't appear to be moving but increases in size, the two aircraft are on a direct collision course.

The handbook also contains maps of the local-area and how Moody's aircraft use the space.

"(This meeting focused on) helping raise awareness about what we do at Moody to accomplish our mission successfully," Kelly said.

One of the main concerns for the two groups is the many military operating areas that may be activated within Moody's air space, which restrict civilian pilots' flight to below 7,000 feet during instrumental flight. Research shows most mid-air collisions occur below 8,000 feet, which is below the altitude of an airliner's flight.

"The pilots want to know how they can navigate Moody's airspace easier," said Tech. Sgt. Mark Hopkins, 347th Operations Support Squadron NCO in charge of air traffic control standards and evaluations. "They are concerned with the altitude restrictions imposed upon them due to the military operating areas above Moody and want to know if different routes are available so they can get to their destination easier.

"I understand their concerns, and we are trying to provide better routes of flight for them in our air space," he said. "When they're restricted, they use more fuel, which costs them more money."

Another topic discussed was the way Moody uses the air space to accomplish the mission. One of the main concerns was local pilots flying too close to Moody's aircraft during an aerial refueling training mission.

"During past 'rendezvous,' we've had local pilots slowly creep toward us until they were within a mile of our aircraft," Kelly said. "We started getting nervous because we were at landing speed for

"We're not maneuverable at that speed," he said. "If (the local pilot) maneuvered the wrong way, we couldn't maneuver out of his way."

The team also made posters with mid-air collision avoidance tips, Moody aircraft's characteristics and other helpful information to display at 11 local-area airports to help local pilots during flight planning.

"We gave the pilots the different patterns we fly, so they know where we are coming from and can avoid us," Kelly said. "We also talked about the performance characteristics of Moody's aircraft, along with pictures for visual recognition.

"We also gave them other quick references in the handbook, so they can carry it with them when flying," he said. "The handbook helps them plan their flight around our schedule. By meeting with the local pilots, we also strengthen our relationship with them.

— Senior Airman S.I. Fielder 347th Rescue Wing Public Affairs

#### A MID-AIR MINUTE

- The most critical times for potential mid-air collisions are three minutes after take-off and eight minutes before landing.
- If an aircraft doesn't appear to be moving but increases in size, the two aircraft are on a direct collision course.
- Most mid-air collisions occur below 8,000 feet, which is below the altitude of an airliner's flight.
  - Information courtesy of Moody's Mid-Air Collision Avoidance Handbook

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