

Air Education and Training Command's
TORCH
September/October 2007



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BE MURDER**
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It's an alarming fact that the average American adult gains at least 2 pounds per year over his or her lifetime. Perhaps even more concerning, we are not just maturing toward obesity, but obesity is increasing among our children. This epidemic will certainly have a negative impact. Besides the increased risk for numerous chronic diseases, the inability to maintain a fit force could add a "heavy" burden to the military ranks.



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

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FROM THE VICE COMMANDER

By Maj. Gen. **MARK A. WELSH III**
Vice Commander, Air Education and Training Command

SUMMER IS OVER

As you look back at “how I spent my summer vacation,” I’m sure there are lots of stories to tell. We had Airmen and Air Force civilians traveling coast-to-coast and overseas spending time with family and friends.

Along the way, you enjoyed traditional summer activities like boating, tubing, water skiing, swimming, camping, hiking and biking. You balanced safety and recreation and made Air Education and Training Command’s summer safety campaign – “Operation Summer Survivor – Zero in on Safety” – a success by employing risk management in all your activities and being good wingmen.

That said, AETC lost two Airmen this summer. That’s two too many.

Air Force-wide, we lost 19 Airmen during the 101 Critical Days of Summer. Eight were killed driving their automobiles; seven lost their lives on motorcycles.

The remaining four deaths resulted from off-duty sports and recreation activities: two drownings; a dirt bike mishap; and an all-terrain vehicle crash.

Unfortunately, we continue to prove that driving too fast for the road and weather conditions, poor decisions, and unfortunate errors can result in fatal consequences.

These losses remind us that we must remain vigilant and focused in our efforts to stay safe.

While the summer months are known as a high-risk period, it’s not the only time we lose Airmen. For fiscal 2007, AETC has seen 11 Airmen die in preventable mishaps: five in automobiles, four on motorcycles, one in an industrial accident, and one who mishandled a firearm.

Although Labor Day traditionally marks the end of AETC’s “Operation Summer Survivor – Zero in on Safety” campaign, I urge you to continue the safety mindset. Bottom line ... we need to remain good wingmen. We simply can’t afford to lose another member of this great AETC family.

“You balanced safety and recreation and made Air Education and Training Command’s summer safety campaign — “Operation Summer Survivor – Zero in on Safety” — a success by employing risk management in all your activities and being good wingmen. That said, AETC lost two Airmen this summer. That’s two too many.”

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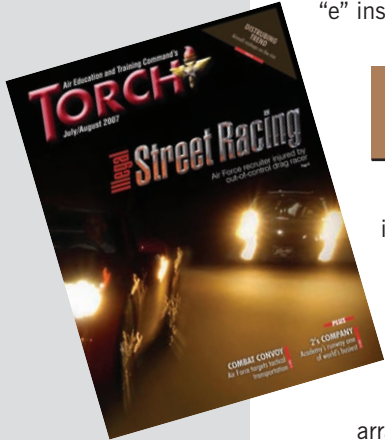
CHEVROLET CAMARO OR CANDIDO CAMERO?

I can't believe the number of times I see "Camaro" misspelled. Your article "Illegal Street Racing" (July/August 2007 issue of Torch, page 8) was no exception. As a matter of fact, it probably takes top honors because of the numerous times "Camero" (with an "e" instead of an "a") appeared

in the article. As a prior owner of a '69 Chevy Camaro, I guess this is a pet peeve of mine. Yes, it's a minor offense, and your article was informative, but my experience at a newspaper taught me misspellings can be distractions to the readers.

*Terry Graham
Lackland Air Force Base, Texas*

Camaros? We were talking about Candido Camero, the famous Cuban percussionist known for the conga and bongo. ... JK! (just kidding). Actually, you are, of course, absolutely correct. We did misspell Camaro (as in Chevrolet Camaro). Sorry for the distraction, and thank you for your feedback.



ILLEGAL STREET RACING

With your cover story on "Illegal Street Racing" in the July/August 2007 issue, you've hit on a topic that "drives" me crazy (no pun intended). It seems more and more people are turning their vehicles into "weapons of mass destruction" by participating in this illegal activity.

For a lot of people, it's not the pre-arranged races that are getting them. It's the ones where kids race each other home from a Friday night high school football game on the spur of the moment. They do it just because they happened to see

their friend in the vehicle next to them and want to have a little fun. Or it's the ones where one driver cuts off another on the highway, and a road rage ensues.

These illegal races are dangerous on our crowded roads, and innocent people, like Master Sgt. Prince Porter and Senior Airman Christopher Pedroley, are paying the price. Thank you for covering a much needed topic so well, and thanks to Sergeant Porter for sharing his story. Hopefully, his experience will get some people thinking.

*Hank Tate
Via e-mail*

LETTERS TO TORCH

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.



My son, Airman 1st Class Denis Rogeski, is written up in your magazine in the article "Combat Convoy" (July/August 2007 issue, page 12). He is now serving in Afghanistan. He called us yesterday to say that you had sent him a

copy — thank you for that. He was very pleased and excited about it.

We accessed the article online and viewed the photos. We also are getting hard copies for ourselves, his wife and his grandparents to have as keepsakes.

Additionally, thank you from my granddaughter Stasi. She is very proud of her daddy, and we will tell her all about him when we show her the pictures!

*Nancy Rogeski
Fort Fairfield, Maine*

A UNIQUE EXPERIENCE

From the 5th Wing Medical Center ... please continue the excellent mix of articles dealing with both aviation safety and the personal health and safety aspect of our lives. Your magazine is unique in my experience, in regularly addressing both of these areas, which, after all, are inextricably connected.

A habit of risk taking or corner cutting in our daily lives translates into a habit of the same approach at work even though we tell ourselves that it won't. We think that the knowledge of the importance of working on or flying a multimillion dollar aircraft will make us act differently. As you undoubtedly know, it doesn't!

Your magazine's approach attacks this weak spot in our thinking (dare I say in our self delusions?). We say, "Train like you fight." Perhaps we should say, "Live like you fight."

After all, this is just another way of saying, "Live life to the fullest."

And why not? Life is short enough as it is!

*Lt. Commander P. (Ben) Wahl
Happy Valley-Goose Bay, Canada*



'WORK HARD, PLAY SMART'

Col. John Blumentritt's article "Geronimo!" in the "From the Director" column (July/August 2007 issue of Torch) reminded me of the days when I jumped off barns and garages with makeshift parachutes (sheets, towels, etc.).

I really enjoyed the article. It mirrored my many safety briefings here at the Air Force Institute of Technology. We take risks but always stay vigilant to the operational risk management process. I use our wingman culture to balance our safety culture and developed a three-step thought process for our mishap reduction program — a strong wingman culture, ORM and situational awareness.

I feel strongly that safety should not take away the risk-taking spirit of our Airmen, but instead help enhance their thought process, quantitatively creating a more systematic Airman for the battlefield. ... Let them push the envelope occasionally.

Thank you for such a great read.

Shannon S. Williams
Wright-Patterson Air Force Base, Ohio



Col. John W. Blumentritt does a tandem jump with Maj. Alex Cos of the U.S. Air Force Academy's Wings of Blue jump team earlier this year.

Thank you very much for the comments. Your letter emphasizes a good point: Air Force safety programs aren't here to eliminate risks; they're here to mitigate them. In other words, if you need to jump out of an airplane — or off a barn — then we simply want you to do so in the safest manner possible, after considering all the risks. We're a risk-taking force that needs to work hard and play smart!

MILITARY RECREATIONAL SKYDIVING INJURIES

I am a military recreational skydiver and went through the AM 490 skydiving program at the U.S. Air Force Academy (reference your cover story, "For the U.S. Air Force Academy Parachuting Program, There's Just One Season ... Fall!" in the September/October 2006 issue of Torch). I also am a member and coach in the U.S. Parachute Association and have jumped with a number of skydivers from every service (including the Coast Guard).

Military skydivers make up a good portion of the Parachute Association's membership, so I know there are a lot out there.

I often hear comments on how dangerous skydiving is. Although our numbers are not as large as those in some

activities, I think our injury/fatality rate is on the bottom end of the scale. But I have no numbers to confirm this. The Parachute Association keeps statistics on incident reports, but does not include military status.

Do you have any statistics on how many Airmen are injured per year from recreational skydiving?

Capt. Lori Katowich
Laughlin Air Force Base, Texas

Your assumptions are correct as far as Air Force skydivers go. The Air Force has averaged less than three serious recreational skydiving mishaps a year. That is a relatively low number when compared to other recreational activities such as basketball that averages 223 lost time mishaps per year. On the other

hand, since Oct. 1, 1995, five Air Force members have lost their lives while skydiving off-duty, compared to zero basketball fatalities.

During the past five years (since Oct. 1, 2002), the Air Force has had 14 recreational skydiving mishaps, 13 of which were related to hard landings. Twelve of those mishaps resulted in a fractured bone.

Skydiving done correctly is a relatively safe sport, but you can't relax as even a small mistake in this activity could have serious or even fatal results.

Should you need Air Force safety statistics in the future, you can contact your base safety office, which has access to the Air Force Safety Center's mishap database tracking system.

'WHAT'S THE BIG DEAL?'



In reference to the Torch Talk letter "Breeding Contempt" (July/August 2007 issue, page 2), what's the big deal? So you used a dog's nickname instead of its official breed name ... so what. The lady that wrote, "I cannot believe the lack of professionalism this kind of error displays," is being just a bit dramatic, don't you think?

That's all she got from the story? That was an excellent article with some nice photos. I thought it was very professionally done. Keep up the good work.

Trevor Tyler
Via e-mail

OBSTACLES

CHALLENGE TRAINEES AGAIN

LACKLAND AIR FORCE BASE, Texas (AETCNS) — After being out of commission for just more than three months, the 737th Training Support Squadron reopened the basic military training obstacle course June 11.

Air Force Chief of Staff Gen. T. Michael Moseley shut down all Air Force obstacle courses following a course fatality last December at Moody Air Force Base, Ga.

General Moseley's suspension, which became official March 9, came on the eve of a new Air Force Instruction proposal created to standardize all course requirements servicewide. The suspension proved necessary to perform operational risk management analysis for hazards and procedural integrity at each individual course.

Operational risk assessments evaluate courses based on a number of criteria, including all briefings given before the course is actually used, course inspection, maintenance, manning and security. Extraneous equipment used during course runs and severe weather plans also are assessed.

"To meet the new requirements, all courses must perform an ORM inspection and submit their findings in a package to their major command," said Senior Airman Brandon Consola, 37th Training Wing ground safety technician. "Those findings, as well as proposed changes, are then approved, and the course is reopened."

Officials gave Lackland's obstacle course, which is used by nearly 40,000 trainees every year, a large amount of attention because of its impact on the Air Force mission. It is one of the first courses to be approved for reopening under the new AFI standardization.

AFI 36-2202 divides courses into two categories: Category I courses are those with obstacles no higher than 4 feet, and Category II courses are those with obstacles no higher than 14 feet. To meet approval with the AFI, the basic military training course went through a meticulous assessment for possible safety hazards and structural integrity analysis. It also had to make some changes.

The course has two obstacles, Cliff I and Cliff II, which both exceed the now standard 14-foot limitation. They have since been excluded from use by any trainees or Airmen running the course.



Photos by Robbin Cresswell

On the re-opening day of the basic military training obstacle course June 11, Brig. Gen. Darrell Jones (front right), 37th Training Wing commander at Lackland AFB, Texas, paces some basic trainees through the course, along with his vice commander Col. Eric Wilbur (back right). Wilbur also is shown doing the low crawl through an obstacle. All Air Force obstacle courses were closed earlier this year by order of the Air Force chief of staff after an Airman at Moody AFB, Ga., died while trying to complete an obstacle.



"The fall zones for both of those obstacles exceed 14 feet," said Tech. Sgt. Christian Kick, 737th TRSS obstacle course NCO in charge. "In order for us to bring them back on line, we'll have to decrease the fall zones for each one with construction projects. But (overall) the changes we've made don't really affect the course operation at all."

— Staff Sgt. Vincent Borden
37th Training Wing Public Affairs Office

DROWSY DRIVERS KILL MORE THAN 1,500 PER YEAR

LACKLAND AIR FORCE BASE, Texas (AETCNS) — Many people take for granted the dangers that come with driving long distances.

Without giving it another thought, the average person would jump in his car after an eight-hour workday and drive the four or five hours to visit a friend for the weekend even though the consequences could be deadly.

Senior Master Sgt. Burrell Hancock, Air Intelligence Agency safety director, offers a few tips for drivers to help keep their vacation travels as safe as possible.

“Being aware of the hazards such as driver drowsiness that come with driving long distances is the first step,” Hancock said.

According to the National Highway Traffic Safety Administration Expert Panel on Driver Fatigue and Sleepiness report, the annual averages are 40,000 nonfatal injuries and 1,550 fatalities resulting from driver drowsiness.

To avoid becoming a statistic, Hancock recommends drivers get a full eight hours sleep and formulate a plan before starting a long drive.

“Sitting for long periods of time makes you tired,” he said. “If you don’t schedule your stops, fatigue can creep up on you.”

Some drivers may think driving with the windows down while drinking coffee and listening to their stereo blasting will keep them alert, but Hancock

says drivers need to address the symptoms of fatigue instead of ignoring them.

“Putting a band-aid on the problem won’t make it go away,” he said. “If you’re sleepy, the only thing that will fix that is getting a good night’s sleep.”

A National Sleep Foundation’s Sleep in America poll confirms that drivers aren’t listening to their body when it’s in need of sleep.

According to the poll, 60 percent of Americans have driven while feeling sleepy, and 37 percent have actually admitting that they have fallen asleep at the wheel.

Knowing their limits is what Hancock stresses to all drivers.

“All people are different, if

you know that you only can drive three hours without a break then listen to your voice of reason and take as many breaks as needed,” he said. “We are at war, and our job is to fight and win. We can’t be fit to fight if we are in the hospital.”

Although many may have that “it will never happen to me” attitude, drivers need to remember their decision also can affect other drivers and passengers on the road.

“When you are on vacation, it is suppose to be a time of leisure,” Hancock said. “Unfortunately, the wrong decision can change that for everyone.”

— Staff Sgt. Kristine Dreyer
Air Intelligence Agency
Public Affairs

DWI – CAN YOU AFFORD IT?

VANCE AIR FORCE BASE, Okla. (AETCNS) — We’ve all heard the statistics and dangers about driving while intoxicated, but do we really realize what these actions could cost us?

Here are three examples of individuals arrested by the security forces for driving under the influence following the consumption of a six-pack of beer. Although disciplinary actions taken by a commander may vary and are handled on a case-by-case basis, typical punishment includes an Article 15 and loss of one grade.

A senior airman, reduced to airman first class will lose \$8,006 over the two-year period it takes to earn the grade back. Cost per beer — \$1,334. For a technical sergeant reduced to staff sergeant over a five-year period, the loss will be \$35,358. Cost per beer — \$5,893. For a master sergeant reduced to technical sergeant, the loss, including the potential effect to retirement pay during an average 30-year life span, will rise to \$191,184. Cost per beer — \$31,864.

Other actions may include getting restricted to base,

receiving extra duties, losing half your base pay for two months, being enrolled in some form of alcoholism rehabilitation program, or being administratively separated from the Air Force.

The security forces unit also initiates actions. Not only is your on-base driving privileges revoked for one year, the department of motor vehicles from the state your driver’s license was issued is normally notified. End result: Your car insurance premiums will skyrocket.

If the incident is off base, besides punishment imposed by the Air Force, the costs get even higher. The driver will be jailed until released to military authorities or making bail. Then he or she faces the risk of criminal prosecution and conviction. Don’t forget, your state driver’s license will be revoked and your insurance premiums will increase. When you toss in attorney fees, which can easily cost thousands of dollars, and time lost from work, it’s evident that drinking and driving is not worth it.

— Chief Master Sgt. Eugene Kampe
71st Medical Group superintendent

DUNE BUGGY VS. BICYCLE



Just in case it needed saying,

in a race or collision between a dune buggy and a bicycle, the dune buggy pretty much always wins. To illustrate ...

Huffing and puffing, I was pedaling my bike up the hill in front of the base exchange at Laughlin Air Force Base, Texas, when a friend pulled up next to me in his street legal dune buggy. We were jawing back and forth, giving each other some good-natured ribbing.

In the meantime, our vehicles crept closer and closer to one another.

Unbeknownst to me, the dune buggy's rear tire and axle are much bigger and stick out further than the front of the vehicle. So as my friend pulled away, his rear tire clipped mine. I flew over the handlebars as my bike flipped.

That's a flight that this C-130 pilot never wants to take again.

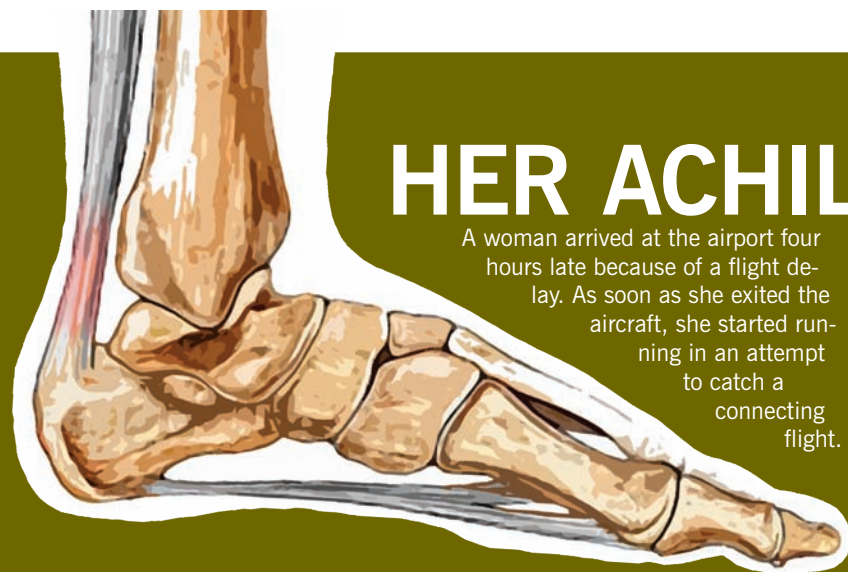
My bike somehow landed in front of his rear tire, which ran over it. The pressure from the dune buggy pushed the frame of the bike down on my ankle, breaking it. Meanwhile, in an attempt to catch myself from the fall, I extended my left arm and landed on my hand. In doing so, the impact from the fall broke my left elbow.

And to think, before this incident, I'd never broken a bone in my life.

All of this tore up my flight suit pretty good, as I lay there bloodied and broken. On a positive note, even though my head bounced off the asphalt a couple of times, I didn't sustain a serious head injury because I was wearing a helmet.

Since my ankle wasn't a severe break, I only had to be in a cast and on crutches for eight weeks. Then I had two months of physical therapy. My elbow, on the other hand, required three surgeries and nine months of physical therapy to regain full functionality.

— Maj. Brent "Byzo" Bywater
39th Airlift Squadron



HER ACHILLES HEEL

A woman arrived at the airport four hours late because of a flight delay. As soon as she exited the aircraft, she started running in an attempt to catch a connecting flight.

While running, she felt pain in the back of her ankle. She sought medical attention and discovered she'd ruptured her Achilles tendon.

Not only did she miss her flight, she ended up being "grounded" for the next month or so while her injury healed. Her doctor reminded her that before taking part in any strenuous activity — even sprinting through the airport to catch a flight — you should warm-up and stretch to avoid injury. Or make the decision not to run and simply catch a later flight.

HUNTER OR HUNTED?

BOY ACCIDENTALLY SHOOTS DAD

Father and son had been looking forward to this day all year. Nothing quite compares to the excitement of the hunt. And hunting elk in the Rocky Mountains can get the adrenaline pumping.

But new hunters also learn that hunting is an exercise in patience. You don't step out of your vehicle and start shooting into herds of elk. You might not even catch a glimpse of one for days. For this father and son team, it had been three days and they had yet to see much more than a rabbit.

But on the third day, they spotted a six-point bull elk. Dad pointed out the target to his son. He wanted his son to make his first kill. Just like they'd practiced, the boy took his time and squeezed off a shot. Maybe it was nerves, or maybe just poor aim, but the youngster missed. He quickly ejected the spent shell, which was automatically replaced by another. But the startled elk wasn't going to wait around for the boy to take another shot. Dad brought it down an instant after his son's failed attempt.



by Dave Nolan

A father made a full recovery after his son shot him in a hunting accident.

Then the triumph and jubilation of the moment turned to turmoil.

Unable to contain his excitement over his dad dropping the elk, the boy turned to his father, and hollered, "You got 'em!" But in his enthusiasm, he'd lost situational awareness. When he turned to congratulate his dad, his rifle swung with him and inadvertently fired. His dad fell.

Horrified, the boy ran to his dad's side. He saw the blood, heard his dad's moans and expected the worst. Fortunately, the bullet went through the man's abdominal external oblique muscle — more commonly known as the "love handles" — and missed any vital organs.

While this lucky dad ended up making a full recovery, others haven't been so fortunate. Every year would-be hunters inadvertently become the prey. With hunting season just around the corner, it's imperative for people to keep the basics of hunting safety in mind at all times.

— Tim Barela

SIX TIPS FOR HUNTERS

1. Always assume that your gun or bow is loaded and ready to shoot.
2. Never point your weapon at anyone; always point it in a safe direction.
3. Keep your safety on until ready to shoot.
4. Clearly identify your target before you shoot. Every year people are shot because they are mistaken for game.
5. Keep your emotions in check. Seeing game after waiting all day can cause excitement to rise and good judgment to fall. Don't lose situational awareness.
6. Keep your gun clean. Even a small amount of debris at the end of your barrel can cause a severe injury.

— International Hunters Education Association

Handwritten text in a medieval script, likely Latin, located at the top of the page. The text is arranged in several lines and appears to be a preface or introduction to the drawing below.



Handwritten text in a medieval script, likely Latin, located below the drawing. This text appears to be a list of measurements or proportions related to the figure above.

Handwritten text in a medieval script, likely Latin, located at the bottom of the page. This text appears to be a continuation of the text above, possibly providing further details or commentary on the drawing.

A



*Obesity a concern
for veterans,
recruits and kids*

Problem

By Capt. **FE LOBO-MENENDEZ**
Illustration by **SAMMIE W. KING**

Leonardo da Vinci's iconic drawing of the "Vitruvian Man," along with the accompanying text, is sometimes called "Proportions of Man." Created around the year 1492 as a scientific study of the proportions of the male human body, his artwork probably would look different if redone today, as the "proportions of man" (and woman) have changed over the years. Case in point: A short time ago, I sat in my friend's living room sharing pictures from her past. It was her high school year book, 1967, and something very striking caught my eye.

"Wow, all of you were skinny!"



Physical training gets a little strenuous for Airman 1st Class John Ring, 317th Maintenance Squadron, Dyess Air Force Base, Texas, during Marine Corps field training at Camp Bowie, Texas, Aug. 4. With combat operations soaring, it's more important than ever for Airmen to stay fit.

by Senior Airman Carolyn Viss

My friend laughed, and staring at the picture responded, "You are right; I hadn't thought about it or noticed it." Not one adolescent in her senior class appeared overweight. After enjoying and sharing a few snapshots of her past, we said our goodbyes and I left to pick up my children from school. Arriving at their high school with my friend's yearbook pictures still vivid in my mind, I was shocked to observe that many of the children walking out of school, gathering by the bus stop, walking to their cars or waiting for a ride, were overweight. These adolescents represent the pool of potential recruits comprising the future of our armed forces.

It's not uncommon for adults to hear and even say, "When I was a kid, I could eat anything and not gain a pound." Yet as adults it becomes increasingly difficult to maintain an ideal weight.

It's an alarming fact that the average American adult gains at least 2 pounds per year over his or her lifetime. This means that a hypothetical 18-year-old weighing 150 pounds could weigh 274 pounds by age 80, almost double his or her weight.

While this example is overly simplistic, it does illustrate a disturbing trend about the declining health of our country's pop-

ulation. Perhaps even more concerning, we are not just maturing toward obesity, but obesity is increasing among our children.

The obesity epidemic is a public health concern and is being increasingly publicized in the media and by our military leaders. A recent article published by the Associated Press — "Are U.S. Troops too Fat to Fight?" — illustrates the overweight trends of the active and reserve components as well as the weight issues plaguing new accessions entering military service.

This article claims that 20 percent of all male applicants and 40 percent of female candidates are too heavy to enter the military. So, recruits are being told to lose weight and reapply.

Data from the U.S. Army Research Institute of Environmental Medicine indicates that 58.4 percent of Soldiers, age 21 and older, are overweight by federal standards, and 36.5 percent of Soldiers age 20 and younger do not meet the Body Mass Index standard.

This epidemic will certainly have a negative impact not only on individuals, but on society as a whole. Besides the increased risk for numerous chronic diseases and their socioeconomic impact on the nation, the inability to maintain a fit force could add a "heavy" burden to the military ranks.

On Jan. 1, 2004, then Air Force Chief of Staff Gen. John Jumper implemented the Fit to Fight Program. This program is not just designed to pass an annual physical fitness test, but to change the culture of the Air Force and make fitness part of an Airman's lifestyle. Since implementation, commanders and senior NCOs, who play a key role in enforcing the new fitness standards and embracing this change in culture, have overseen an approximate 80-percent pass rate compared to 69 percent before implementation Air Force-wide.

So you might ask yourself, "What can I do to stop the trend?"

We have to lead our troops to a healthier, fit lifestyle. All of us have to sell exercise and good diet to our Airmen. This will ensure the U.S. military maintains its legacy as the fastest, leanest and most powerful military in the world.

Captain Lobo-Menendez is with the 20th Medical Support Squadron at Shaw Air Force Base, S.C. (AFP/N)

A Pain in the Back

If you have excess weight, weak muscles and/or poor posture, your back will be one of the first places you feel the strain, according to health professionals. Back pain and injuries are common because so many muscles have to contract and relax to allow you to stand and move. Couple that with poor lifting techniques, and you've got a problem! Tendons attach muscles to bones, ligaments hold your vertebrae together, and muscles protect your spine and hold your body in place. If all of these are healthy and strong, you're good to go. So eat right, keep a healthy weight and stay fit!



Combat to the Core

While serving in a combat environment, Airmen and Soldiers also are battling weaknesses in their body's core strength to increase fitness, decrease injuries and deal with stress. Core strength refers to abdominal and back muscles used to support the spine and keep bodies stable and balanced.

With their shoes off, water bottles by their sides and hand towels ready for sweat, deployed service members at the H6 Fitness Center, Balad Air Base, Iraq, feel the burn during an abs class.

"It's important to have a healthy lifestyle because it helps get the mission done," said 1st Lt. Kathryn Romano of the 332nd Expeditionary Communications Squadron.

According to Romano, the abs routine delivers a good core workout that's meant to challenge people.

The abs class is taught three nights per week. Each session lasts between 30-45 minutes. The classes feature four-count flutter kicks, 90-degree crunches, oblique and banana crunches, V-sits and planks, just to name a few.

"In general, strength core exercises such as Pilates and yoga have become very popular over the years because they concentrate on building good posture," Romano said.

"They make you feel better, lengthen your muscles and help alleviate some back problems," she said.

The abs classes consistently attract at least 30 service members each session, Romano said.

Capt. Bill Woods, also an instructor, has lost 46 pounds since arriving at Balad nearly five months ago.

"I gradually incorporated aerobics, abs training and a disciplined diet to my daily routine," he said.

The captain emphasized the importance of fitness in today's military climate.

"With our high ops tempo, there are no ifs, ands or buts about it, you have to stay fit," he said. "Fitness helps with combat and emotional stress."

— Staff Sgt. Carlos Diaz
U.S. Central Command Air Forces

Participating in an intense abs class, Master Sgt. Marlon Carcamo (left) and Senior Airman Jacalyn Albert are regulars at the gym while deployed to Balad Air Base, Iraq. Carcamo is assigned to the 332nd Expeditionary Logistics Squadron. Albert is assigned to the 332nd Expeditionary Maintenance Squadron.



Flame on! From left to right, Army Pvt. David Valadez, Airman Basic Anthony Haddock, and Airman 1st Class Alan Knabe work hard to put out a fuel fire, while receiving instruction from Marine Staff Sgt. George Vargas. The Louis F. Garland Department of Defense Fire Training Academy at Goodfellow AFB, Texas, trains students in proper hose techniques so they can attack a fire swiftly, aggressively, effectively and as safely as possible.



THE
FIRE
WITHIN

Students in 'hot' seat from
day one at Goodfellow's
firefighting school

By Tech. Sgt. **MIKE HAMMOND**
Photos by Tech. Sgt. **MATTHEW HANNEN**

She couldn't have been much more than 5 feet tall and a hundred pounds, dripping wet. And after traveling nearly the length of a football field in the toughest, most agonizing steps she'd ever taken, Airman 1st Class Erin Metzger of the Pennsylvania Air National Guard was just that: dripping wet with sweat.

Just days into Block IV of training at the Louis F. Garland Department of Defense Fire Training Academy at Goodfellow Air Force Base, Texas, the diminutive young woman, who holds the Air Force basic training push-up record for one minute (81), found herself struggling to move another inch. She'd already dragged the dead weight of a 150-pound fire hose some 250 feet, while clad in 40 pounds of protective gear. With about

50 feet to go before reaching the waiting hydrant and with the unrelenting, humid Texas summer heat bearing down on her, her eyes rolled back in utter exhaustion.

She attempted another step forward, lost her balance and fell to the ground.

The only woman in a class of 18 Airmen, Marines and Soldiers, Metzger appeared to have succumbed to her seemingly impossible task.

Then, slowly, her head lifted as a soundtrack of encouragement reached her ears.

"Let's go! Don't stop, Metzger!" "Keep it up!" the shouts began in unison.

If she could finish this training objective in the time required,

Nearing the point of exhaustion, Airman 1st Class Erin Metzger of the Pennsylvania Air National Guard drags the dead weight of 150-pound fire hose in the heat of a Texas summer day. The 300-foot hose drag is one of many physical challenges students have to overcome to graduate from the firefighting school.



she would move on with her classmates to meet the beast they all came here to subdue: fire. But as minutes ticked by and her struggles continued, Metzger's prospects looked grim — and this was only the practice attempt.

She would have to find the fire within her to make it through the test that counted. ...

First Taste of Fire

The physical demands of the Garland Academy quickly weed out the wannabes. That may sound harsh, but that's the way it has to be according to the school's instructors, who contend that every second counts when it comes to saving lives.

According to instructor Tech. Sgt. Luis Ortiz-Acevedo, it



only takes minutes for an out-of-control fire to burn a house down. And when people are denied oxygen from smoke inhalation, brain damage can occur in less than 5 minutes and becomes irreversible after 10.

"There's no time to lose," he said.

For those who have the inner fire to make it, the intense training at the academy prepares students of all military branches in the basic aspects of firefighting safety, techniques and performance.

There are six blocks of instruction in the course, which lasts 68 academic days. The first three blocks are focused primarily in the classroom and on basics like knot tying, first aid and equipment familiarization.

Only in Block IV — 43 training days into the course — do students get to feel the heat of their first fire.

In a large square fenced area just a small hike from the schoolhouse itself, a team of Block IV students finds itself battling an outdoor brush fire.

Using hay and straw for fuel, the instructors set a blaze and watched the teamwork and excitement ignite.

"I actually expected the fire to be a little bigger, but it was still fun. We still got to 'play' in the fire!" said Airman Basic Thomas Moyer. "We didn't think the stuff they taught in class really worked, but it (does)!"

Ortiz-Acevedo knows it works. In his career, he's fought aircraft fires, responded to structural blazes in base housing, and been involved in multiple rescue situations.

Now on his second instructor tour, Ortiz-Acevedo said his experiences in the field strengthened his resolve to teach.

"I just like to teach — especially Block IV, because it's hands-on for the most part," he said. "We cover basically every-

thing in our training: structures, aircraft, vehicles, liquid and rescue. We've been adding more training so the Airmen come out of the school ready to perform their duties and fight fires."

Mark Ledford, a former academy instructor and the current fire chief at Randolph AFB, Texas, can attest to that.

Ledford faced multiple structural fires and even an F-15 crash with live munitions during a 24-year active duty firefighting career. But no call stands out more than the five days he spent fighting a "POL" (petroleum, oil and lubricant) fire on Guam.

On Dec. 8, 2002, Super Typhoon Pongsona slammed the tiny island as a Category 4 storm packing winds gusting to 173 mph. The storm's damage included setting fire to tanks containing more than 8 million gallons of fuel. Ledford and other members of the Anderson Air Base fire department responded to help the Guam fire department battle the huge blaze.

With about 50 feet to go before reaching the waiting hydrant and with the unrelenting, humid Texas summer heat bearing down on her, her eyes rolled back in utter exhaustion. She attempted another step forward, lost her balance and fell to the ground.

“When we got five to seven miles out, we came around a mountain and saw this huge column of smoke,” he said. “When we got there, we pulled up a road to look for water sources. Just then, a lid from a POL tank exploded. We thought we were goners.”

Fortunately, they survived the explosion unscathed. Ledford and his crew knew they couldn’t put the fire out; there was just too much fuel and not enough water. So to protect the adjacent tank containing the rest of the island’s unleaded fuel, they relied on “basic firemanship” they learned at the Garland Academy.

“Since we didn’t have enough water, we took some of the fundamentals these guys learned at the schoolhouse and set up a relay operation,” he explained. “We had a brand new Airman, straight out of tech school, manning the turret, and his job was to put out that fire. He did a heck of a job. When these Airmen come out of the school now, they are mission ready.”

But they don’t become mission ready overnight. Before students at the academy hear the first hiss of water on fire, they have to overcome realistic training obstacles geared to the most physically fit and mentally strong. They must master challenges like the 300-foot pull that pushed Metzger to the brink, plus a confined spaces trainer that sends some trainees into a claustrophobic meltdown.

They have to be fired up before they can put a fire out.

Fire — Inside and Out

The prospect of failure, along with some divine intervention and earthly advice, helped fuel Metzger’s inner fire as she stepped back up for her evaluation attempt on the 300-foot pull. After her disappointing practice attempt resulted in a time far above what was required, Metzger said she prayed and reflected on how to improve.

“I thought to myself, ‘No matter how bad it hurts, as horrible as it feels, I have to do this,’ ” she explained. “Then the instructors and some fellow students gave me some tips — like putting a lot of pressure on the hydrant wrench, using the balls of my feet and leaning forward as far as I could. And when I hit that ‘brick wall,’ I just kept pushing as fast as I could.”

Her persistence — and the support of instructors and classmates — paid off.

“I shaved almost six minutes off my time!” Metzger said. Her new time of 3:27 was well within the required time-frame, and she advanced with her class to the hands-on portion of training: fighting real fires.

She says she knows she’ll make it through the course now, and even has more motivation from which to draw strength.



Are your ears burning? Tech Sgt. Luis Ortiz-Acevedo instructs Staff Sgt.

It Ain't Easy Being a Hero

Objective: Confined space, high angle, auto extrication.

Borrrrrrrrrr!

Don't the instructors at the Louis F. Garland Department of Defense Fire Training Academy at Goodfellow Air Force Base, Texas, realize that I just survived a military working dog attack, not to mention jumping out of an aircraft at 11,000 feet near the Rocky Mountains?

But before I got too cocky, I decided I better find out more about this new challenge.

“What is a confined high, uh, extrication?” I asked with a yawn.

“That’s confined space, high angle, auto



by Tech. Sgt. Mike Hammond

extrication,” said Tech Sgt. Jason Berry, an advanced rescue instructor.

He explained that the challenge is to go through a dark two-story maze wearing a bulky air tank, mask, fire suit, rescue helmet, boots and assorted other protective equipment. The maze is nearly 120 feet

Torch photographer Tech. Sgt. Matt Hannen claws his way out of the confined spaces trainer at the Garland Academy.

long and roughly 3 feet by 3 feet (smaller in some areas), simulating an air conditioning ventilation system. The objective is to bring out a 110-pound dummy at the end of the maze before you run out of air. The instructors give you about 30 minutes of air, but if you breathe too fast it might only last 15 minutes. When your air gets down to about a quarter of a tank, an ear-piercing alarm sounds to warn you.

“Hmmm,” I thought. I grew up in darkrooms processing film, so the dark shouldn’t bother me. I’m skinny and have never shown any signs of claustrophobia, so the small space shouldn’t bother me either. But I didn’t know what to make of that whole “you might run out of air” thing.

I shrugged my shoulders and confidently

"My whole family has been very supportive of me," the Airman said. "My dad has written me every single day since May 1. I can't wait to walk off the plane (as a certified firefighter) to see my parents waiting for me."

Metzger will be easy to pick out. She'll be the one wearing the shiny new firefighter's badge ... and a bright smile to match. ✈



James Kennedy on battling blazes inside buildings.



Dowsing the flames, Marine Pvt. Oscar Bonilla fights a building fire during training.

THIS IS FIRE!

FAST! In less than 30 seconds a small flame can get completely out of control and turn into a major fire. In minutes, a house can be engulfed in flames. Most fires occur in the home when people are asleep. If you wake up to a fire, escape first, and then call for help.

HOT! A fire's heat alone can kill. Room temperatures in a fire can be 100 degrees at floor level and rise to 600 degrees at eye level. So keep low. Inhaling this super hot air will scorch your lungs. This heat can melt clothes to your skin. In five minutes a room can get so hot that everything in it ignites at once. This is called flashover.

DARK! Fire starts bright, but quickly produces black smoke and complete darkness. Plan your escape routes ahead of time.

DEADLY! Smoke and toxic gases kill more people than flames do. The odorless, colorless fumes can lull you into a deep sleep before the flames reach your door. Having a smoke alarm increases your chances of survival.

— U.S. Fire Administration

thought, "Let's do this!" When I donned all my gear, I already felt "confined." That should have been a warning to me, but I plodded on carefree.

Then I entered the elongated coffin they called a ventilation shaft.

"So, this is what claustrophobia feels like," I thought. With the air tank on my back, it made it difficult to negotiate tight areas that were divided by structural pipes. I had to wiggle like a worm to get through all the twists and turns and elevated climbs. I had to fight back panic a couple of times when I felt stuck.

Despite a few intense moments of doubt, I reached the dummy in fairly good spirits. But that was only the first 120 feet. I now had to drag the human-shaped sandbag back through the mock air vent.

My rescue was going well at first, but then I came to an elevated section with stairs. With me pulling and gravity tug-

ging, I labored to drag the dummy up the steps. By the time I got to the top, I was exhausted and breathing as hard as if I'd just finished a cross country race.

The problem was I still had a long way to go before I could log my first "save."

I inched along with my victim in tow. Weary to the bone, I wanted to quit. But vanity drove me. I didn't want to be humiliated by not finishing.

Gasping for air, I heard Berry holler, "Slow your breathing down!"

"So this is what it feels like to hyperventilate," I thought.

Nevertheless, I tried to slow down my breathing and take deeper breaths.

It worked for a short time, but the dummy seemed to be gaining weight. It felt like 400 pounds and wasn't budging.

Finally, Berry entered this coffin of shame to assist me. My arms still burned with every pull. Berry yelled at me and told

me to get moving. Disoriented, I guided us to a dead end.

Suddenly, I envied the dummy and desperately wished it was I who was being pulled out.

I'd hit rock bottom and feared I was going to fail. Then the ear-piercing alarm went off on my tank, signaling that I was close to running out of air. I realized that if I ran out of air, I wouldn't be able to finish the rescue.

Adrenaline kicked in, and either I started moving faster or Berry started pushing harder. It didn't matter to me at this point. I just wanted out of this death trap.

When I finally reached the end, I pulled off my mask and plopped to the floor. I never felt so exhausted in my life. I couldn't move.

Humbled, I had to tip my hat to rescue crews who do this kind of thing for a living. As I discovered, it ain't easy being a hero.

— Tech. Sgt. Matthew Hannen



The
Risk
and the
Rescue

Medical evacuation mission in Afghanistan challenges helicopter crew

By Capt. **MATTHEW MILLER**
Photo by Staff Sgt. **STACY PEARSALL**



During infiltration training at Baghdad International Airport, Iraq, Staff Sgt. Gabriel Ruff uses a hoist to raise a "patient" to safety. Ruff is a pararescueman deployed from Moody AFB, Ga.

Since the beginning of the global war on terrorism, the 347th Rescue Wing at Moody Air Force Base, Ga., has lost three helicopters in Afghanistan and one in Iraq. Seven crew members gave their lives in the process.

All seven deaths took place in Afghanistan, and the biggest killers of that desolate country are the mountains and the weather. In Iraq, helicopter pilots face a greater prospect of being shot at by ground fire.

In Afghanistan, the greatest threat is the terrain.

After swapping stories with other pilots, I felt flying in Afghanistan seemed sort of “graduate” level. Before leaving, many of us compared notes with Afghan vets. It didn’t take long to feel the perils of mountainous flying in Afghanistan. Between Iraq and Afghanistan, most helicopter pilots I’ve spoken to consider Afghanistan the more dangerous place to fly.

Preparing for this, our flight (the 41st

Rescue Squadron’s A-Flight) spent two weeks flying in the mountains of Asheville, N.C. While Asheville’s altitude doesn’t compare to Afghanistan’s, the foggy weather synonymous with the Smoky Mountains provided perfect training.

The lessons we learned were worth their weight in gold by the time we were called upon for a medical evacuation mission Dec. 23.

On this night, our crew consisted of Capt. Craig Burks and me, both HH-60G Pave Hawk pilots; Staff Sgt. Grady Galvin, a flight engineer; and Staff Sgt. Rick Castro, an aerial gunner. Other than Castro, all crew members had significant combat experience flying in Iraq.

Flying in Afghanistan, however, was new to all of us.

My crew sat scattered throughout Kandahar Air Base, Afghanistan, as our handheld radios chirped with the news of a possible medical evacuation mission. We soon learned our mission was to pick up a member of NATO’s International Security Assistance Force approximately 60 miles north of Kandahar.

When word came we were directing a launch, our crew sprinted into action and expected to be off the ground in 30 minutes. As my crew prepared the helicopter for engine start, I reviewed the route, weather and enemy threats, and developed a game plan.

The weather at Kandahar was still “clear and a million,” meaning unrestricted visibility. That gave our crew a false sense of comfort.

About 20 minutes into the flight, Galvin noticed the upcoming mountains looked bigger than those seen during previous trips to the north.

From our experiences in Asheville, our crew began communicating our options. The objective was now only 20 miles away, and the cloud deck peaked at 9,000 feet. We had three options: fly under, fly over or turn around.

Joint-service combat search and rescue training in these HH-60G Pave Hawks from Moody AFB, Ga., simulates rescuing aircrews behind enemy lines. Training such as this came in handy for a 41st Rescue Squadron crew deployed to Afghanistan.



By Staff Sgt. Aaron D. Allmon II



Before a night training mission,

1st Lt. Mike Kingry, an HH-60G Pave Hawk co-pilot assigned to Moody's 41st Rescue Squadron, programs his navigational instruments, as Capt. Jason Rodgers, the HH-60G's aircraft commander, prepares his night vision goggles. The 41st RQS "Jolly Green Giants" routinely fly night missions to maintain proficiency in their primary mission — combat search and rescue.

Flying under meant circumnavigating clouds, canyons, peaks and ridges — not something any of us were comfortable with. Flying over meant we might not find a "sucker hole" large enough to get down and make the pick up. Turning around meant one of our allies was going to die.

Turning around isn't an option many of us like to consider as our first.

We knew running out of gas wasn't an issue, so giving it a shot by flying over the top of the clouds looked like the best option. All of us are family men with children, and we were aware of the risks. As a crew, we chose to take the high road and fly above the clouds, hoping for a clearing. We decided to fly to the point in space where the victim lay below.

If we couldn't get through the thick clouds, we'd have to acknowledge the mission couldn't be performed at an acceptable risk level.

With more than 10 miles to the objective, the weather didn't look good. All of us were beginning to think it was a fool's errand. The best news came when the joint terminal attack controller announced "skies clear," and much to our pleasure, the assessment proved true.

We crested one final ridge poking out of the clouds, and it was clear the cloud blanket ended. We were able to make a rapid descent to successfully retrieve our patient.

Out of Moody's four accidents, not one was from enemy fire. All shared one thing — they were flown by crew members trained in the ability to assess risk using operational risk management and were trained in the use of crew resource

"Flying under (the cloud deck) meant circumnavigating clouds, canyons, peaks and ridges — not something any of us were comfortable with. Flying over meant we might not find a 'sucker hole' large enough to get down and make the pick up. Turning around meant one of our allies was going to die."

management. For us, what could have been an unsuccessful or even fatal rescue attempt turned into a success because we had a team of experienced aviators able to assess a dynamic environment and make the right decisions.

We have lost airplanes and people. I don't pass judgment, but I am determined not to repeat the mistakes of the past.

As the war in Afghanistan continues into its sixth year, the U.S. Army and Air Force have entered into an agreement that allows the Army to use combat search and rescue crews to augment their medical evacuation capability. As the requirements of a medical evacuation essentially mirror those of the combat search and rescue mission, our crews stand ready to fly either mission at a moment's notice.

We will always follow our credo, "These things we do ... that others may live," but we do not venture beyond our capabilities and what we are trained to do. For aviators, it's important to be realistic with your capabilities. If you're uncomfortable, it is your responsibility to speak up. Chances are, someone else is uncomfortable too.

I am happy to say, at least for now, we are all home. After four months deployed to Afghanistan in support of Operation Enduring Freedom, the members of the 41st Rescue Squadron A-Flight fulfilled the final half of an eight-month commitment supporting our combat search and rescue mission. And the use of crew resource management translated into mission success. ✪

Captain Miller is an HH-60G Pave Hawk pilot with the 41st Rescue Squadron at Moody AFB, Ga.

TRAINING CAN BE MURDER

FIGHTER PILOT BALANCED TACTICS, SAFETY, EFFECTIVENESS

By **ELLORY WALLWORK**

"I'd hate to see an epitaph on a fighter pilot's tombstone that says, 'I told you I needed training.' ... How do you train for the most dangerous game in the world by being as safe as possible? When you don't let a guy train because it's dangerous, you're saying, 'Go fight those lions with your bare hands in that arena, because we can't teach you how to use a spear. If we do, you might cut your finger while you're learning.' ... And that's just about the same as murder."

That quote may seem a little extreme, but Lt. Col. Lloyd "Boots" Boothby (April 17, 1931, to Nov. 26, 2006) was referring to the Air Force's urgent need to improve fighter tactics training, balanced

against safety, but not at the expense of effectiveness. Boothby, who passed away Nov. 26, was an experienced combat pilot and an academic instructor in the 57th Fighter Weapons Wing at Nellis Air Force Base, Nev., in the early 1970s. He looked at the Air Force's declining kill ratio from Korea to Vietnam which was 2.4 to 1 in Vietnam compared to 8 to 1 in the Korean War.

He led the effort to fix it.

This involved several key steps, starting with a thorough analysis of the engagements over Vietnam.

Boothby led a series of studies at the Tactical Fighter Weapons Center, which were part of Project Red Baron, examining each of the war's air-to-air battles. While the subsequent reports noted many accomplishments and even more lessons learned, they highlighted several significant trends.

The colonel's team discovered that pilots of multi-role fighters



tended to have such a diverse range of missions that they seldom had a chance to master air combat tactics. They also noted pilots who were shot down rarely saw the enemy aircraft or even knew they were being engaged.

Additionally, few U.S. pilots, before flying into combat, had any experience against the equipment, tactics or capabilities of the enemy's smaller, highly maneuverable fighters.

In short, the Red Baron Reports called for "realistic training (that) can only be gained through the study of, and actual engagements with, possessed enemy aircraft or realistic substitutes."

Based on this report and Boothby's persuasiveness to get himself and Capt. Roger Wells access to an intelligence organization's restricted collection of Soviet equipment, training manuals and technical data, they developed the dissimilar air combat training, or DACT, program to meet the Tactical Air Command's initiative of "Readiness through Realism."

Under the DACT program, Air Force officials had some T-38s painted with Soviet-style paint schemes and flew them based on adopted Soviet tactics. Because of his combat experience, academic instructor background, and involvement in Project Red Baron and in developing the DACT program, Boothby served as the first aggressor squadron's commander when the 64th Fighter Weapons Squadron activated Oct. 15, 1972.

As an instructor, Boothby proved himself an effective teacher

who relished the attention of his captive audience. Ever-animated and quick with a joke or "fighter" story to make a point, he told the pilots he was instructing what they needed to know to succeed. These qualities ensured his students remained spellbound and eager. One former student recalled one of the colonel's more popular attention steps:

In typical fighter pilot stance, using his hands to represent a dogfight, he would spray lighter fluid from his mouth across his right hand (palming a lighter at the time) and literally flame the left hand and wristwatch bogie. He generally walked away with a few singed hairs on his hand, but his students received a magnificent visual demonstration of the seriousness of air combat.

Such object lessons ensured this charismatic instructor's students learned and retained the knowledge they might need to save their lives one day.

Upon learning of Boothby's recent death, Air Force Chief of Staff Gen. T. Michael Moseley noted:

"He ... had an impact on how we do business and how we think about this air combat work. ... Boots Boothby left a true legacy. I know one Texas public school-educated, land grant college graduate, F-15 weapons officer, Fighter Weapons Instructor Course instructor and ex-57th Wing commander who has certainly benefited from folks like this."

Mr. Wallwork is with the Air Force History Office in Washington D.C. (AFPN)



Historical photo courtesy of the Nellis AFB, Nev., History Office



FINDINGS IN THE PROJECT RED BARON REPORT

- ✧ Aircrews of multi-role fighters tended to have such a diverse range of missions that they seldom had a chance to master air combat tactics.
- ✧ Those who were shot down rarely saw the enemy aircraft or even knew they were being engaged.
- ✧ Few, before flying into combat, had any experience against the equipment, tactics or capabilities of the enemy's smaller, highly maneuverable fighters.

RECOMMENDATION: Employ realistic training that "can only be gained through the study of, and actual engagements with, possessed enemy aircraft or realistic substitutes."

Under the dissimilar air combat training program in the early 1970s, Air Force officials had some T-38s painted with Soviet-style paint schemes and flew them based on adopted Soviet tactics. That kind of realistic training helped pave the way for today's U.S. fighter pilots to dominate the skies.

STUDENT PILOTS SOAR TO 35,000 FEET WITHOUT EVER LEAVING GROUND



by Staff Sgt. Austin M. May

Students in Specialized Undergraduate Pilot Training class 08-12 learn what it's like to breathe oxygen for an extended period of time in the altitude chamber at the Laughlin AFB, Texas, aerospace physiology flight.

LAUGHLIN AIR FORCE BASE, Texas (AETCNS) — The pressurized cockpits of Laughlin's three training aircraft keep student and instructor pilots comfortable while flying at altitudes several thousand feet in the air.

In the unlikely event that something goes wrong and the aircraft loses pressure, the pilots must be able to recognize the effects and know how to safely put the aircraft back on the ground.

At the 47th Aeromedical Dental Squadron's Aerospace Physiology training flight, a massive altitude chamber allows students to take a simulated flight to 35,000 feet without ever leaving the ground.

While in the chamber, students learn to recognize the signs of hypoxia, a condition that occurs when not enough oxygen is delivered to the brain, said 1st Lt. Sharon Beuscher, Human Performance Training Team element chief.

The symptoms of hypoxia vary from person to person, so it is vital to flight safety that students be able to recognize their own symptoms in a safe environment where trained experts can monitor students and no lives are at stake, the lieutenant said.

— Staff Sgt. Austin M. May
47th Flying Training Wing Public Affairs

PILOT'S 'INADVERTENT ACTUATION OF THE FRONT COCKPIT FLAP LEVER'

RANDOLPH AIR FORCE BASE, Texas — The Air Force has completed its investigation of the Feb. 22 T-38C accident near Hondo, Texas, which resulted in the loss of the aircraft.

The accident investigation board determined the cause of this mishap was the mission pilot's inadvertent actuation of the front cockpit flap lever resulting in the full extension of the flaps at 390 knots. This resulted in the aircraft initially pitching nose up and then nose down.

The T-38C Talon from the 12th Flying Training Wing at Randolph was traveling at a speed appropriate for the mission, but well above the design speed for flap extension. The left flap rod broke causing the left flap to raise to a streamline position with the right flap remaining extended. This resulted in an uncommanded left roll, which led to an unrecoverable condition and a proper decision by the pilot to eject.

The aircraft was the flight lead of a formation of two T-38s flying an offensive basic fighter maneuver — or OBFM — training mission. The mission profile included gravity awareness turns, tactical formation maneuvering, an OBFM demonstration for the student, and a practice OBFM engagement for the student to fly.

They had just completed the OBFM engagement when the mishap occurred.

After ejecting from the airplane and reaching the ground, the

CAUSES T-38C CRASH

pilot was recovered by a San Antonio Air Life helicopter and transported to Wilford Hall Medical Center at Lackland Air Force Base, Texas, where he was treated and released.

The aircraft, valued at \$6.7 million, was a total loss. Property damage was limited to ground depression, damaged trees, and fuel and hydraulic contamination.



file photo

The wreckage site near Hondo, Texas, left little doubt that the \$6.7 million T-38C was a total loss.

AIRCREW'S 'FAILURE TO TAKE ACTION' LEADS TO C-21 MISHAP

SCOTT AIR FORCE BASE, Ill. (AMCNS) — Air Mobility Command released the results of its investigation into the Oct. 2, 2006, C-21A aircraft accident at Decatur Airport, Ill. The aircraft was assigned to the Air Force Flight Standards Agency in Oklahoma City.

The accident investigation board, convened by AMC, determined that the primary cause of the mishap was the aircrew's failure to take appropriate action. The aircrew consisted of a pilot and an instructor pilot.

Prior to the accident, the mishap pilot was undergoing aircraft commander upgrade training, flying a simulated single-engine approach to the runway (simulating the loss of the #2 engine). During the landing, the aircraft became unstable after the mishap pilot reduced power to the #1 engine.

The mishap pilot recognized the

problem and attempted to go-around, but failed to use both engines as directed in Air Force Instruction 11-2C-21, Volume 3, AFFSA supplement. The aircraft rolled to the right and the aircrew was unable to recover; the right wingtip tank made contact with the runway and the aircraft slid across the grassy infield.

The board determined that the mishap pilot got into a slow-speed situation in the C-21 with which he was unfamiliar, and he was unable to take the correct actions. Also, while the mishap instructor pilot recognized the mishap pilot's mistake, he also failed to take the appropriate action to correct the situation. According to the investigation report, while the mishap instructor pilot recognized the airspeed

deviation, he did not assume control of the aircraft nor ensure both engines were used as directed in AFI 11-2C-21, Volume 3, AFFSA supplement.



An accident investigation board determined that the mishap pilot got into a slow-speed situation in the C-21 with which he was unfamiliar, and he was unable to take the correct actions.

IMPROPER PLACEMENT OF AIRCRAFT RESPONSIBLE FOR C-32 ACCIDENT



SCOTT AIR FORCE BASE, Ill. (AMCNS) — Air Mobility Command officials here released the results of its investigation into the June 1, 2006, mishap involving an engine test on a C-32 aircraft at Andrews AFB, Md., during which asphalt from the shoulder pavement disintegrated and impacted the aircraft.

The accident investigation board, convened by Air Mobility Command, concluded the primary cause of the mishap was the improper placement of the aircraft, with the tail of the aircraft over the asphalt.

The mishap occurred as the engine run team was slowing the engines down following a test, at which time a nearly 8-foot-by-

13-foot patch of shoulder asphalt separated from the ground, broke apart, and portions of the asphalt impacted the aircraft.

The board determined a substantial contributing factor to the accident was the lack of knowledge on the part of the engine run team of the potential risks associated with high power jet engine thrust on airfield asphalt edge pavements. These risks are caused by the Bernoulli uplift force which comes into play when the airspeed over the pavement is high enough to overcome the weight, friction and adhesive properties of the asphalt.

No one was injured in the accident, although damage to the tail section of the aircraft was significant.

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