“In flying I have learned that carelessness and overconfidence are usually far more dangerous than deliberately accepted risks.”

— Wilbur Wright

In a letter to his father written in 1900
8 | Orphaned
---
Two years ago, a drunk driver ran down a couple from Lackland Air Force Base, Texas. He killed the two technical sergeants and orphaned their 4-year-old son. The surviving family members talk about the heart-breaking ordeal.

16 | 100 Marathons
---
... and counting
Suffering from severe asthma as a child, doctors thought Amanda Preble would have trouble walking around the block. But this future Air Force lieutenant colonel proved them wrong. She has run 100 marathons, including all 14 Air Force Marathons.

19 | Thinking about Running a Marathon?
---
Check out these dozen tips from a running coach who has logged 100 marathons.

20 | It Ain’t Over ‘Til It’s Over
---
On his fini-flight in the T-1A Jayhawk, a pilot from Randolph Air Force Base, Texas, gets an uninvited guest… a turkey vulture.

TORCH TALK 2
Readers discuss getting lost in the wilderness, mountain climbing and extreme sports, people from Torch’s past who experienced happy and sad endings, driving drunk, and more.

AROUND THE COMMAND 4
Don’t Get April Fooled: Beware of the year’s deadliest season for motorcycles… Tracking a Killer: Check out which months are the worst for Air Force motorcyclist fatalities the past 10 years… Airman helps six high school teenagers injured in car crash… Firefighters hone rescue skills.

TALES OF THE STRANGE 6
Train Cuts Car in Half: Driver survives with barely a scratch… Pork Rind Calamity: Man wrecks big rig while choking on spicy snack.

THE ALERT CONSUMER 7
New Camouflage: Uniforms for deployed members better, safer.

HANGAR FLYING 22
Glider program gives cadets wings.

CLEAR THE RUNWAY 24
Solve It: Students learn mishap investigation techniques… Ain’t Got No Gas: Improper fuel planning leads to aircraft crash.
SPRING FORWARD ... CAUTIOUSLY

Springtime brings with it many changes; we change our clocks, the weather starts to change, and many of us increase our outdoor activities. But while springing forward with our clocks to daylight-saving time is sudden and instantaneous, we should perhaps proceed a little more cautiously when it comes to increasing our outdoor activities.

We all want to take advantage of warmer spring days as many of us have gone the way of the grizzly bear the past few months — hanging out in our warm, cozy "caves" until the weather gets more cooperative. So we’re anxious to move out of hibernation mode, whether it be some outdoor recreation and exercise, or pulling motorcycles out of the garage and hitting the streets.

But if you’ve been dormant during the colder days, it may take a little time to get back into your battle rhythm. Springing out the front door without a warm-up and running five miles on your first day back could leave you in the hurt locker. Instead, do a good warm-up, stretch, and give your body a chance to adjust to the new routine. Or if you are taking your motorcycle out for the first time since fall, you might want to consider the likelihood that your driving skills may be a little rusty. Again, take it slow, stay focused, and let your reaction time catch up with your eagerness to experience the open road.

Believe it or not, we go through this same thought process in the flying community. Spring can bring some extreme weather conditions — thunderstorms, rain, high winds — and we have to plan for these hazards. We pay extra attention to weather briefs and adjust our flying plans accordingly to decrease risk. These same precautions are also taken into account in our ground-based training throughout the command.

If we channel that same level of planning and purpose and apply it to our daily lives, we’ll be better off. Unfortunately, all too often, this doesn’t happen. That’s why you see motorcycle and sports and recreation mishaps spike in the spring. That’s why you hear about people getting caught in flash floods, another springtime hazard.

Perhaps in addition to waking from our long winter “sleep,” the “spring break” or “spring fling” attitude also comes into play. For some this means complacency or letting your guard down. Unfortunately, to others, this translates to adding alcohol to their activities and spiking the risk of mishaps — and heartache — increases exponentially.

This issue of Torch features an Air Force couple from Lackland Air Force Base, Texas, who were at a springtime motorcycle rally when they were run down by a drunk driver. In one careless moment, their 4-year-old son was orphaned. We also have stories on motorcycle safety and how to train for a marathon while limiting your chances for injury.

We want to help you get your spring off to a good start ... because we want you to be here with us — healthy and happy — when spring ends.
‘I GUESS IT’S A GUY THING’

I started reading the article “Miracle on the Mountain” (January/February 2011 issue, cover story), and couldn’t put it down. Mike and Matthew Couillard went through an icy hell. The part about Mike not wanting to admit he was lost rang true with me. I guess it’s a guy thing — always too proud to ever cop to the humiliation of being lost. Maybe that’s where they got the phrase “dying of embarrassment.” Anyway, after that initial mistake, I like how their will to survive kicked in … although, I still can’t imagine leaving my kid behind, alone and unprotected. But then again, I’ve never been in a situation like that. It makes you think how you might handle it.

Harold Tabor
Via e-mail

NO WIMPS ALLOWED

Cool story! (“Seven Summits,” January/February 2011 issue, page 16). I’m glad to see that the Air Force isn’t trying to turn Airmen into a bunch of wimps by discouraging extreme sports. Articles like these show how you just want to ensure people plan ahead and think about the risks of whatever they are doing. You’re still not the Army, but, hey, nobody’s perfect!

Former Army Capt. J.R. St John
Via e-mail

WHERE ARE THEY NOW? …

… A HAPPY ENDING

I was going through my old papers and came across the Torch magazine with an article about Christy Niit, my daughter (“Shooter Built from Scratch,” March 2002, page 12). Christy’s last name is now Gardner as she married another Airman when she was stationed at Seymour Johnson Air Force Base in Goldsboro, N.C., for two years. She and her husband then spent four years stationed at Aviano Air Base, Italy, where my grandson was born.

She spent a total of six years on active duty, which included a deployment to Qatar and another one to Balad, Iraq.

Christy separated from the active-duty Air Force in 2007 and joined the Air National Guard at Berry Field in Nashville, Tenn. She is a staff sergeant working in the 118th Logistics Readiness Squadron Individual Equipment Element, and her husband, Daniel, is a staff sergeant in the 118th Maintenance Squadron Fuels Cell Shop. They have two children — 6-year-old Aiden and 11-month-old Audrey.

I am so proud of the decisions Christy has made with her life. Just thought you might want to know what happens to those who you write about in your magazine.

Ellen Niit
Reseda, Calif.

… A SAD ENDING

I served in the Air Force from January 2000 to October 2007. My basic military training flight was featured in the May 2000 issue of Torch (“Awakening the Warrior,” page 2) on the obstacle course at Lackland Air Force Base, Texas. Sadly, I just found out that one of my fellow Airmen from that flight, Paul Maidman, was killed last year in Las Vegas by a drunk driver. Paul was still in the service, stationed at Nellis AFB, Nev. I am going to send a copy of that magazine to Paul’s family. I am sure his parents will appreciate having the extra memorabilia from their son’s career.

Christopher Stone
Selma, Texas
Reference the article “Don’t Drown Your Career” (May/June 2010 issue of Torch, page 4) about the Airman who crashed while drunk driving and more recently “Charged with DUI” (January/February 2011 issue, page 5): Recently, I have had an opportunity to speak about driving under the influence and alcohol mishap prevention at three different units in the 17th Training Wing at Goodfellow Air Force Base, Texas. In addition, I have been providing new student briefs for quite a while, not only as the chief of safety, but also as a previous training squadron commander.

I have yet to have a class, regardless of size, which did not have someone impacted by DUI. Of course, you all know or have heard the message about DUI and how it can end your career or impact the lives of others. I can give you specific facts and figures regarding DUI, but until you have heard someone’s voice crack as they tell you the story of how it impacted their lives you might not get it.

In 2005, my unit had three DUIs within one month. Obviously, this is not something I was particularly proud of, to say the least. I had to come up with an idea that would make a significant impact. My wife actually had the perfect solution, and I pursued it. I contacted three people who had been affected by drunk drivers, and they jumped at the opportunity to give their testimonies.

Two ladies briefed in tandem about their DUI experience. They had been on their way from Wichita Falls to Dallas for a dog show. On their way to the show, they were hit head-on by a drunk driver. The driver had gotten into an argument with his wife earlier in the day, drank a six pack of beer at his deer stand, and proceeded to drive the wrong direction on the highway.

Together, the women had more than $1 million in surgery costs to repair their legs from the impact. One of them suffered a permanent disability. You could feel the anger in her voice as she discussed how she could no longer ride horses — a true passion gone forever because of a single irresponsible act of a complete stranger.

Following the tragic story from the two ladies, a gentleman with only one arm made his way to the podium. He talked of the day he was riding his bicycle in Wichita Falls and a drunk driver hit him head-on. The impact threw him over his handlebars into his own front yard. He remained in the hospital for the next six months of his life.

He told us about his right leg and how it now was mostly made of metal from all the reconstruction. He told us about how his dominant right arm had to be amputated.

Although the medical injuries were incredible, the next part of his story will forever be etched in my mind. His eyes filled with tears as he spoke about the effect the event had on his little girl. When the incident occurred, she saw him hurt and lying in the front yard — an image no child should have to live with. He said when he returned home from the hospital while still going through rehabilitation, his young daughter would not leave his side. In fact, she brought her bed into his room so she could be next to him day and night. She was afraid he would leave and never come home again. Finally, he mentioned how he would never again be able to fully wrap both of his arms around her to comfort her.

At Commander’s Calls focused on alcohol and DUI mishap prevention, our wing safety team asked for military volunteers to come forward and give their testimonies. There is one specific Commander’s Call held for the Navy detachment which will always be part of my memory. One of the Sailors departed the brief with tears in her eyes. Near the end of our presentation, she came back into the room and found the courage, for the first-time ever, to publicly tell her story about her older sister being killed by a drunk driver. You could have heard a pin drop as her words made an emotional impact on every single person in the room.

Personally, I know I never want to be the cause of such pain in anyone’s life. The decisions you make can change not only your life, but the lives of those you never even knew. As wingmen, we all have a duty to prevent mishaps through our experiences and training. If you have a story to tell, please do so.

Let your voice be heard. … It just might stop a mishap before it begins.

Sam Spooner
Goodfellow Air Force Base, Texas

Thank you for sharing your experiences. In this issue, beginning on page 8, we have a story of a 6-year-old boy who was orphaned two years ago when a drunk driver killed his mom and dad. Both were technical sergeants stationed at Lackland Air Force Base, Texas.
April showers might bring Texas Bluebonnets in May, but April also marks the deadliest month of the year for Air Force motorcycle riders.

In the past decade, the Air Force has lost 169 Airmen to motorcycle mishaps. Twenty-six of those fatalities happened in April — by far the most of any other month of the year.

Along with bluer skies and warmer weather, springtime brings motorcycles out from their winter “hideouts.” With more motorcyclists suddenly hitting the streets, mishaps have historically risen.

Unfortunately, Air Education and Training Command has not been immune to this phenomenon. We have lost 33 Airmen to motorcycle mishaps in the last decade, and 45 percent of those happened in the springtime. In fiscal 2009, an eye-opening 77 percent of the Air Force’s springtime private motor vehicle mishap fatalities involved motorcycles.

During spring, people are anxious to pull their motorcycles out of the garage as the weather improves. Many have let their skills atrophy over the winter. Throw in excessive speed — the leading cause of most motorcycle mishaps no matter the time of year — and you have a deadly combination.

Then, you also have to factor in people driving four-wheeled vehicles haven’t had to contend with motorcyclists near as much during the winter. So a driver’s situational awareness isn’t as sharp when it comes to the harder-to-spot two-wheeled vehicles that are making their abrupt return to the road.

A combination of all these hazards cost a 26-year-old staff sergeant his life just last spring in Abilene, Texas. On April 14, he was seen weaving in and out of traffic and through traffic lights on his Yamaha R6 at a high rate of speed when a Dodge Ram 2500 pulled out in front of him. Investigators estimated the Airman was traveling at more than 85 mph and skidded some 100 feet before hitting the truck at nearly 50 mph. The driver of the truck hadn’t seen the motorcyclist because the sergeant was in a blind spot next to a sport utility vehicle. But investigators said if the sergeant had been traveling the speed limit, he would have easily been able to stop without impacting the truck.

Statistics show that Airmen in their mid-20s who ride sport bikes are the most likely to speed, violate traffic laws and possibly put themselves and others at risk for a fatal mishap.

But while history shows that younger riders will be involved in the most accidents, among the 5,091 record-number of motorcyclists killed nationwide in 2008, half were 40 years or older. No one is exempt. So as we head into the April motorcycle boom, let’s slow down and take into account that we may have to knock off a little rust as we hit the streets.

Last year in AETC was the first year we did not experience a single motorcycle fatality. Let’s keep this positive trend going and ride safe!

Colonel Rice is the director of safety for Air Education and Training Command, Randolph Air Force Base, Texas.

<table>
<thead>
<tr>
<th>MONTH</th>
<th>FATALITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>1</td>
</tr>
<tr>
<td>February</td>
<td>8</td>
</tr>
<tr>
<td>March</td>
<td>10</td>
</tr>
<tr>
<td>April</td>
<td>26</td>
</tr>
<tr>
<td>May</td>
<td>18</td>
</tr>
<tr>
<td>June</td>
<td>18</td>
</tr>
<tr>
<td>July</td>
<td>17</td>
</tr>
<tr>
<td>August</td>
<td>19</td>
</tr>
<tr>
<td>September</td>
<td>15</td>
</tr>
<tr>
<td>October</td>
<td>11</td>
</tr>
<tr>
<td>November</td>
<td>15</td>
</tr>
<tr>
<td>December</td>
<td>9</td>
</tr>
<tr>
<td>Ten-year total</td>
<td>169</td>
</tr>
</tbody>
</table>

Air Force Safety Center
FIREFIGHTERS HONE RESCUE SKILLS


According to Steven Kinkade, 56th Civil Engineer Squadron assistant training chief, Luke is the best place to host any kind of fire training because its firefighters have access to one of the best emergency response training facilities in the world.

Kinkade said the three-week combination of hands-on and classroom training teaches Airmen how to rescue victims in confined spaces. They also learn to perfect their knot and harness skills.

Once a firefighter goes through technical rescue training and receives certification, they can be part of a rescue crew.

“We were evaluated on basket raises and lowers from high-angle situations and rappelling off high point,” said Staff Sgt. Michael Alvarado, 56th CES firefighter. “In a real-world situation, we would use this skill to rescue a victim who is trapped in an area hard to get to, such as a mountain side, ravine or canyon.”

— Airman 1st Class Melanie Holochwost  
56th Fighter Wing Public Affairs

During a training evaluation of a self rescue, Mark Finchum unloads the brake bar rack.

SURVIVAL, EVASION, RESISTANCE AND ESCAPE INSTRUCTOR

Senior Airman Zachary Yoakam was awarded the Air Force Achievement Medal for assisting six teenagers who were injured during a major vehicle accident outside of Fairchild Air Force Base, Wash., Dec. 6.

Ellsworth Air Force Base, S.D. (ACCNS) — Senior Airman Zachary Yoakam came across a car accident and helped save the lives of six teenagers Dec. 6 while on temporary duty to Fairchild Air Force Base, Wash.

Yoakam, a 28th Operations Support Squadron survival, evasion, resistance and escape instructor at Ellsworth, was attending SERE upgrade medical training at Fairchild when he saw the crash scene. The victims, ranging in age from 15 to 18, were on their way back home from a movie when they slid on some black ice and then smashed into a telephone pole.

“The accident happened the first night I got into town,” Yoakam said. “I was driving back to billeting at about 10 p.m., after a good friend and I had dinner. I saw a car by the side of the road. The telephone pole was hanging by its wires.”

The Airman said when he passed by the accident, he thought, at the very least, he could offer the people he saw standing outside a warm place in his car while they waited for the authorities.

But as he arrived on scene, he realized he would need to do more than provide a cozy shelter. Six teenagers were injured, and three were still trapped inside the wrecked vehicle.

“I immediately sized it up and set up a triage,” Yoakam said. “I directed a middle-aged woman who had also stopped to help to call 911 and asked her if she had any blankets in her car. When she told me she did, I took the blankets and used them to help treat the injured passengers for shock.”

Yoakam described the weather that Friday night as being cold and windy with freezing rain and temperatures in the 20s. As he wrapped the victims in the blankets, he checked them over for signs of further injuries.

— Airman 1st Class Alessandra N. Hurley  
28th Bomb Wing Public Affairs

Survival, evasion, resistance and escape instructor Senior Airman Zachary Yoakam was awarded the Air Force Achievement Medal for assisting six teenagers who were injured during a major vehicle accident outside of Fairchild Air Force Base, Wash., Dec. 6.

Once he had the three teens outside the vehicle sheltered and stabilized, he tended to those still trapped in the wreckage.

The car’s frame was bent and half-buried in snow, he said. One of the passengers inside had a large cut on her face and was at risk for serious back injury, he added.

“I instructed the driver and two passengers inside the car to stay put, and told one of them to help keep the girl’s head still by placing his hands on either side of her face to provide stability for her back,” Yoakam said.

“I’m proud of Airman Yoakam,” said 28th Operations Group first sergeant Master Sgt. Marty Joyce, who saw Yoakam receive an Air Force Achievement Medal Feb. 15 for his heroic actions at the mishap scene. “If he hadn’t acted upon the life-saving strategies he learned from his training, the injured teens could have been a lot worse off.”

— Airman 1st Class Alessandra N. Hurley  
28th Bomb Wing Public Affairs

Ten-year total 169

— Air Force Safety Center
LAPEER COUNTY, Mich. — A Michigan man walked away with only a couple of scratches and a bruise after a train plowed into his car, ripping it in half, at a railroad crossing here in June.

The Lapeer County Sheriff’s Office said witnesses recounted seeing 26-year-old Adam Brimmer of Flint, Mich., drive around a lowered railroad crossing gate with signals flashing only to be struck by an Amtrak passenger train headed for Chicago, the Detroit Free Press reported.

The train, traveling at an estimated 60-65 mph, sheered Brimmer’s 2004 Pontiac Grand Prix in two, the newspaper said. Remarkably, Brimmer suffered only minor scratches on his right elbow and left knee, as well as a small bruise on his hip; none of which required medical attention.

“It’s amazing that he survived,” said Sgt. Craig Miller of the sheriff’s office.

Brimmer disputes the eyewitness accounts.

He told WNEM News in Saginaw, Mich., that he was lighting a cigarette 50 feet before reaching the tracks but that no warning lights had come on at that time. Instead, he said the flashing red signal activated at the last instant, and then “boom!”

“I looked to my right, and the train is literally grazing the passenger seat,” Brimmer told WNEM.

The back half of Brimmer’s vehicle ended up some 50 feet down the tracks, eerily with his 3-year-old son’s empty car seat still in the crushed back seat. Thankfully, his son, who he said happens to love “choo-choo trains,” was safely at home. Additionally, a wheel from Brimmer’s car flew through the window of a nearby tax preparation firm’s building, Miller said.

The sergeant added that Brimmer was given three citations. Amtrak is investigating the incident.

BLAINE, Wash. — In another bizarre case of distracted driving, a Washington State Patrol trooper says the driver of a FedEx tractor-trailer rig lost control of his truck on Interstate 5 after choking on some spicy pork rinds. The rig then jackknifed and came to a stop in a muddy ditch.

Trooper Keith Leary says 42-year-old Edward Sutherland of Mount Vernon suffered minor injuries in the July mishap. Leary says the man was driving his rig southbound from Blaine, when he began choking and veered from the southbound lanes across the median into northbound lanes.

The truck did not hit any other vehicles.
WASHINGTON (AFNS) — Airmen deploying to Afghanistan in 2011 will wear a new uniform that will meet evolving camouflage and fire-retardant demands in theater, Air Force officials said.

While Airmen have been faced with a slew of uniform changes in recent years, this new uniform is not a matter of image or heritage but instead has resulted from a joint initiative that ensures all outside-the-wire deployers in Afghanistan, regardless of branch of service, have the best ground combat uniform to enhance combat effectiveness.

According to Lt. Col. Shawna McGowan, the Air Force future programs branch chief, Air Force leaders collaborated with Army experts to develop a solution to meet evolving camouflage and fire-resistant demands in theater. The result was the safer, more effective uniform being issued to them as part of their deployment gear beginning in March.

The new uniform, called the Operation Enduring Freedom Camouflage Pattern, or OCP, is the same uniform recently fielded in Afghanistan to U.S. Soldiers, the programs branch chief said.

“At first, Airmen receiving the (Airman Battle System-Ground, or ABS-G) uniforms with mission responsibilities outside the wire in Afghanistan will have priority for the OCP,” McGowan said.

But the plan is for the OCP uniform to eventually become the only ground-combat uniform worn by Airmen in Afghanistan both inside and outside the wire, she said. This also will minimize the number of bags Airmen will carry into and out of the theater.

“The OCP uniform is scientifically developed to blend in with Afghanistan’s terrain, which will make our Airmen safer and more effective on the battlefield,” she said. “The new material is also flame resistant and lighter weight than either the ABS-G or the (Airman Battle Uniforms, or ABUs).”

The material also contains a bug repellant to protect our deployed Airmen, she added.

McGowan added that not only is this uniform better than its predecessors, but working jointly with the Army to use a tested uniform is the fiscally responsible thing to do.

“It’s not only a joint use of the best ground combat uniform available,” she said, “it saves fiscal resources and also aligns with the National Defense Authorization Act language that encourages collaborative efforts between the services.”

Since the OCP is replacing the other uniforms, there also will be a savings that will come from not needing to store and supply both the ABS-G and ABUs, the colonel said.

This won’t be the first time Airmen have worn this camouflage pattern in Afghanistan though.

“Some Air Force personnel who are assigned to Army units were already issued the OCPs in the Army fielding initiative that began in August,” said McGowan, who restated that these uniforms will be issued to individuals, and they won’t be covered out-of-pocket by Airmen.

Individual units won’t even be authorized to purchase these uniforms for the foreseeable future, the colonel said.

“The only authorized OCP uniforms are those purchased and issued by Air Force Central Command,” McGowan said. “While some units are interested in procuring the OCP for training, future deployments and such, they won’t be authorized to do so because those orders would take away from supplies that are prioritized for the most at-risk deployers.”

The colonel also discouraged individuals from purchasing their own uniforms as that could result in them receiving non-tested, non-compliant uniforms that ultimately could put lives at risk. With any new uniform, “knock-offs” are readily available, and Airmen need to use sound judgment and not spend personal funds on potentially non-compliant OCP assets, she said.

“Essentially, any unauthorized purchase of the OCP uniforms could result in putting Airmen at risk either on the front lines or at home,” McGowan said.

She added that switching to the OCP and having AFCENT as the sole issue point for these uniforms will meet the ultimate goal of ensuring that Airmen are equipped with the best, most advanced uniform available today.

— Tech. Sgt. Jess Harvey
Secretary of the Air Force Public Affairs
“It’s Mommy’s birthday!” exclaims 6-year-old Nathaniel Britt, unable to contain his excitement.

With a hop and a skip, he follows his grandparents, who are carrying a cake and 12 yellow balloons, out the back door of the house.

When they get on the patio, his voice booms a hearty rendition of “Happy Birthday to You.” Then he takes a balloon into his miniature fist and lets it go, watching it slowly drift up into an overcast sky.

“I know God’s gonna grab that balloon and give it to Mommy,” Nathaniel says wistfully. “I just know it.”
A

Claiming they were soul mates, Tech. Sgts. Maurice and Audra Britt had their lives and their love affair cut short when a drunk driver plowed into them and orphaned their son.

On his mom’s birthday Nov. 11, Nathaniel and his uncle (Staff Sgt. Aron Lee) get ready to send one of the 12 yellow balloons they release every year to heaven. Lee says his nephew enjoys this celebration, which makes him feel closer to his mom.

“I raised three kids and was a first sergeant for nearly 10 years in the Air Force. You learn that good news doesn’t come at 4 a.m.”

his dad as indestructible, capable of hurling his cackling little boy in the air like a football and catching him in mighty hands that Nathaniel always knew would be there to pick him up when he was down. “My daddy is the strongest man in the world!” Nathaniel would often boast proudly.

Then Nathaniel lost a miracle worker … a woman capable of curing his every ailment with a magical kiss and tender hug. Skinned knees? No problem. His mom could transform his tears into giggles long before the blood dried. A nightmare? Her warm embrace would vanquish any monster his mind could dream up. “My mom is soooooo beautiful,” he’d say adoringly.

In other words, Nathaniel lost his world.

Fortunately for him, his new reality includes living with loving grandparents, Audra’s mom and dad, in San Antonio. Also close by are an uncle, three aunts and a cousin, who at 5 years old serves as a great playmate and distraction from his woes.

GP (Grandpa)

When the phone rang just after 4 on a Sunday morning, 57-year-old Ronald Lee instinctively knew something was wrong. “I raised three kids and was a first sergeant for nearly 10 years in the Air Force,” said Ronald, who retired as a master

feelings of guilt. It’s just a cold reality in a busy world that sees an average of nearly 150,000 people die each day, or roughly 100 per minute. Who could possibly mourn all of them? Three people killed on the back of a motorcycle quickly turn into just another tragic statistic.

But Nathaniel lost more than numbers that day.

First he lost Superman. Like most 4-year-olds, he still saw his dad as indestructible, capable of hurling his cackling little boy in the air like a football and catching him in mighty hands that Nathaniel always knew would be there to pick him up when he was down. “My daddy is the strongest man in the world!” Nathaniel would often boast proudly.

Then Nathaniel lost a miracle worker … a woman capable of curing his every ailment with a magical kiss and tender hug. Skinned knees? No problem. His mom could transform his tears into giggles long before the blood dried. A nightmare? Her warm embrace would vanquish any monster his mind could dream up. “My mom is soooooo beautiful,” he’d say adoringly.

In other words, Nathaniel lost his world.

Fortunately for him, his new reality includes living with loving grandparents, Audra’s mom and dad, in San Antonio. Also close by are an uncle, three aunts and a cousin, who at 5 years old serves as a great playmate and distraction from his woes.

When the phone rang just after 4 on a Sunday morning, 57-year-old Ronald Lee instinctively knew something was wrong. “I raised three kids and was a first sergeant for nearly 10 years in the Air Force,” said Ronald, who retired as a master...
With his heart racing, he picked up the phone.

“Are you Ronald Lee?” a woman on the other end asked.

“Yes,” he responded warily.

“Are you Audra Britt’s father?” she continued.

“Yes,” he said.

“Is the baby with y ... ?”

Ronald cut her off. “What’s going on?” he asked.

She explained that Audra had been in a serious accident and gone through surgery to remove her spleen and a kidney.

“We’re on our way,” Ronald said. “What about Maurice?”

“I’m sorry; I’m not at liberty to say,” she replied.

“But I’m his father-in-law,” Ronald protested.

“I’m sorry,” she said again.

By not telling him about Maurice, the woman had actually revealed everything, Ronald said. He called Maurice’s parents in Kentucky and gave them the phone number to the hospital.

Then Ronald and his wife, Carol, scrambled to load up their grandson, who they’d been babysitting. A groggy Nathaniel, still in his pajamas, asked, “Where we goin’ GP?”

“To see your mommy and daddy,” he answered.

As they drove to Austin, Maurice’s father called and confirmed Ronald’s worst thoughts.

His son-in-law didn’t make it.

Sadness, fear and despair gripped Ronald. He’d immediately liked Maurice when Audra had first introduced him.

“Maurice was a great provider, who took care of my daughter and made her happy,” he said. “He was an old-fashioned kind of guy, who asked me permission for my daughter’s hand in marriage. I never saw Audra so happy as when I walked her down the aisle on her wedding day. She really loved that man.”

When they finally arrived at the hospital a little over an hour after they’d left San Antonio, Ronald saw his firstborn child in a coma, hooked up to machines helping to keep her alive.

“I know what my eyes told me, but I never believed for a minute that she wouldn’t walk out of there,” he said. “I just prayed that if God had one more miracle left, I wouldn’t be mad if he bestowed it upon my daughter.”

He fell into a deep depression, the anguish of a father whose duty was to protect his “little girl” — even if she’d turned 30-plus years.

“You never expect to bury your kids ...” he said solemnly as his voice trailed off.

For days, he mourned all he’d lost. Her passion, her loyalty, her laugh. A Pittsburgh native, all Ronald’s children were born with Pittsburgh Steeler black and gold blood coursing through their veins. But perhaps none shared his passion for his hometown’s professional football team more than Audra.

“She loved the Steelers; I created a monster,” he said with a chuckle. “One of our best days together was watching Pittsburgh win the Super Bowl in ’08. Then, of course, she couldn’t wait to get to work to talk some smack.”

These fond memories tortured Ronald.

“I was angry ... vindictive. I was vengeful,” he said of Hernandez-Rodriguez, who in February 2010 was sentenced to 20 years in prison for intoxication manslaughter and another five for fleeing the scene. “Early on, if I had been near Audra’s killer ...

“But that’s not who I am. That’s not who Audra was. And that’s not what she needed me to be for Nathaniel.”

 Ironically, it turned out to be his grandson who helped him to snap out of his funk.

“One day he said, ‘GP, why you cryin’? Nathaniel had never seen me cry before, so I’m sure it shook him up,” Ronald said.

“I looked down at him, and then something just clicked inside me. I realized how selfish I was being. I’d lost a daughter, but he’d lost his mother and father. His whole world had been turned upside down.”

“I just prayed that if God had one more miracle left, I wouldn’t be mad if he bestowed it upon my daughter.”

And he had reason to believe. Audra was one of the people in the Pentagon Sept. 11, 2001, when terrorists hijacked a passenger plane and crashed it into the building.

“It was scary, but the Good Lord had spared her then,” Ronald said.

But when Audra died after holding on for nearly a week following the hit-and-run, “I lost my mind,” he said. “I completely lost my mind.”
Following in the footsteps of his mom and his grandpa, Nathaniel is learning to be a die-hard Pittsburgh Steeler fan.

Aunt Nikki

Anika Lee, Audra’s younger sister by one year, found out about the accident via a phone call from her mom. Living in Houston at the time, she began the two-hour drive to Austin.

“My mom’s voice didn’t give anything away,” said Anika, who more often goes by Nikki. “I’m sure they didn’t want to tell me too much because they knew I would panic — yes, I’m that person in my family, the emotional one.”

She knew Audra was hurt, but hadn’t heard anything about Maurice. She tried to call him on his cell phone and couldn’t understand why he wouldn’t answer. So she called the hospital to try to track him down.

A little while later, her phone rang. A nurse told her that Maurice had died at the scene.

“I pulled over to the side of the road and started freaking out,” she said. “I couldn’t believe he was gone. He was Audra’s soul mate. They were so good together.”

Nikki calmed down enough to reach Austin.

“It was overwhelming,” she said. “My sister had been full of energy and life; she never stopped moving. To see her just laying there motionless . . .”

Distraught, Nikki fainted in the hallway of the hospital.

“My sister was my best friend; we were two peas in a pod,” Nikki said. “We’d talk every single day and e-mail each other. She’d tell me funny stories about Nathaniel — something he said or did — and we’d laugh till it hurt. She was a big part of my life.”

“My sister had been full of energy and life; she never stopped moving. To see her just laying there motionless . . .”

DRUNK DRIVING FACTS

- About 30 percent of Americans are involved in an alcohol-related crash during their lifetime.
- The highest rates of drunk driving occur among drivers aged 21-24.
- Nearly 75 percent of fatal crashes between midnight and 3 a.m. involve alcohol.
- On average, someone in the United States is killed by a drunk driver every 40 minutes.

-National Highway Traffic Safety Administration
Nikki said she sometimes still reaches for the phone to call Audra. She always realizes her error before dialing.

“I still feel the void,” she said, wiping a tear as it rolled to the corner of her lips.

But she does still get to see glimpses of her sister … through her nephew.

“He is a constant reminder of her,” Aunt Nikki said. “Not in looks — physically he takes after his father. But he has his mother’s spirit, her inquisitive mind and her infectious laugh.”

Uncle Face

Staff Sgt. Aron Lee, 33, was stationed at Cannon AFB, N.M., when his mom called him and told him that Audra and Maurice were in the hospital.

“My first thought was of my nephew and how he was going to grow up without a dad,” said Aron, who is married and has a daughter just a year younger than Nathaniel. “It broke my heart, and I knew I’d have to be there for him and my sister.”

So he and his family loaded up the car and drove to Austin as fast as they could.

“When I saw Audra, I couldn’t believe it,” he said. “She was always the life of the party. She was always the first one on the dance floor and the last to leave.”

Aron sunk down heavily into a chair near his sister. He looked into the nurse’s eyes and pleaded with her.

“Please make my sister get up,” he said, sobbing.

The nurse burst into tears.

When Aron left the room, Nathaniel spotted him and with a big grin hollered, “Uncle Face!” (Audra, being the practical joker, had taught her son to call Aron “Uncle Face” because “Face” is his stage name. He moonlights as a hip hop and gospel singer.)

“Nathaniel gave me a big hug, and then saw I was crying,” Aron said. “He patted me on the shoulder and said, ‘I’ll be OK. I knew right then and there that I’d have to pull myself together and man up for his sake.’”

Uncle Face grabbed his cell phone and asked his nephew to sing his ABCs into it. Then he took the recording and played it for his sister over and over again.

“I read somewhere that people in comas can hear you,” he said. “I thought maybe if she heard Nathaniel’s voice, she would wake up.”

But a few days later when doctors informed the family that Audra was brain dead, those hopes were dashed. They made the gut-wrenching decision to remove her from life support.

Aron, however, wasn’t ready to let his sister go. When the doctor and nurse tried to enter the ICU room to disconnect Audra from the life-preserving machines, her baby brother blocked the door.

“No!” he yelled, the tears streaming down his face. “No!”

His father gently grabbed him by the shoulder and said, “It’s time, son; it’s time.”

Aron relented and watched helplessly as the nurse, one-by-one, disconnected the machines that had kept his sister alive. He saw Audra take her last breath.

“My dad was broken,” Aron said. “I’d never seen him like that. He came to me and said, ‘Son, I’m going to need you to be there for me.’”

With assistance from his Air Force family, Aron was able to get a humanitarian assignment to Lackland AFB so he could help his parents raise Nathaniel. He’s still there, assigned to the 737th Training Group as a training manager, and only minutes from where his sister and brother-in-law worked.
Grammy and GP lay a big kiss on their grandson while relaxing on a backyard swing. Nathaniel’s parents appointed Ronald and Carol Lee as their son’s legal guardians. Raising Nathaniel has helped them deal with the grief of losing their daughter and son-in-law.

**Grammy**

Carol Lee walked into an empty bathroom at the hospital. She had just found out that a drunk driver caused this heartache. While everyone else around her fell apart, she had held it together. But now alone, she cried uncontrollably. “*Why!*” she screamed. Then she prayed for God to give her the strength for what was to come. For while the rest of her family believed Audra would wake from her coma, Carol knew otherwise. Call it a mother’s intuition. She simply knew she’d never hear her daughter’s sweet voice again or gaze upon her radiant smile.

She remembered when Audra gave birth to her first grandchild. Carol had traveled to Hickam AFB, Hawaii, where Audra was stationed at the time. Her due date was sometime in December, but Nathaniel wouldn’t wait. He was born on Thanksgiving Day.

“When Audra was in labor, she kept telling me she couldn’t have the baby because it hurt too much,” Carol said smiling. “I told her, ‘*Well, you can’t keep that baby in your stomach.*’ But Audra always was stubborn. She ended up having a C-section.”

After such a rough start, Carol said Audra took to being a mother like a duck takes to water. She was a natural.

“She was a great mom, and she loved that boy with all her heart,” she said. “And he loved her back.”

So imagine the excruciatingly painful moment when it fell to “Grammy” to tell Nathaniel that his mother had perished.

“*Nathaniel, Grammy has something to tell you,*” she said. “*Is it about Mommy? Is she going to be OK?*” Nathaniel asked anxiously. Then, more quietly, he asked, “... *Did Mommy go to heaven with my daddy?*”

Carol knew that Nathaniel was too bright a boy to beat around the bush. She decided to give it to him straight.

Tears flowed out of Nathaniel’s big brown eyes.

“*Why did both of them have to go see God?*” he asked with a shaky voice.

Carol held her grandson tightly.

“*Can we go home now?*” he asked.

“*Yes,*” Grammy replied.

**Nathaniel**

Today, Nathaniel has adjusted to his “new world.” He’s one of the most popular kids at school — the “life of the party,” just like his mom. GP and Grammy do their best to fill in for his mom and dad, fixing him his favorite meals and listening intently to his never-ending stories. He spends some nights with Uncle Face to give his grandparents a break from trying to keep up with a 6-year-old who has more energy than a lightning bolt. And Aunt Nikki is always nearby to read him a story or give him a squeeze.

But Nathaniel hasn’t forgotten his parents ... not even close. Some nights, he still cries himself to sleep or wakes up with nightmares. But there are plenty of good times with lots of family members to love him and provide happy memories, like the day they celebrated Audra’s birthday.

That night when it was time to go to bed, Nathaniel sleepily protested, “*But I’m not tired.***”

With a knowing smile, Grammy said softly, “*OK, you don’t have to go to sleep; you can just lay here for a bit.***”

Then Nathaniel yawned and his eyes began to roll into the back of his head. Groggily, he said, “*I’m going to shut my eyes now so I can look at Mommy and Da ...***”

Sweet dreams, Nathaniel. ... Sweet dreams ... ✞
100 Marathons ... and counting
One officer’s improbable path to becoming a road warrior

By Nicole McLaughlin
Photos by Tech. Sgt. Samuel Bendet
Suffering from severe asthma as a child, Lt. Col. Amanda Preble hasn’t let that stop her from logging some 2,600 miles in marathons.
While it’s taken Lt. Col. Amanda Preble 23 years to get from her first marathon to her 100th, the fact that she can run one at all is somewhat of a surprise. When she was a child, she had such a severe case of asthma that doctors told her mother she’d be lucky to walk around the block.

Preble has spent her life proving the docs wrong.

Today, when she isn’t busy studying the weather in space at her job at the Pentagon, she’s either running a marathon, driving to a marathon or planning her next marathon. When she crossed the finish line of the Air Force Marathon at Wright-Patterson Air Force Base, Ohio, Sept. 18, it became her 100th such race (14 of them the Air Force’s big event).

“I just love to run,” the 46-year-old meteorologist said.

Preble is what the Air Force Marathon office calls a STAR — part of their Spirited, Tenacious, Athletic Running squad. This elite group of runners consists of those who have entered every full Air Force Marathon since its inception 14 years ago.

Ironically, her first Air Force race almost never happened.

Seven weeks before the inaugural Air Force Marathon in 1997, Preble crashed on her bicycle and broke her elbow.

“I ran the first (one) with my arm pinned and bandaged,” she said with a sheepish grin.

Five years later, Preble convinced her husband, Dan Marvin, to join her, making the 2002 Air Force race his first full marathon. That particular run became even more significant for the lieutenant colonel as she was four months pregnant when she ran it.

“It was my slowest Air Force Marathon to date, because I had to stop once every mile,” she said. “But it was an amazing thing to do as a couple, and an empowering thing to do as a first-time mom-to-be.”

Then in 2007, Preble ran the Air Force event shortly after giving birth to her second child.

“Our kids (7-year-old Grace and 3-year-old Chase) have grown up with mom and dad running marathons,” she said of the family tradition.

The couple has become so comfortable at running races together, that they now celebrate every mile marker with a kiss without breaking stride.

Although Preble is an active-duty officer, it’s not her affiliation with the Air Force that keeps her coming back every year.

“I’ve done enough other marathons at this point to have a pretty good idea of what I like in a race, and the Air Force Marathon certainly delivers,” Preble said. “The organization is outstanding, and I love the finish.”

The colonel said the key to earning 100 marathon medals injury-free is perseverance, preparation and staying within your abilities.

“Running a marathon is fun, but it is definitely no joke,” said Preble, who coaches “Girls on the Run,” a program...
Thinking About Running a Marathon?

Here are 12 tips to help you finish

1. **Pick your shoes carefully.** Shoes can change your stride and form. The wrong shoe can cause blisters and more serious injuries.

2. **Wear the right clothing.** A good wicking fabric is much better than cotton.

3. **Wear bright colors.** Always assume drivers can’t see you, and try to make yourself more visible.

4. **Wear an ID bracelet.** This identification gives the basics like your name and emergency contacts ... just in case.

5. **Don’t wear headphones.** Headphones blaring music cause you to lose situational awareness with both vehicles and other runners.

6. **Prepare early.** Don’t wait until the last minute to get ready for a race.

7. **Pace yourself.** If you start preparing for a marathon but do too much too soon, it can lead to stress fractures. Slowly build up your miles.

8. **Acclimate to the conditions.** Heat and humidity really pack a punch; so you need to get used to running in such conditions. Also, know the symptoms of heat-related illnesses.

9. **Drink plenty of fluids.** Staying properly hydrated is imperative. But be careful not to over-hydrate.

10. **Keep a cell phone with you.** Cell phones are a really great safety device for running, allowing you to dial for help or a ride if weather conditions change or anything else goes wrong.

11. **Use the buddy system.** Either run with a partner or let somebody know your route and how long you’ll be gone.

12. **Stay within your abilities.** Don’t push yourself too hard or get in the mindset that you have to finish the race at all costs. There will be other marathons, other days.

— Lt. Col. Amanda Preble
It aint 'Til it's OVER!

Pilot gets uninvited guest during fini-flight ... a turkey vulture

Enjoying my fini-flight Nov. 10, I looked forward to a fantastic finish to my T-1A Jayhawk flying stint with Air Education and Training Command. Then the bottom fell out.
We planned a formation out and back from Randolph Air Force Base, Texas, to David Wayne Hooks Airport in Houston with a simulated air refueling sortie on the front half and a simulated airdrop sortie on the return trip. The first leg of the sortie went off without a hitch. We completed all requirements and separated the formation for weather considerations heading into Houston.

We entered a low-level route on the second sortie for the airdrop mission and had to dodge some weather. We ultimately aborted the route once we turned westbound and saw that it would be impossible to complete because of the developing weather. We climbed to 4,500 feet and headed toward College Station, Texas, for a planned formation arrival prior to splitting up for separate arrivals into Randolph.

As the lead, everything was going relatively smooth as we reached 30 nautical miles north of College Station at 3,500 feet.

Then we heard a loud bang and felt a shudder. Moments later the aircraft’s cabin filled with a putrid aroma that could be likened to rotten chicken.

We had struck what we believe to be a turkey vulture on the left side of the aircraft. The aircraft suffered no degradation in handling immediately after the strike or through landing. A quick scan of the engines showed that both were operating within limits with no apparent issues with the left engine.

Our wingman crew was in the offset position when we informed them we took a bird. We instructed them to look us over to give us an idea of the damage, so that we would come up with our game plan. We recommended they check us out from line abreast. By flying to the side of us, they could look us over without risking anything falling off our jet and taking them out as well. As they pulled up to line abreast on the left side, they informed us that yes, indeed, we had hit a bird.

With all the information we had available to us (engine instruments, visual inspection, aircraft performance and controllability), we decided to land full-stop at the nearest airstrip in College Station, which was to the right of us and in the direction we were already heading. We cleared off wing to shadow us and came up initial to Runway 16 while we set up for a 10-flap straight in for the planned full stop. Approach and landing were uneventful, and we taxied back to parking. Our wingmen executed their approach and landing without incident, as well.

Our surprise came when we opened the crew entrance door to see the extent of the damage done to the aircraft from the suspected turkey vulture. It looked as if someone had peeled the wing root with an old-school field opener.

There was blood everywhere.

It looked more like we’d hit a small deer than a bird, but Christmas was still more than a month away; so I was fairly confident it wasn’t Rudolph. Not to mention, the engine had bird matter all around the inlet and, upon post flight inspection, in the bypass duct on the back side. Even with all that damage, the T-1 continued to fly without any perceptible handling anomalies.

We ended up climbing on our wingman’s jet after buttoning up our aircraft and proceeded home to Randolph.

I was a little late getting to my fini-flight celebration, but, hey, safety first. It just goes to show, it ain’t over ‘til it’s over. …

At the time of this incident, Major Cranston was a T-1 pilot assigned to the Air Education and Training Command Flight Safety Division at Randolph AFB, Texas. He has since moved to the 99th Airlift Squadron at Andrews AFB, Md., where he flies the C-20 Gulfstream IV, providing executive airlift around the world. Cranston earned an AETC Well Done Award for his actions in handling the in-flight emergency.

All’s well that ends well, as Maj. Mike Cranston safely finished his T-1 fini-flight and received a warm welcome from his wife and kids on the Randolph flight line.

**BATTLE OF THE BIRDS**

**TURKEY VULTURE:** Struck 864 times by Air Force aircraft and responsible for $54.5 million in damage.

**BLACK VULTURE:** Struck 460 times by Air Force aircraft and responsible for $67.2 million in damage.

**AMERICAN WHITE PELICAN:** Caused the Air Force $257.7 million in damage with only 21 strikes. No other bird has cost the service more money.

**CANADA GOOSE:** Caused the Air Force $92.9 million in damage with only 199 strikes. They are the second most costly bird to the service.

**MUTE SWAN:** The largest bird threat to aircraft — an impressive 31 pounds of meat and beak.

Information gathered from the U.S. Department of Agriculture and the Air Force BASH Team at Kirtland AFB, N.M. (updated through fiscal 2010).
In its commercials, the popular energy drink Red Bull claims to “give you wings.” The Air Force Academy soaring program in Colorado Springs, Colo., actually does. While the academy's flying program boasts it can take someone whose feet have never before left the ground and teach them to soar, that statement just might sell the program short. It can actually take someone whose feet have never before left the ground and teach them aerial “gymnastics.”

Just ask Cadet 2nd Class Charlie Meyer and Cadet 1st Class Justin Lennon, who are members of the glider aerobatic team at the academy. The Falcons recently finished second in glider aerobatics and outperformed rival Embry-Riddle Aeronautical University for the first time.

Both Meyer and Lennon said that nothing they had done prior to joining the Air Force Academy could have prepared them for glider aerobatics. Neither of them had ever done anything remotely close to it.

“Our goal (truly) is to take someone who has never been in a plane before and teach them to fly,” Meyer said. Academy glider pilots compete in two categories: sportsman and advanced. The former is for juniors, the latter for seniors.

One of the unique aspects of competitions in this sport is that there are no age categories. Private individuals can bring teams to compete against college-age flyers. Some people start by entering competitions and working their way up to professional sponsorship.

“You got 20-year-olds competing against guys who have been doing it for 20 years,” Meyer said. “You have to pay attention...
every second you’re in the air. You don’t have the luxury of moving around, so you monitor your position constantly.”

To learn to fly glider aerobatics safely, training at the academy follows a progression. Cadets first learn basic flying. After a process that includes about 65 flights, they reach the level of instructor. Another 30 flights or so qualifies them for aerobatics. The next step is competition in the sportsman category. The concluding upward bump, to intermediate, requires 10 more flights.

Glider aerobatics is different from other intercollegiate sports in another respect as well. Whereas most teams spend the regular season tuning up for a conference tournament or some sort of championship event, glider aerobatic teams have a much more limited window.

The season starts in September and runs into November. When the season ends, the placing is definitive.

Each event tests flyers in three types of routine: known, free and unknown. The free routine is determined by the individual. Judges watch pilots’ routines from the ground and assess a grade for each maneuver. The grade is multiplied by the number of points awarded for each move, so the score is rendered as a percentage of the total possible points.

Cadets also fly demos, meaning they have something akin to the all-star games familiar in other sports. But unlike those exhibitions, glider aerobatics demos take place more often than once a year.

As a senior, Lennon is done with competition for the Falcons, so he is passing on the lessons he’s learned to those who will have opportunities to use them. He’s also scheduled to fly the glider demo at the academy’s graduation.

“What I think about is making your own roller coaster,” he said. “It’s so much fun, and it’s all hands-on. Once you get used to it, it’s great.”

Even if your feet have never before left the ground.

Mr. Edwards is with the public affairs office at the Air Force Academy. (AFNS)
SHEPARD AIR FORCE BASE, Texas — It took a little more than six months for an accident investigation board to determine what caused the Space Shuttle Columbia to disintegrate Feb. 1, 2003, upon re-entry into the Earth’s atmosphere.

The official report released Aug. 26, 2003, showed the board narrowed the immediate cause of the catastrophe down to a missing tile on the leading edge of the left wing. Another part of the consideration was some sort of mechanical failure of Columbia’s propulsion system.

In a roundabout way, that’s where a little-known course at Sheppard Air Force Base came into play following that fateful flight. David Knauer, 361st Training Squadron Jet Engine Mishap Investigation Course instructor, said then-Navy Cmdr. Mike Francis, a graduate of the course, served on the Columbia accident investigation board, applying the tools he learned as a student to a real-world accident.

“We, of course, like to think we gave him at least a little knowledge to help him through that time,” Knauer said.

That’s exactly what the course is designed to do: train military members and civilians from around the world how to investigate what caused a jet engine to fail. The class pulls in Air Force, Navy, Marine and Coast Guard students who have the same requirement. Students also come from 55 countries around the world including Australia, New Zealand, Poland and the Czech Republic, to name a few.

Knauer said most people would think that graduates of the course would fill the role of the maintenance member on investigation boards.

“The maintenance member has a very extensive and sometimes exhausting task to perform during the investigation,” he said. “That person will analyze maintenance factors to include pre-mishap status of the aircraft, aircraft systems, maintenance qualifications, proficiency and training.”

Ronald Loeffler, another course instructor, said students start out by learning how to be investigators. Photos and case studies from past mishaps are used to help the students understand the processes of a jet engine mishap investigator.

Then it’s time for the first of two hands-on investigations with actual engines that suffered some sort of damage that led to their failure in flight.

“There are times when we go through the classroom portion looking at pictures, we come out to the lab area where we have engines representing what we just discussed,” Loeffler said. “We then go use the actual item so they can do an investigation on their own.”

In this portion of training, students can pick up parts, look inside the engine and examine fan blades and other aspects of the propulsion mechanism to figure out how the engine specifically failed.

“If you’re involved in an accident investigation and the engine was the cause, this course is essential to help you figure out what happened, especially if you’re not an engine mechanic or an engineer,” said Maj. Andrew Garcia, attending the course as an operations officer from the 48th Equipment Maintenance Squadron at Royal Air Force Lakenheath, England. “It helps to give you a general idea of theory as to how the engine works as well as all the different things that can go wrong, what to look for and the simple tests that you can do out in the field even with just the minimal amount of equipment.”

— John Ingle
82nd Training Wing Public Affairs

Studying an engine that was destroyed by a bird years ago. David Knauer, left, assists Brad Bianchi during the 361st Training Squadron’s Jet Engine Mishap Investigation Course at Sheppard AFB, Texas. Knauer, a course instructor, and others teach the nine-day course to help develop investigative techniques to those who could potentially be part of an accident investigation board. Bianchi is a quality assurance inspector for the 75th Propulsion Maintenance Group at Tinker AFB, Okla.
An accident investigation board recently determined a Bombardier DHC-8/Q200 crashed Nov. 19, 2009, because of the aircrew’s failure to properly fuel plan and then refuel with enough gas to reach their destination.

The aircraft, assigned to the 524th Special Operations Squadron, 27th Special Operations Wing, Air Force Special Operations Command, was conducting a passenger and cargo transportation sortie in support of U.S. Africa Command. But while on the mission, the aircraft, piloted by the aircraft commander, crash-landed in an isolated field nearly 61 miles north-northwest of its destination and some seven miles west of its emergency divert airstrip in western Africa.

The crew — consisting of the aircraft commander, copilot and loadmaster — and all six passengers suffered at least minor injuries, with one passenger sustaining severe injuries. The aircraft was a total loss with a cost estimate of $7 million.

When the aircraft arrived at its first stop. The crew had diplomatic clearance to on-load 4,000 liters of fuel. Although two fuel trucks arrived, the mishap pilots determined fuel was not necessary, and the aircraft commander decided not to refuel. As the aircraft climbed to 24,000 feet, the crew received indications of a fuel shortage. The aircraft commander diverted the aircraft to an airstrip 12 miles closer and began a descent.

During the descent, the right engine shut down from fuel exhaustion. Then, 29 seconds prior to impact, the left engine began to shut down, also from fuel exhaustion.

In addition to improper fuel planning, investigators found that once airborne, despite indications of a fuel shortage, the crew did not divert to a suitable alternate airport early enough in the sortie to avoid this mishap. The accident investigation board also found sufficient evidence to conclude the following factors substantially contributed to the mishap: insufficient mission and flight planning; faulty decision-making; complacency; task misprioritization; channelized attention; and the crew pressing to meet mission demands.

A thorough review of the aircraft and maintenance records revealed that neither the condition of the aircraft, nor the performance of any maintenance operations played a role in the accident, board members concluded.