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TORCH
November/December 2010

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FROM THE
DIRECTOR

By Col. **John W. Blumentritt**
AETC director of safety

YOU RAISE ME UP

On a majestically blue, warm, sunny San Antonio day Dec. 20, which was perfectly suited for golf despite being just one day shy of the official start of the winter season, I stood in front of more than 100 people at my retirement ceremony and found the ending bitter-sweet. I was excited about the new opportunities I face, but a little saddened to leave the Air Force, a service that has been so good to me.

So I faced my family, friends, co-workers and commanders, and referencing the inspirational song by the same title, I told them, "You raise me up."

Indeed, my entire career has been sprinkled with amazing people coming together to accomplish sometimes seemingly impossible goals. I am privileged to have been a part of such a dynamic team. Nowhere has that been more apparent than during my time as your Air Education and Training Command director of safety.

Each year during my tenure, we teamed up to set another standard in safety that had before seemed out of reach. Then, it all came together in 2010. We started out by notching the first summer in the command's history that not a single person lost his or her life to a mishap. Then came a record-setting year in flight, with AETC recording an outstanding mishap rate that was crucial to the Air Force achieving its greatest year ever in flying safety. Moreover, while a vehicle crash claimed one active-duty military off-duty death, we had zero on-duty fatalities the entire fiscal year.

"That's what is so remarkable about serving in this command and Air Force. We don't let the odds sway us. We roll up our sleeves and go to work trying to achieve what everybody says can't be done."

And, finally, the most amazing feat of all … as calendar year 2010 came to a close, we had gone more than a year without a mishap-related off-duty death.

Talk about finishing with a bang!

By sheer numbers, the odds are stacked against us. If AETC broke off and became its own entity, it would still be the fourth largest Air Force in the world.

But that's what is so remarkable about serving in this command and Air Force. We don't let the odds sway us. We roll up our sleeves and go to work trying to achieve what everybody says can't be done.

I am proud to have stood by you and witnessed this miracle we worked so hard to attain.

Without a doubt, you prosecuted the unthinkable … by unleashing the unimaginable … the talent of Air Force men and women.

That's why I can say with confidence to my replacement, Col. Creig Rice, as he takes the reins in February, that you can continue this positive trend and even surpass it.

Each and every day of my career, you raised me up! More importantly, however, together you raised, and will continue to raise AETC, the Air Force and the nation to the highest of levels.

For that, I personally and professionally thank you … and bid you goodbye.

IN A TOE JAM

Had to laugh when I read Tech. Sgt. David Henry's advice to avoid distractions, such as "showing off for the cute lady" walking by when you're working out with weights ("Oh, Henry!" September/October 2010 issue, cover story). Not two months ago my brother got distracted by a "hottie" and dropped a 25-pound weight on his big toe. Not only did he break his toe, which was very painful, but he was pretty embarrassed. I'm OK with it because just another thing to tease my kid brother about, but just thought I'd share how relevant Henry's advice can be.

Joe Walker
Philadelphia

AMAZING AIRMEN

I enjoyed the article "Oh, Henry!" in the September/October 2010 issue of Torch (cover story). Mr. Olympia? That's amazing! I always find it incredible that so many of our Airmen become professional athletes or Olympians or do some other amazing feat outside of their duties. The commitment and discipline it takes to accomplish something like that when you already have a demanding job boggles the mind. It just goes to show the caliber of people we are recruiting.

Kayla Meacham
Via e-mail

LETTERS TO TORCH

Have a comment or complaint? Letters to Torch may be sent via e-mail to: torch.magazine@us.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.

LUCKIEST OR UNLUCKIEST?

If you get mauled by a black bear and struck by lightning twice ("Tales of the Strange," September/October 2010 issue, page 6), I don't know if you are the unluckiest guy in the world or the luckiest because you survived. But I think I'd buy some lottery tickets just in case. Anyway, another good story. I always enjoy reading your "Tales of the Strange" articles.

Staff Sgt. "Smokey" Bear
Via e-mail

by Tech. Sgt. Samuel Bendet

POWERED PARACHUTIST

I saw the on-line article about the near drowning of the powered parachutist in Galveston, Texas ("A Narrow Escape," July/August 2010 cover story). I am extremely pleased to see this fine work.

Retired Maj. Dean Cherer
Via e-mail

2011 TORCH CALENDAR

The Torch calendars are super! Y'all outdid yourselves with this issue. The pictures are great! This is the best one I can remember in the eight years I have been here. Thanks for a great product.

Cliff Robberts
Randolph Air Force Base, Texas

I received my copy of the 2011 Torch Calendar and want to thank you folks very much! It fits very nicely into my cubicle. I work at the Naval Air Warfare Station at China Lake, Calif., as a weapons analyst. We test weapons for both the Navy and Air Force. I have worked for the Navy for almost 30 years, but I want you to know that I also have great admiration for the Air Force. China Lake will continue to support Navy and Air Force testing enthusiastically.

Don G. Bell
China Lake, Calif.

Wow! Another outstanding effort on the calendar.

Randy Schavrien
Randolph Air Force Base, Texas

Calendars arrived earlier this week ... fantastic! They are perfect for our cubicle bulletin boards. You made lots of people happy. Thank you for your support.

Ted Wilkens
Kirtland Air Force Base, N.M.

I use the Torch calendar as a recruiting instrument in my Air Force Junior Reserve Officer Training Corps unit, and so far it has paid off.

Maj. Donald Bailey
Donaldsville, La.

The Torch calendar continues to be a great hit here (T-6 program). We went through them in the first two weeks.

Billy Doolittle
Wichita, Kan.

I really enjoy your yearly calendar, which I hang over my desk. It was a big hit here this year!

Steve Panger
Scott Air Force Base, Ill.

Saw the 2011 Torch Calendars. The pictures are great!

Maj. Celia A. Clay
Pearland, Texas

My daughter and her fiancé are both Air Force pilots and getting married soon. They had to move their wedding date up drastically as he is heading to Korea very shortly. They had engagement photos in front of a vintage aircraft and car — some taken in their flight suits — and those were incorporated into their Web page with an aviation flavor. So I plan to use the Torch calendar (with its aviation photos) to remember what the two of them are doing each day, as well as what other servicemen and women are doing for our country. The calendar turned out great!

Aletha Werner
Walla Walla, Wash.

I believe that the Torch calendar is the best calendar by far and will display it again this year in my work area. Keep up the good work, and thank you for your contribution to this country. It is greatly appreciated!

Gina P. Bradley
Harvest, Ala.

UPDATE

INSPIRING COMEBACK

LAUGHLIN LIEUTENANT RETURNS TO PILOT TRAINING AFTER LOSING LEG

LAUGHLIN AIR FORCE BASE, Texas (AETCNS) — After having his right leg amputated following a Sept. 6, 2009, boating mishap, 1st Lt. Ryan McGuire returned to pilot training at the 47th Flying Training Wing here in November.

Torch featured the lieutenant on the cover of its May/June 2010 issue. Since the accident, he has completed rehabilitation using his prosthetics and was cleared by a medical board to continue the pilot career that was interrupted by the mishap.

Only seven months after receiving the below-the-knee amputation, McGuire pushed himself to compete in the inaugural Warrior Games at the Olympic Training Center in Colorado Springs, Colo., where he earned a gold medal in the 50-meter backstroke, a bronze in the 100-meter freestyle swim and fourth in the 1,500-meter run

Then in September, he completed the grueling Air Force Marathon at Wright-Patterson Air Force Base, Ohio. These amazing feats less than a year after losing his leg earned him the Air Education and Training Command Male Athlete of the Year honors for 2010.

McGuire's injury occurred at Lake Amistad, near Laughlin, during the 2009 Labor Day weekend after getting a four-man tube tow rope tangled around his leg. The tube and rope yanked him from a boat while jetting across the lake at 40 mph. He dislocated his hip, fractured his pelvis and mangled his right foot, which had to be removed a month later at Brooke Army Medical Center in San Antonio.

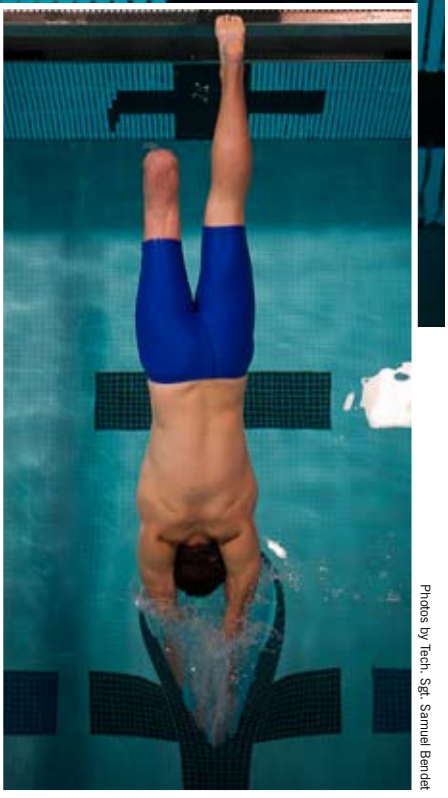
Since July, McGuire has been back on duty at Laughlin, but not in pilot training.

"When I first lost my leg, I never dreamed this day would come," McGuire said of his return to the cockpit. "But leadership here has supported me every step of the way, and honestly, they're the ones who gave me this dream to come back."

Col. Michael Frankel, commander of the 47th FTW, said it was a no-brainer to back McGuire in his efforts.

"When I first met Lieutenant McGuire, it was obvious that this young man is something special," Frankel said. "He has always had a positive attitude. I've never seen him down, never see him upset, he's always been pressing forward trying to achieve his goals. I look forward to the day when he graduates from pilot training, and I can hand him a set of silver wings."

— Joel Langton
47th Flying Training Wing public affairs



Photos by Tech. Sgt. Samuel Bendet

Competing in the Warrior Games *at the Olympic Training Center in Colorado in May was just one of the inspiring feats 1st Lt. Ryan McGuire completed on his road back to pilot training after having his right leg amputated.*

INVESTIGATORS RELEASE FINDINGS OF PARACHUTING MISHAP

RANDOLPH AIR FORCE BASE, Texas (AETCNS) — In December, the Air Force released its investigation of the June 25 parachute accident at the Air Force Academy, Colo., that resulted in major injuries to a student jumper enrolled in Airmanship 490 (basic parachute training course).

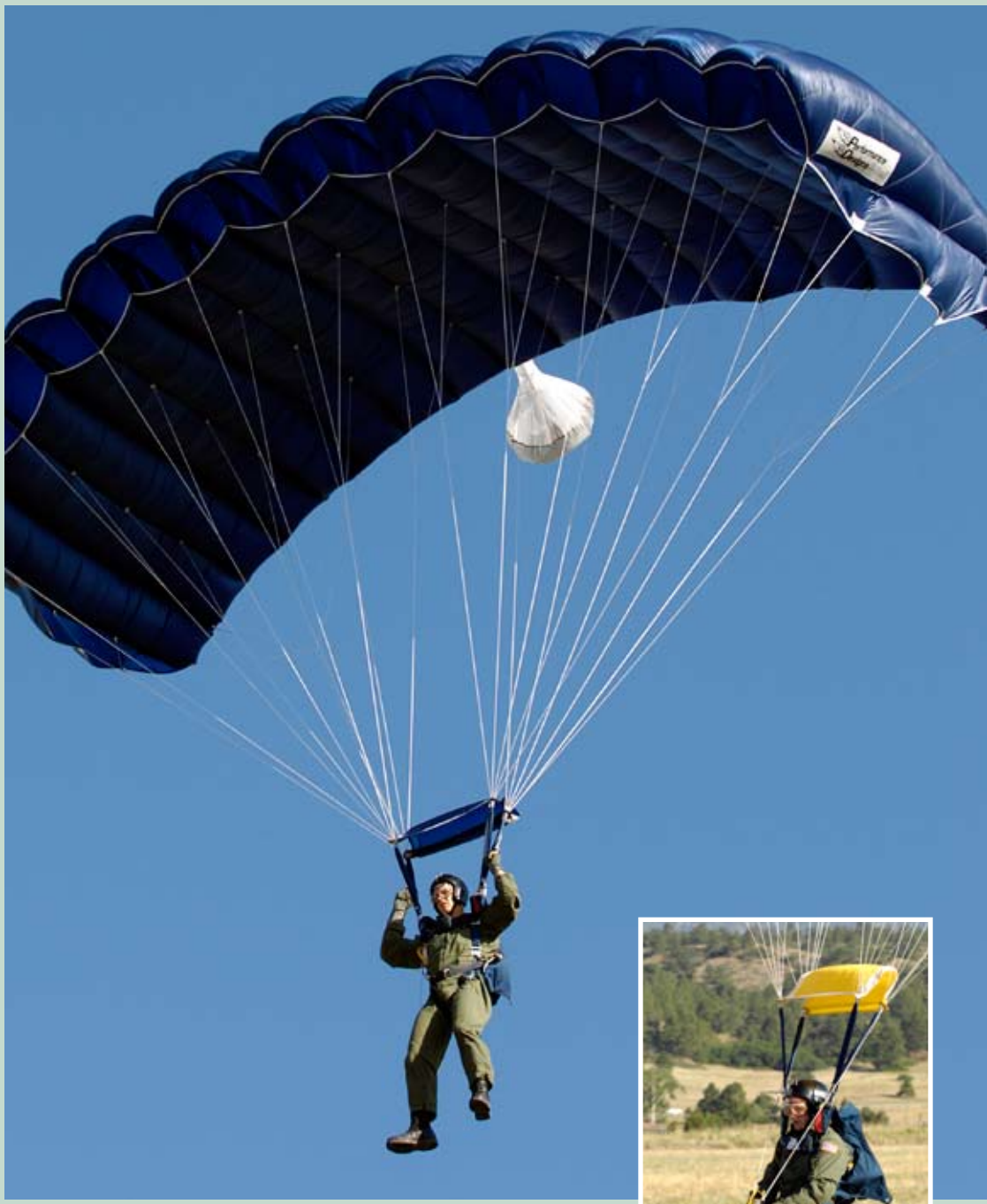
The accident investigation board determined that the cause of the mishap was the student's failure to provide proper steering inputs to the west on his final leg, as directed. The improper steering started the chain of events that ended with the victim impacting a windsock pole.

After completing his first jump and debrief successfully, Cadet Matthew Pirrello, a Reserve Officer Training Corps student at Ohio University, geared-up for the second of his five jumps. The student jumper and nine others boarded a UV-18B Twin Otter aircraft. Following takeoff, the UV-18 ascended jump altitude over the drop zone.

According to the investigation report, the student jumper exited the plane and flew the parachute canopy within allowable limits until setting up for his final approach to the landing point. It was then that the student jumper failed to notice crosswinds from the west. This was caused by a breakdown in visual scans for windsocks because of channelized attention (a focus on landing on the preferred landing point).

The breakdown in scanning and the channelized attention led to diminished control of the canopy and failure to correct for winds to the west, which is a procedural error that was a major factor in the mishap.

His landing controller had advised the student jumper by radio to make course adjustments to the west. Pirrello acknowledged he heard radio calls, but he was unable to execute the course corrections as directed. Additionally, as the student jumper continued down, he saw the obstacles ahead of him and misjudged his speed, closure and distance from them. Because of this he made a 90-degree turn to try and miss the windsock pole leading to over control of the canopy and, ultimately, impact with the windsock pole.



Photos by Mike Kapla

A cadet was seriously injured *after striking a windsock pole during a parachuting descent at the Air Force Academy, Colo., last summer.*

TALES OF THE STRANGE

THAT'S GOTTA HURT!

PHOTOS SHOWING BOY WITH FORK THROUGH NOSE NO HOAX

When photographs showing a pre-school age boy with the tines of a fork piercing his nose began circulating around the internet and through e-mail in July 2007, many wondered if the pictures were real or doctored.

The caption read, "Mom said don't run with scissors, but didn't mention a fork." With many people asking the question of whether this was real or fake, Snopes (*www.snopes.com*), the on-line seekers of truth, started "investigating."

Snopes managed to get in touch with the boy's mother who confirmed that this was no hoax. Here's what she had to say in her response to the Snopes query:

"It's real. Happened July 11 at a Chinese buffet restaurant in Minneapolis. He was climbing into the booth and fell while holding his fork in his hand. When the waiter picked him up from under the table, the fork was through his nose. There was only a little blood because the fork tines missed all the cartilage in the nose.

"The one picture is from the emergency room, and the other is two days later at home. The ER doctor and the ENT (ear, nose and throat) doc we saw the following day said they had never seen this before and that we were pretty lucky that the fork went up and out through the nose. We saved the fork and these pictures for him to see when he gets older. We e-mailed the pics to our family, co-workers and friends, and now they are all over the internet. Live and learn I guess."

***In the emergency room**, doctors had to remove the fork after three of the tines had pierced the boy's nose during a fall. Two days later at home, the puncture wounds had already begun to heal.*

DON'T RUN, JUMP OR CLIMB WITH SHARP OBJECTS

✦ Using a little common sense with sharp objects is the best way to prevent accidental injuries involving cuts or punctures.

✦ Don't run, jump or climb with sharp objects.

✦ Avoid transporting them.

✦ If you do have to transport them, carry with the sharp or pointy end pointed away from you.

✦ Don't allow children to handle sharp objects.

✦ Store sharp objects in a drawer with a safety latch.

✦ If handling sharp objects, be careful if wet because your hand could slip onto the sharp or pointy end.

✦ Let falling objects fall … don't try to catch them and risk cutting your hand.

✦ Some common sharp objects that we may take for granted: Scissors, forks, kitchen knives, screw drivers, letter openers, and pens and pencils, to name a few.

— Air Education and Training Command ground safety

HOUSE OF HORRORS?

MOST PEOPLE ARE SAFER AT WORK THAN AT HOME

Most Americans, on average, are safer at work than they are at home — 11 times safer to be exact, according to the National Safety Council.

Each year, on average, there are 53,200 off-the-job deaths compared to 4,933 on-the-job deaths. Additionally, 9.4 million people suffer off-the-job disabling injuries, while 3.7 million experience the same on the job. And then there's the economics of it: off-the-job mishaps cost society $240.3 billion, compared to $164.7 billion on the job.

When friends and families are added into the equation, there are a staggering 72,600 deaths that take place in homes and in the community from unintentional injuries each year, as well as more than 20,200,000 disabling injuries, affecting 112 million households, and costing Americans over $251.9 billion.

As a society, Americans must think about safety not only when at work, but at home, on the road and in the community as well.

"By understanding the hazards we face, adopting safety as a fundamental right, and knowing that we can influence safe outcomes, together we can make the United States the safest country in the world — each minute of the day, one day at a time," NSC officials said.

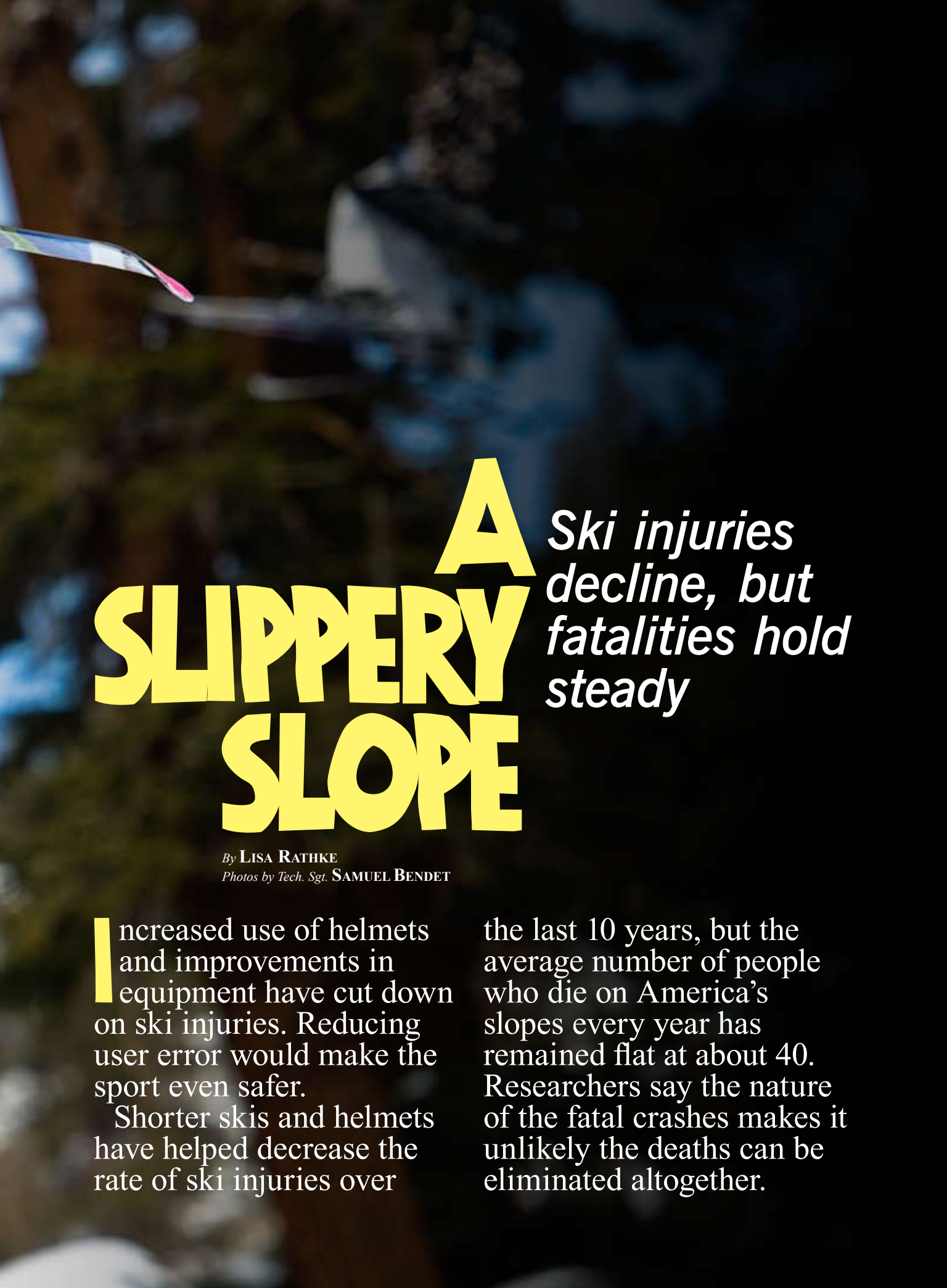
— National Safety Council

WHAT'S INJURING OR KILLING US AWAY FROM WORK?

- Falls, especially among adults 65 and older
- Drivers who are distracted while texting or using their cell phones
- Inexperienced teen drivers
- Sports injuries
- Poisonings, especially from unintentional drug overdose from painkillers or other prescription medications
- Overexertion
- Choking
- Drowning
- Home fires caused by everything from cigarettes to electrical problems
- And many more incidents that we never intended to happen

— National Safety Council

A skier at Heavenly Ski Resort, *South Lake Tahoe, Nev., successfully lands a back flip on one of the resort's terrain parks. With no helmet, he is taking his life into his own hands performing such aerobatics over a rough landscape.*



A SLIPPERY SLOPE

Ski injuries decline, but fatalities hold steady

By **Lisa Rathke**
Photos by Tech. Sgt. **Samuel Bendet**

Increased use of helmets and improvements in equipment have cut down on ski injuries. Reducing user error would make the sport even safer.

Shorter skis and helmets have helped decrease the rate of ski injuries over the last 10 years, but the average number of people who die on America's slopes every year has remained flat at about 40. Researchers say the nature of the fatal crashes makes it unlikely the deaths can be eliminated altogether.

Director of Ski Patrol Brian Gannon, *who works at Heavenly Ski Resort and has been a ski patroller for nearly 20 years, has seen his fair share of mishaps on the slopes. He was even the first responder to the scene of Sonny Bono's fatal skiing mishap in January 1998.*

Cutting too sharply immediately after a jump, *a skier loses control just before he crashes into a snow bank.*

According to the National Ski Areas Association, 25 skiers and 13 snowboarders died during the 2009-10 season out of 59.8 million skier/snowboarder days.

"It's a rare event, and it looks to me, based on our research, that this is something that is going to be very difficult to address because the deaths primarily are due to collisions with fixed objects, where somebody is going at a relatively high rate of speed," said Jasper Shealy, a professor emeritus at the Rochester Institute of Technology who has studied skiing and snowboarding injuries for 40 years.

"Typically slope deaths involve males in their teens to late 40s who are intermediate or better skiers ... when they lose control."

Typically slope deaths involve males in their teens to late 40s who are intermediate or better skiers, wearing a helmet, and traveling at a high rate of speed when they lose control. Of the 38 who died last season, 30 were males.

"There's almost no margin for error. They hit a tree; and, unfortunately, they die," Shealy said, explaining that the forces generated by hitting a fixed object far outweigh the protection a helmet affords.

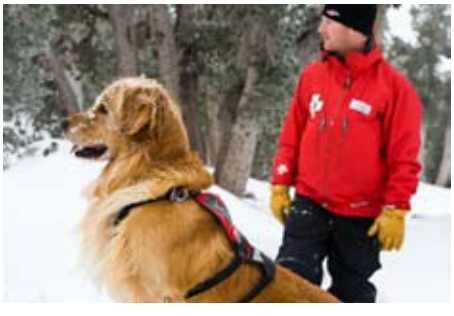
Despite high-profile cases such as that of actress Natasha Richardson, who died of head injuries after falling on a ski slope in 2009, the sport remains relatively safe.

For example, 900 Americans died bicycle riding; 3,600 drowned either swimming, playing in the water or falling in; and 39,000 died in motor vehicle crashes in 2008, while 46 died from lightning in 2007, according to the National Safety Council.

The best way to avoid injury on the slopes is to wear a helmet; ski or ride in control; be able to avoid objects and other skiers and snowboarders; and never test the effectiveness of the helmet, said Michael Berry, president of the National Ski Areas Association.

Skiers and riders also should follow what he calls a responsibility code, which includes stopping in safe places; looking uphill and yielding before going downhill or merging onto a trail; staying off closed trails; and knowing how to use lifts.

"For a sport that has the kind of adrenaline factor that skiing and snowboarding does, there isn't a corollary injury rate. ... I mean we're right down there with tennis," Berry said.



Summit, a search and rescue dog, *is one of many who are on call to rescue lost skiers, who either skied too far off the trails or become buried by an avalanche.*

A snowboarder performs *an Indy snowboard grab at a terrain park on Heavenly Mountain.*

On paper, snowboarding appears to be more dangerous but less deadly. The injury rate is 50 to 70 percent higher than in skiing, Shealy said, which he suspects is because of the people doing it: Snowboarders tend to be young males.

While snowboarders get injured more often, the death rate is about one-third lower than in skiing. That snowboards don't release from the feet of the snowboarder is a likely explanation, Shealy said. When a rider falls, the edge of the snowboard drags on the snow and acts like a brake (reducing blunt force impact fatalities). But that also can cause fractures (increasing injuries), he said.

Overall, the rate of ski injuries has dropped by half since the late 1960s and early 1970s nationwide.

The broken lower legs of the 1970s are almost nonexistent, if a skier's binding is appropriately set, adjusted and well-maintained, Shealy said. The rate of midshaft tibial fractures has gone from a high of about 25 percent of ski injuries to about 1 percent.

"They were due to the failure of the ski to separate from a person at the appropriate time," he said.

In recent years, serious knee injuries, particularly ACL injuries, have declined by about 30 percent, the National Ski Areas Association said. The introduction of shorter skis is the likely reason.

"The mechanism is what we refer to as the 'phantom foot,' where it's the tail of the ski that exerts a force on the knee that the knee wasn't designed to accommodate. So as skis got shorter that lever arm got shorter and therefore less force," Shealy said.

"In the last 10 years, head injuries have declined by 50 percent thanks to the increased use of helmets."

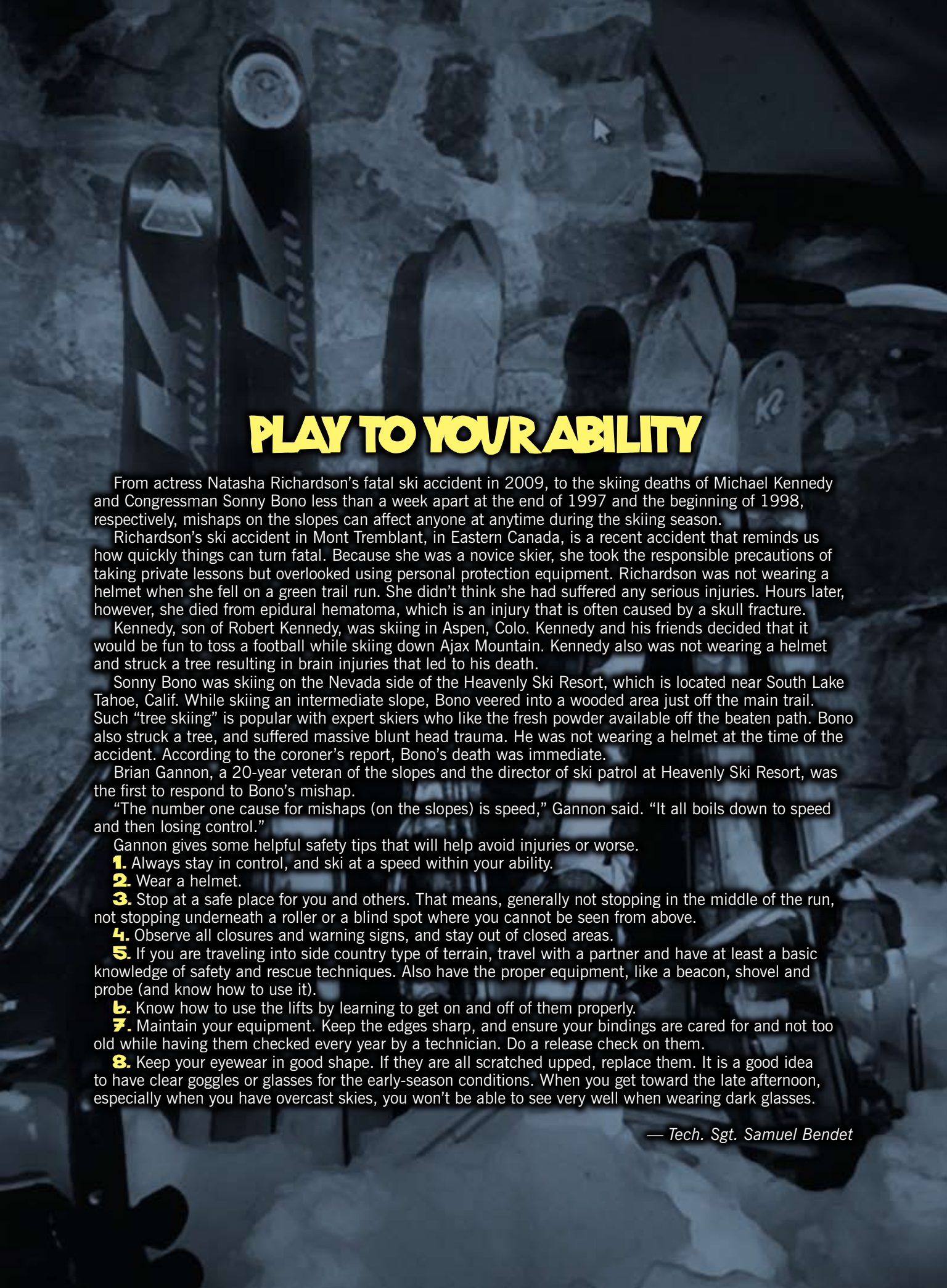
In the last 10 years, head injuries have declined by 50 percent thanks to the increased use of helmets. But even though more than half of all skiers and snowboarders nationwide wear helmets, life-threatening head injuries such as skull fractures are still possible.

Behavior is the key, Berry said.

"People should wear helmets; they're important," he said. "But at the end of the day, they should ski and snowboard as though they were not wearing a helmet."

Rathke is a writer with the Associated Press. Reprinted with permission.

A cross country skier *is warned by his loyal companion to turn around while crossing the partially frozen waters of Lake Tahoe.*



PLAY TO YOUR ABILITY

From actress Natasha Richardson's fatal ski accident in 2009, to the skiing deaths of Michael Kennedy and Congressman Sonny Bono less than a week apart at the end of 1997 and the beginning of 1998, respectively, mishaps on the slopes can affect anyone at anytime during the skiing season.

Richardson's ski accident in Mont Tremblant, in Eastern Canada, is a recent accident that reminds us how quickly things can turn fatal. Because she was a novice skier, she took the responsible precautions of taking private lessons but overlooked using personal protection equipment. Richardson was not wearing a helmet when she fell on a green trail run. She didn't think she had suffered any serious injuries. Hours later, however, she died from epidural hematoma, which is an injury that is often caused by a skull fracture.

Kennedy, son of Robert Kennedy, was skiing in Aspen, Colo. Kennedy and his friends decided that it would be fun to toss a football while skiing down Ajax Mountain. Kennedy also was not wearing a helmet and struck a tree resulting in brain injuries that led to his death.

Sonny Bono was skiing on the Nevada side of the Heavenly Ski Resort, which is located near South Lake Tahoe, Calif. While skiing an intermediate slope, Bono veered into a wooded area just off the main trail. Such "tree skiing" is popular with expert skiers who like the fresh powder available off the beaten path. Bono also struck a tree, and suffered massive blunt head trauma. He was not wearing a helmet at the time of the accident. According to the coroner's report, Bono's death was immediate.

Brian Gannon, a 20-year veteran of the slopes and the director of ski patrol at Heavenly Ski Resort, was the first to respond to Bono's mishap.

"The number one cause for mishaps (on the slopes) is speed," Gannon said. "It all boils down to speed and then losing control."

Gannon gives some helpful safety tips that will help avoid injuries or worse.

1. Always stay in control, and ski at a speed within your ability.

2. Wear a helmet.

3. Stop at a safe place for you and others. That means, generally not stopping in the middle of the run, not stopping underneath a roller or a blind spot where you cannot be seen from above.

4. Observe all closures and warning signs, and stay out of closed areas.

5. If you are traveling into side country type of terrain, travel with a partner and have at least a basic knowledge of safety and rescue techniques. Also have the proper equipment, like a beacon, shovel and probe (and know how to use it).

6. Know how to use the lifts by learning to get on and off of them properly.

7. Maintain your equipment. Keep the edges sharp, and ensure your bindings are cared for and not too old while having them checked every year by a technician. Do a release check on them.

8. Keep your eyewear in good shape. If they are all scratched upped, replace them. It is a good idea to have clear goggles or glasses for the early-season conditions. When you get toward the late afternoon, especially when you have overcast skies, you won't be able to see very well when wearing dark glasses.

— Tech. Sgt. Samuel Bendet

BIG ~~BROTHER~~ Daddy IS WATCHING

Father finds a way to 'illuminate' dangers of road

By **Tim Barela**
Photos by Tech. Sgt. **Samuel Bendet**
Photo composite by **David M. Stack**

Two classic tales for little kids growing up are the stories of *Little Red Riding Hood* and *The Three Little Pigs*. In both stories lurks the Big Bad Wolf, the dangerous foe for the little girl and the piggies.

Col. John W. Blumentritt, Air Education and Training Command director of safety at Randolph Air Force Base, Texas, remembers sharing these tales with his three children when they were growing up. But now, as his kids have blossomed into two young adults and one teenager, he knows that the "Big Bad Wolf" they face each and every day is on the roads and highways.

"The nice thing about little kids is you can get them to listen intently and hang on your every word … they think their parents are geniuses," Blumentritt said with a chuckle. "But once they hit their teen years, somehow we parents seem stupider, and they start to tune us out."

So when Blumentritt was given a chance to spark some dialogue with his youngest daughter, 17-year-old Ashley, on the perils of the road, he jumped at the chance.

In early 2010, USAA, the insurance and investment management company, reached out to its members with teen drivers to test a new device in their vehicles that gathered information on the teen's driving habits, according to Michael Sherman, a USAA Corporate Communications partner. This pilot program enabled teens and parents to identify opportunities to improve the teen driver's skills through open discussion, Sherman added.

"I know it is a big, bad world out there when it comes to tran-

sitioning your children to driving," Blumentritt said. "Sure, you can sprain an ankle or break a leg in sports, but people die in automobile accidents. Running into someone else on the basketball court might hurt, but smashing a couple of 2,000-pound vehicles into each other is unfathomable."

The colonel's concern is justified.

"Motor vehicle crashes are the leading cause of death among 15 to 20 year olds," Sherman said. "Immaturity and lack of driving experience are the two main factors leading to the high crash rate among teens."

Sherman went on to say that this lack of experience affects a teen's recognition of and response to hazardous situations and results in dangerous practices such as speeding and tailgating.

These are facts that Blumentritt is all too familiar with … not only because of his three drivers, who all fall into high-risk categories because of their ages, but because of the thousands of young Airmen he is responsible for who also reside in this group. Once the colonel signed on for this program, a monitoring device — which included a GPS tracking system and a sensor that could detect unsafe driving practices such as swerving, braking too hard and speeding — was installed in Ashley's vehicle last summer.

"At the beginning I was kind of iffy about my parents being able to see how well I drive," Ashley said. "It made me nervous, and I'd get frustrated when the little blue light went off."

The "little blue light" was linked to the sensor device that would detect unsafe driving practices. Any driving transgressions would set off the light, which would blink on the dashboard.

"That light would go off, and I'd find myself apologizing to it," Ashley said. "I'd be like, *'I'm sorry, I'm sorry, I'm sorry!'*"

Ashley said that at first, she was extra cautious because she wanted to impress her parents. But as weeks turned into months, she grew accustomed to the "little blue tattletale" and settled back into her comfort zone.

"My friends had a lot of fun with it," Ashley said with a good-natured chuckle. "One of my friends thought it was funny to brake-check (hit her brakes hard) when I was following her just to set off my blue light."

Most of the abnormal driving trends tended to be caused by defensive driving — motorists doing illegal U-turns in her path or slamming their brakes, Ashley said.

"Ashley self-reported every transgression because she wanted to preemptively clear her name," Blumentritt said with a laugh. "But I was surprised by the number of abnormal reports that were linked to defensive driving. That prompted me to start watching my own behavior and noticing how many times in downtown San Antonio I have to be attentive and avoid a vehicle, brake quickly, turn sharply. Defensive driving is not necessarily comfortable driving."

After nearly five months with "big daddy" watching, the Blumentritts were happy with the results.

"Overall it was a great experience and helped make me a better defensive driver," Ashley said. "I'm glad I did it."

Her dad agreed.

"Anything that you can do to talk to your teenagers about driving safety is a teaching moment, and by default, a good thing," he said. "They may act like they don't want to hear it, they may push back, they may get bored; but the bottom line is, if it's important to you, it's going to be important to them."

With a Web Tech 7000 GPS Tracking System *installed into her vehicle, Ashley Blumentritt and her dad, Col. John Blumentritt, participated in a pilot program that tracked and analyzed the teen's driving behavior.*

Plane Lands Itself after Pilot Ejects

In the Cold War Gallery of the Air Force's National Museum, one comes across a sleek F-106 interceptor from a long-gone era. Its outward appearance is not unusual. True, it is a sharp-featured, delta-wing beauty, but that is how all of the "Sixes" looked.

Four decades ago in Montana, a pilotless F-106 guided itself to a miraculous landing

By **Peter Grier**
Photos courtesy of the **Air Force National Museum**

However, this particular F-106 possesses a history that is truly extraordinary. That is because this Delta Dart once lost its pilot yet still managed to land itself safely. This is no joke. During a Feb. 2, 1970, training mission that originated at Malmstrom Air

An F-106 Delta Dart *sits in a Montana cornfield after landing without its pilot, Capt. Gary Foust.*

"By all rights, this 'Six' should have ended its days as shards of metal scattered over a square mile or so of the northern Great Plains."

Force Base, Mont., F-106A No. 58-0787 suddenly entered an uncontrollable flat spin, and its pilot was forced to eject.

Rather than plunge into a frozen field, however, the aircraft suddenly recovered. Sans pilot, it eventually made a gentle belly landing on open land near Big Sandy, Mont. … Relatively gentle, in any case. The landing was smooth enough that its jet engine was still running when a local law enforcement officer arrived on the scene.

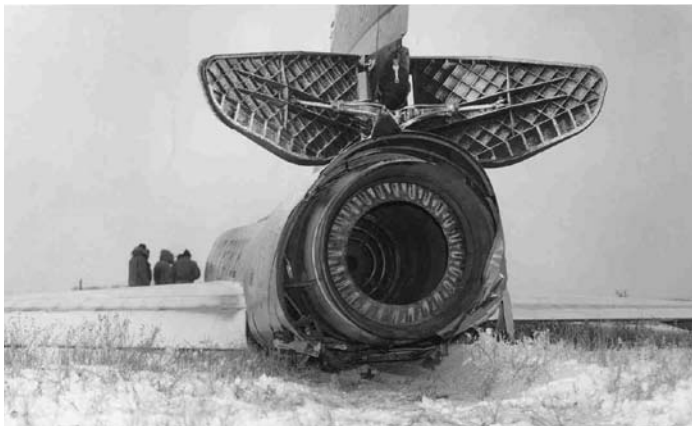
After repairs, No. 58-0787 served several more years in California and New York before eventually finding its way to the museum at Wright-Patterson AFB, Ohio, in 1986.

By all rights, this "Six" should have ended its days as shards of metal scattered over a square mile or so of the northern Great Plains. Instead, it sits amidst other military aircraft from a time of great tension between superpowers, reminding visitors that aircraft with the speed and range to intercept Soviet-manned bombers were once an integral part of U.S. national security.

Two-vs.-One Training

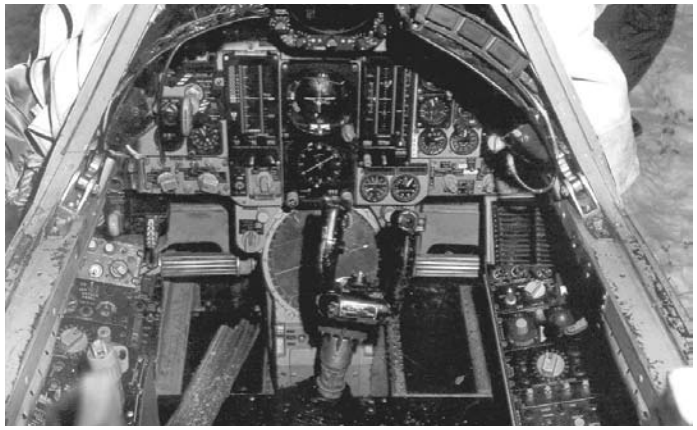
Like any high-performance aircraft, the Six could cause serious trouble for a pilot who pushed its flight envelope. And the Six had some inherent problems as well.

"Despite the level of sophistication found in the F-106A Delta Dart in its service life, it was regarded by the Air Force as having the 'greatest mission-task loaded cockpit' among (the) types flown in the '70s," wrote Christopher T. Carey, a historian at the McClellan Aviation Museum (now Aerospace Museum of California), in his online history of F-106 development. "Despite being an excellent aircraft to fly, it required a competent and proficient pilot to wring every bit of its excellence out of it."



Response crews *were amazed at how little damage was done — just some underside rips that were later repaired.*

Originally, the mission that February day nearly four decades ago was to be a two vs. two air combat training flight, featuring four F-106s from the 71st Fighter Interceptor Squadron at Malmstrom. One aircraft subsequently aborted from the mission when its drag chute deployed on the ramp. So the day's training activity became a "two vs. one" fight.



Back on her gears again, *the F-106 didn't look too bad, inside or out.*

The "one" on this eventful day was Tom Curtis. The "two" were 1st Lt. Gary Foust and Maj. Jim Lowe.

The sides split up, each proceeding to their end of the training air space — about a 20-mile separation. Then they turned into each other, so they would pass head on, with a thousand-foot separation between them.

The rules of engagement were that neither Curtis, nor Foust and Lowe, could try to gain an advantage until they blew past each other. Then the fight would be on.

"We got into a vertical rolling scissors. I gave him a high-G rudder reversal. He tried to stay with me, (but) that's when he lost it."

The point of the exercise was to outmaneuver one's opponent and gain a valid firing position.

"Of course, this was a big ego thing, who was the winner, etc.," said Curtis in his recollection of the incident found at the Web site *www.F-106DeltaDart.com*. "I figured I could handle Gary pretty easy, but I did not trust Jimmy."

So Curtis came at his opponents in full afterburner, doing Mach 1.9 when they passed. Then he took his opponents straight up to 38,000 feet.

"We got into a vertical rolling scissors. I gave him a high-G rudder reversal," said Curtis, referring to Foust. "He tried to stay with me, (but) that's when he lost it."

Foust's Delta Dart began to spin out of control.

Foust experienced post-stall gyration, a situation in which an aircraft can roll left and right and suddenly swap ends. His attempts to regain control failed, and the fighter went into a flat spin at 35,000 feet, according to a 1978 article in the Oneida County, N.Y., Mohawk Flyer (the fighter was by then in service at nearby Griffiss AFB, N.Y.). Usually, that kind of situation is unrecoverable.

"The aircraft looked like the pitot tube was stationary, with the aircraft rotating around it. … Very flat" and slowly rotating, Curtis said.

Foust rode the aircraft down to 15,000 feet, all the while trying spin recovery procedures without success. Lowe, an instructor pilot, followed behind until the aircraft had descended to as low as 12,000 feet.

The "Cornfield Bomber," *as it came to be called, aircraft 58-0787 now sits on display at the Air Force National Museum at Wright-Patterson AFB, Ohio.*

"Eject your drag chute," Lowe instructed, according to the Mohawk Flyer. The newspaper went on to say that "the idea didn't work," and that "the chute flapped in the air and wrapped itself around the plane's tail."

It was time to eject. By this time, though, Foust had gone through many recovery procedures. One of these was to actuate the take-off trim button, which trimmed all control surfaces to a take-off setting. The trim settings for a landing were similar.

Two Safe Landings

"When Gary ejected, the aircraft was trimmed wings-level for about 175 knots (200 mph), a very nice glide setting," Curtis said.

So, when Foust finally ejected — miracle of miracles — the Six recovered and headed off straight and level toward the horizon. Perhaps it was the change in balance, or the force of the ejector seat against the fuselage, or the change in aerodynamics caused by the ejection process.

Whatever it was, Lowe is said to have yelled into his radio, "Gary, you better get back in it!"

At that point, all that Foust could do was watch as his fighter flew off without him.

Foust, dangling from his parachute ropes, landed safely in a mountainous area and was brought out later by locals on snowmobiles. This, after all, was February in Montana.

As the fighter neared the ground, it stayed level and made what is described as an approach for a perfect landing in a snowy field, sans landing gear.

The F-106 wasn't safe yet, however.

"Skidding across the snow, the aircraft veered around a rock pile that was sitting in the middle of the field," the Mohawk Flyer reported. "The F-106 finally stopped near the end of the field, about 400 yards from a paved road."

A local law enforcement officer called Malmstrom to report that he had come upon a fighter that was on the ground, pilotless, and still running. Even the radar scope was still operating. The lawman wanted to know how to turn off the engine. Someone at the base told him to just let it run out of fuel.

The engine continued to run for one hour and 45 minutes.

The landing did a bit of damage to the fighter's underside, ripping open an ugly gash several yards long. The wings, in contrast, were fine.

"As the fighter neared the ground, it stayed level and made what is described as an approach for a perfect landing in a snowy field, sans landing gear."

In time, a team of technicians from the Sacramento Air Logistics Center at McClellan AFB, Calif., came to the site and partially disassembled the Six. They trucked the pieces to a nearby rail line, loaded it onto a flatcar, and shipped the whole thing to California. There, Air Force workers repaired it and returned it to active service.

The F-106's final service was with the 49th Fighter Interceptor Squadron, at Griffiss — the last active Air Force F-106 unit.

By the 1970s, the Soviet Union's increasing reliance on intercontinental ballistic missiles for its nuclear deterrence had lessened the U.S. need for speedy interceptors such as the F-106. In the end, the Delta Dart did not serve in Vietnam, nor did it ever fire a shot in anger. The F-15 began replacing it in 1972, with the Sixes typically being passed along to Air National Guard units. The last F-106 that remained in Air Force service was retired in 1988.

Convair produced about 340 of the fighters for the Air Force. Starting in the late 1980s, about 230 of the surviving airframes were converted into QF-106 drone configuration and used for target practice. Thus the last of the pure air defense interceptors was relegated to aerospace history.

On at least one occasion, however, the F-106 proved that it was an aircraft that didn't even need a pilot. The fighter that somehow accidentally righted itself and landed on its own — wheels up — is now a museum piece. Rightly so.

Mr. Grier, a Washington editor for the Christian Science Monitor, is a longtime defense correspondent and a contributing editor to Air Force Magazine. Reprinted with permission from Air Force Magazine, April 2009 issue.

DISSECTING THE DELTA DART

The F-106 was one of the star performers of the first generation of true supersonic Air Force fighters, the famed "Century Series" that included the North American F-100, McDonnell F-101, Convair F-102, Lockheed F-104, Republic F-105 and Convair F-106.

The F-106 was a derivative of the F-102 Delta Dagger, which had a troubled development and never seemed to quite live up to the Air Force's expectations for performance. Originally dubbed the F-102B, the F-106 eventually received its own designation and its official nickname, Delta Dart. To most who flew it and worked on it, however, it was simply the "Six."

Perhaps the most significant basic difference between the F-102 and the F-106 was in fuselage shape. The Delta Dagger had a somewhat bulky cross section. The Six, by contrast, had a slim, aerodynamically advanced area-rule fuselage, whose pointy cigar shape helped minimize drag-inducing shock waves at supersonic speeds.

The F-106 also featured a more powerful Pratt & Whitney J75 after-burning turbojet. Almost from its first flight in December 1956, the aircraft showed that it would easily meet the Air Force's requirements for a speed of Mach 1.9 and ceiling of 57,000 feet.

"Finally, by the end of the '50s, the Air Force had the long sought after 'ultimate interceptor' it had anticipated in the late '40s," wrote Christopher T. Carey, a historian at the McClellan Aviation Museum (now Aerospace Museum of California), in his online history of F-106 development.

The need for such an interceptor was obvious to U.S. defense officials, who were watching with concern the Soviet Union's development of faster, long-range nuclear bombers. The Six's job would be to run down such intruders, if necessary, and then destroy them with an atomic weapon of its own, a Genie nuclear-tipped rocket.

This blunderbuss approach to air defense was necessary because precision air-to-air weapons had yet to be invented. Instead, F-106 pilots were to launch their Genie toward the target with a characteristic looping motion, then flee, to get as far away as possible prior to detonation.

When it first entered the Air Force inventory, flying the F-106 was a revelation. Maximum speed was Mach 2.31 at 42,431 feet.

"Ask any pilot who has piloted the Six, and he will quite readily tell you that it was one of the best aircraft he has ever flown," Carey wrote.

Handling the delta wing felt much the same as handling more conventional designs. Plus, the delta wing gave more agility at low and intermediate speeds.

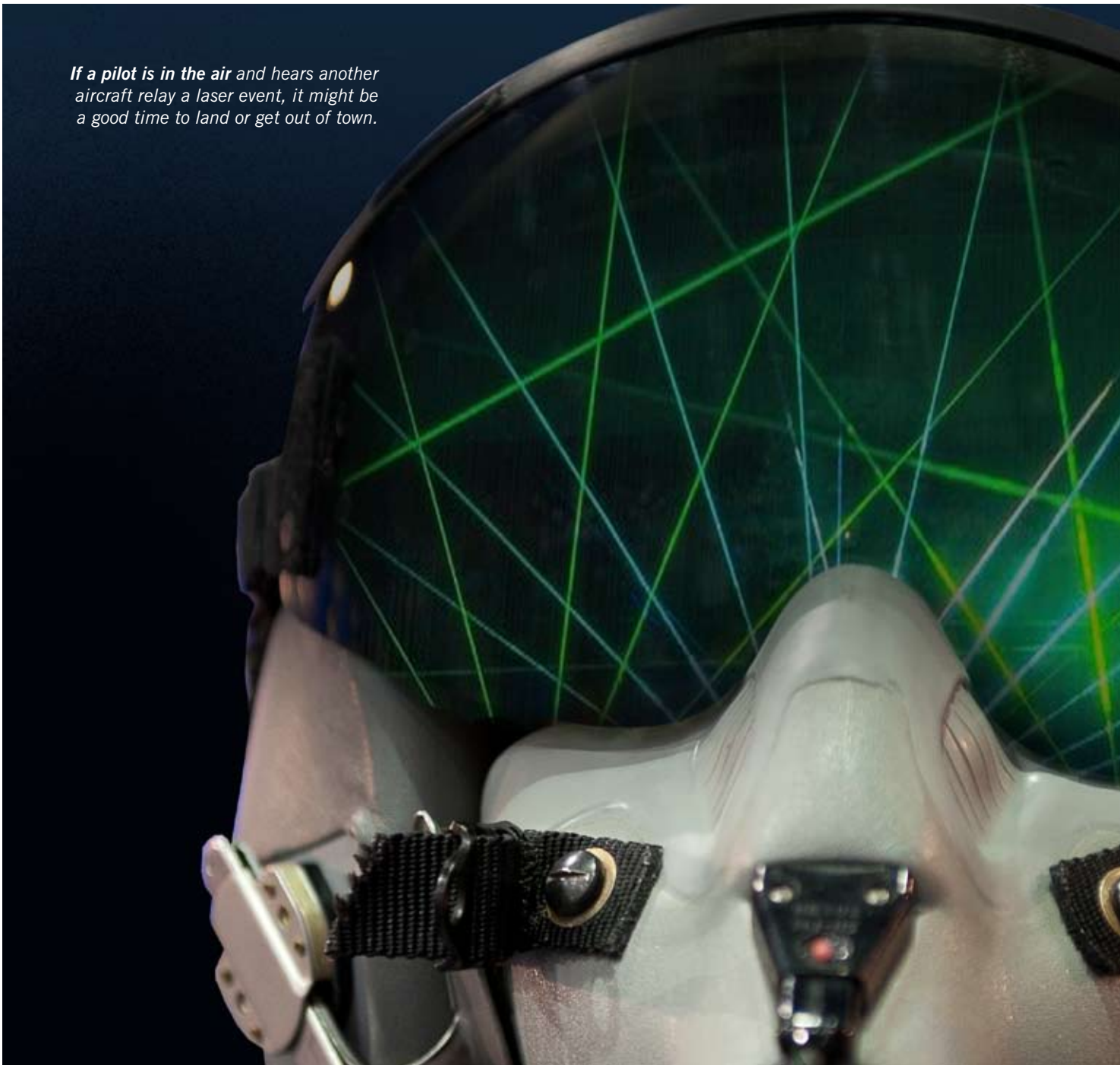
Pitch responsiveness was feather light. The F-106's reaction as it came close to stalling was predictable, beginning with light buffeting and then progressing to worse things. At that point, any increase in angle of attack would lead to severe oscillation and, in all likelihood, a flat spin.

— Peter Grier

LIGHT FRIGHT

AIRCREW LASER EVENTS CAN DAMAGE EYES

By Maj. **CHAD GREINER**
Photo by Tech. Sgt. **SAMUEL BENDET**
Photo composite by **SAMMIE W. KING**



***If a pilot is in the air** and hears another aircraft relay a laser event, it might be a good time to land or get out of town.*

Although fairly rare events for Air Education and Training Command aircrew, laser events still occur and are on the rise in various parts of the world. Aviators have to be careful that these events don't cost them their jobs … or their eyesight.

The means to acquire and even build high strength lasers is increasingly easier via the internet. Many domestic laser events are the result of pranksters, kids, etc., but not all.

Here is a "quick and dirty" guide for aircrew lasing events in the continental United States.

STEP 1: *Don't Go There*

It should go without saying, but ensure you check those NOTAMS (notices to Airmen) for the (insert name of your favorite band from the 80's) laser light show at the stadium along your route of flight. Scheduled laser events *should* be in the NOTAMS. Unauthorized or unscheduled laser events that have occurred to other aircraft *should* be disseminated by the Federal Aviation Administration through the NOTAM system as an "Unauthorized Laser Illumination Event."

Other things to avoid in particular are observatories, firing ranges, restricted areas, etc. Observatories frequently use lasers for sighting targets and for student instruction. Not all observatories are the typical "baseball in a tin can" on top of a mountain. Most universities and many colleges have small observatories on top of a building on their campus that are not obvious from the air.

If you are in the air and hear another aircraft relay a laser event, it might be a good time to land or get out of town. (NOTE: You do not have automatic authority to deviate from air traffic control clearance in the event of a laser incident.)

STEP 2: *Act Like Your Flying Career Depends on It*

Don't let your eye come out of the lasing situation looking like some grotesque deformity out of an alien flick. Don't look directly at the laser. Immediately look away, and shield your eyes. Even indirect eye contact with the laser can cause damage. Regardless of whether or not you still see it in your peripheral vision, it could still cause damage.

Approach books, charts, your arm or any other opaque material should help shield you. Do not rely on your sunglasses or even laser eye protection as a means of defense once a laser event has started. Quick action is essential.

STEP 3: *Report to Air Traffic Control*

Tell air traffic control the location, color, originating position, direction and any other information necessary to allow law enforcement to home in on the source. If in uncontrolled airspace, make an "any radio" call with the time and a brief description of the event.

Don't look back in the vicinity of the laser to give your report. Instead, provide as much detail as you can recall.

STEP 4: *After You Land*

Once on the ground, first seek medical attention as needed. Doctors highly recommend you seek attention whether you have any adverse symptoms from the event or not. You can possibly have damage from the event that doesn't produce any symptoms, but may later. Think in terms of decompression sickness. You might feel fine right now, but that may not be the case 12 hours from now. Damage may be present but not obvious.

File a mishap report with the nearest intelligence shop as soon as possible after the event. They should be familiar with the process and help step you through it. If unable to reach an intel shop, contact the nearest command post, which should be able to assist as well.

Also, please let your base safety office know of the situation for tracking/trending purposes.

Following the appropriate steps can help save your eyesight and career, as well as that of fellow aviators.

Major Greiner is a C-5 pilot assigned to the 68th Airlift Squadron at Lackland Air Force Base, Texas.

CLEAR THE RUNWAY

AIR FORCE HELICOPTER CREW RESCUES FEMALE HIKER

by Master Sgt. Kevin J. Gruenwald

***The 943rd Rescue Group** had to use night vision goggles to rescue a severely injured hiker.*

DAVIS-MONTHAN AIR FORCE BASE, Ariz. (AFNS) — Senior Master Sgt. Mike Flake, an HH-60G Pave Hawk flight engineer with the 305th Rescue Squadron here, had been flying a training mission Dec. 22 around Tucson, Ariz., where his unit trains regularly.

Upon clocking out, he was home by 9:30 p.m., enjoying family time, when he received a call from a Pima County Search and Rescue official requesting his help.

"They told me a female hiker had fallen, and they thought she had broken her leg and back," Flake said.

This set the "rotors" in motion to rescuing a 23-year-old woman from Pusch Ridge in the nearby Santa Catalina Mountains, where she had been lying, injured, for hours.

Civilian rescue workers on the scene treated the woman and secured her to a back board because of a possible back injury. But high winds made the Department of Public Safety helicopter turn away, and darkness kept the civilian rescuers from carrying her down to the trail head.

Familiar with the terrain, and with just enough time left on his "crew clock," Flake went back to work, along with pilots Lt. Col. Paul Anderson and Capt. Anderson Kester and an aerial gunner Tech. Sgt. Josh Donnelly, to help guide the aircraft into the steep terrain.

Despite the winds, the members of the 943rd Rescue Group were equipped for the conditions. The only challenge they faced was that it was the end of the duty day, and Air Force safety regulations prohibit them from operating aircraft without the proper crew rest.

Within work-rest limits, the crewmembers got to base and did some mission planning, Anderson said.

"The mountain is close to 8,000 feet high," he said. "We plotted the coordinates and (the hiker) was at 4,500 feet. We determined how much power we needed."

The higher a helicopter goes, the less power there is to hover, because the air is thinner, he said.

Although there was a slight cloud cover, Anderson said he was glad there was also a full moon.

The more ambient light there is, the better the night-vision goggles work, he said.

The crewmembers took off at 11:25 p.m. for the 10-mile flight to Pusch Ridge.

The area was clearly marked by an infrared strobe, visible only to those wearing night vision goggles.

> **"They told me a female hiker had fallen, and they thought she had broken her leg and back"**

The crew did a few practice approaches to see what the winds were like, and picked out a spot where they could lower Senior Master Sgt. Michael Atkins, a pararescueman, or PJ as they are often called, with the 48th RQS.

"The winds were high, but we got underneath that turbulent air as we got closer to the mountain," Anderson said.

They flew in among the granite cliffs.

"I hoisted the PJ down about 100 feet," Flake said. "It was pretty steep.

"Anytime it's dark and windy near the side of mountain, you can't get too low because of the clearance of the rotor blades," he said. "That's why we could only get down between 70 and 100 feet. No trees were sticking up, but it was really rocky."

The PJ unclipped, and the chopper flew off. Atkins rigged the patient's litter with cables.

Fifteen minutes later, the chopper returned, and Flake hoisted the litter carrying the patient who was completely covered in a sleeping bag and blankets.

The hiker had been dealing with her pain for more than five hours.

"That's a long time to be strapped to a back board," Flake said.

In a little more than an hour, the Airmen got the injured hiker out of the crevasse and to a nearby hospital.

"This is exactly what makes combat search and rescue the best mission in the Air Force, said Col. Harold Maxwell, the 943rd Rescue Group commander. "Not only is our wartime mission second to none as our Airmen save lives from the battlefields of Afghanistan, but as reservists, they're making an impact right here in their local community. An Air Force rescue helicopter and night-vision-goggle-equipped crew made all the difference."

— Capt. Cathleen Snow
920th Rescue Wing Public Affairs

MULTIPLE FACTORS LIKELY CAUSE OF FATAL CV-22 CRASH

HURLBURT FIELD, Fla. (AFSOCNS) — On Dec. 17, Air Force Special Operations Command officials released the results of their investigation into the April 9 CV-22 Osprey accident, near Qalat, Afghanistan, that killed four people and injured 16 of the 20 onboard.

The pilot, flight engineer, an Army Ranger and a civilian contract employee were killed in the crash.

Concluding the investigation, the accident investigation board president could not determine the cause of the mishap by the standard of "clear and convincing evidence," in part because the flight incident recorder, the vibration structural life and engine diagnostics control unit, and the right engine were destroyed and, therefore, not available for analysis. After an exhaustive investigation of the available evidence, the board president ruled out multiple possible causes. Items ruled out included loss from enemy action, environmental brownout conditions and vortex ring state. In addition, a design problem that led to the replacement of the central de-ice distributor support bracket found in all Marine Corps and Air Force Ospreys was not a factor.

The board president determined 10 factors substantially contributed to the mishap. These included inadequate weather planning, a poorly executed low-visibility approach, a tailwind, a challenging visual environment, the mishap crew's task saturation, the mishap copilot's distraction, the mishap copilot's negative transfer of a behavior learned in a previous aircraft, the mishap crew's pressing to accomplish their first combat mission of the deployment, an unanticipated high rate of descent and engine power loss. Substantially contributing factors play an important role in the mishap sequence of events and are supported by the greater weight of credible evidence.

The convening authority approved the board president's report, with comments. While legally sufficient, he assessed the evidence in the investigation report did not support a determination of engine power loss as one of the 10 substantially contributing factors. The convening authority made this decision based upon the evidence in the report and additional analysis of the evidence in the report. The convening authority concluded the preponderance of credible evidence did not indicate engine power loss as a substantially contributing factor of the mishap.

After a review of the original report, the convening authority's statement of opinion and additional material obtained after the completion of the report, the chief of staff of the Air Force reopened the investigation and directed the board president to analyze the additional information.

The board president conducted a follow-on investigation to analyze two Naval Air Systems Command reports and the convening authority's analysis of video data. After consideration of the new material, the only fact the president changed from his original report was the ground speed of the aircraft at impact from what was believed to be 75 to 80 knots at the time of impact. The remainder of the findings remained unchanged.

by Tech. Sgt. Matthew Hannen

Air Force Special Operations Command *officials released the results of their investigation into the CV-22 Osprey accident that occurred April 9 near Qalat, Afghanistan. Four people were killed, and 16 of the 20 people onboard were injured in the accident. The CV-22, like the one shown here, is a tilt-rotor vertical takeoff and landing aircraft.*