Air Education and Training Command's

TE DIDT MAKES HATTOWING LANDING



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UH-1 crew must extract injured Airman from wilderness **FAGE 18**

Alone in the middle of a lake in a foreign country, an Air Force civilian with a busted jet ski has to figure out how to get to shore ... alive! **PRGETZ** "Risk management is a more realistic term than safety. It implies that hazards are ever-present, that they must be identified, analyzed, evaluated and controlled or rationally accepted."

— Jerome Lederer Director of the Flight Safety Foundation for 20 years and NASA's first director of Manned Flight Safety





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Cover photo by Tech. Sgt. Sarayuth Pinthong Back cover photo by Tech. Sgt. Markus M. Maier **TORCH** – the official safety magazine of Air Education and Training Command

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MAKE IT THE NORM

Ver the years our AETC family has made it only one summer — 2010 — without a fatality. We must do everything in our power to make the summer of 2010 the norm and not the aberration. Unfortunately, Air Force safety statistics confirm the Critical Days of Summer, the time between Memorial Day and Labor Day, shows an increase in mishaps, especially in off-duty activities. Add to this the increased stress from current budget crisis, furloughs and an uncertain future, and we can find ourselves even more at risk.

Last year alone we lost 17 Airmen across the Air Force and two Airmen in our command. The Airmen we lost in AETC were 21 and 24 years old, and both died riding motorcycles.

Even one loss is one too many.

Across the Air Force the leading cause of fatal mishaps during this period continues to be off-duty private motor vehicle mishaps, followed by water sports and drowning. Whether traveling at excessive speeds, driving while fatigued, failing to fasten seat belts, drinking and driving, or not using personal

using personal flotation devices, the sad news is that all of these mishaps were preventable. While all

Airmen have a commitment to the core values of integrity, service and excellence, Airmen must also have "Across the Air Force the leading cause of fatal mishaps during this period continues to be off-duty private motor vehicle mishaps, followed by water sports and drowning."

a commitment to their family, friends, co-workers and country to value safety with the same intensity that is held for our other core values. All Airmen are encouraged to discuss mishap prevention techniques in addition to the four pillars of wellness: social, spiritual, mental and physical. Safety is critical to our total well-being.

Supervisors at all levels must engage their Airmen and ensure they understand their role in mitigating risk for themselves and their families. Additionally, continued education efforts should focus on creative ways to communicate the importance of safety for our Airmen.

Success in reducing preventable mishaps depends on strong leadership, effective training, looking out for each other, taking care of the four pillars of wellness, and maintaining our vigilance.

I challenge all of you to make 2013 the safest summer on record. We cannot afford to lose a single Airman.

Our ability to accomplish the mission depends on each of you. Be smart. Emphasize risk management. And, remember, Airmen take care of Airmen. Enjoy the summer months ahead, and be safe.

hleven A. Z



FINGER AMPUTATIONS

I found your article "Four-finger Discount? Preventable Mishaps 'Stealing' Digits at Record Clip in FY 2013" (Spring 2013 issue, cover story) very interesting. But it got me to thinking about what I would do if one of my family members or I accidently severed a finger. I found some information on-line and thought you might like to share it with your readers.

In the event that your finger is amputated during an accident, the American Academy of Orthopedic Surgeons offers this advice:

• Apply pressure to the injured area immediately.

• Gently cleanse the amputated part with water (preferably saline).

- Cover it in gauze wrap.
- Put it in a watertight bag.
- Place the bag on ice.

• Do not put the amputated part directly on ice. You could further damage it.

• Take the amputated part with you to the emergency room immediately.

> Bernie Speights Via e-mail

CRIME AND PUNISHMENT

Wow! Just read the article "I Killed My Best Friend's Sister" (Spring 2013, page 8) and am shocked. I can't believe the Airman killed one of his passengers while texting and driving and did not go to jail. He is lucky the victim's twin sister helped get him off the hook. Good on him for sharing his story to try to bring awareness to this, but I'm still surprised he escaped jail time.

> J.T. Thompson Retired Army Reserve

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

dis.af.inf. of mari to forcin 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.

IT CAN'T BE EASY.

Thank you to Senior Airman Caleb Zody for sharing his story ("I Killed My Best Friend's Sister," Spring 2013, page 8). He made a big mistake, but it appears he is doing his best to atone for it. It can't be easy for him to talk about, but he is doing a good thing by bringing more awareness to the growing problem of texting and driving. *Master Sgt. Andy Michaels Via e-mail*

AS GOOD AS ADVERTISED

It's good to know flight suits work as advertised ("Girl on Fire," Spring 2013 Torch, page 16). But maybe if they are so effective they should be issued to all Airmen. It's a proven uniform — fire retardant and iconic for our service. Instead of changing utility uniforms every couple of years, the Air Force should just make the flight suit the service's standard utility uniform. Just a thought ...

C. Gable Via e-mail



WAISTLINE vs. WASTE LINE

Thanks for your article "Diet Drinks + Alcohol = 'Pour' Judgment" in the Spring 2013 issue of Torch ("The Alert Consumer," page 7). I don't drink that often, but when I do, I like to mix my drinks with diet cola to save calories. I never knew that could actually increase the negative effects of alcohol to your system. I'm sure a lot of people don't know about this. I wonder how many people have been in an alcohol-related accident or been pulled over for DUI because of this very thing? It's not worth it to save a few calories if it's going to get you into trouble.

Mary Pratt Via e-mail

TO WESTAFRICA WITH LOVE

I work in the Nonresident Programs Division of the Defense Language Institute English Language Center.

In late 2012, I was TDY to Niamey, Niger, and was given a tour of the main air force base there. At the conclusion of the visit, one of the Nigerien officers removed a calendar from the wall and presented it to me as a gift. It was their official air force calendar, which shows their planes and some base facilities.

Recently, a couple of Nigerien Air Force members arrived at DLI to study English. When they return homeland in a few weeks, I am going to present some 2013 Torch Calendars to them. I am sure they will proudly display them around their base.

> Dawn Moore Joint Base San Antonio-Lackland, Texas

WENT LIKE HOTCAKES

The Torch calendars made it (to forces in Southwest Asia) and were such a big hit here that we ordered more. Once guys found out there were more calendars, they went like hotcakes. As you know, counting the days is a number one priority when deployed ... it gives sanity to all. Thanks a million!

Glenn M. Harman Kabul, Afghanistan

DEATH WISH?

Reference your story "Lightning Jackpot? Oklahoma Man Struck Six Times" (Spring 2013 Torch, "Tales of the Strange," page 6): Anyone who gets struck by lightning a half dozen times isn't trying very hard to avoid it. Seems to me the guy has a death wish.

Pierre De Letoile Ontario, Canada

TIRE IN THE HOLE!

Here's a cautionary tale for Torch readers. ... This morning on my way to work, I had just turned onto San Pedro and the light at Ramsey was red. As I slowed the light turned green, and I noticed a vehicle going the other direction. The large sport utility vehicle pulled to the side with flashers going.

There weren't any other vehicles on the road yet, so I sort of concentrated on what was going on while going slow in my lane to ensure the lady in the SUV was OK. She got out in her high heel boots and looked at the rear of her vehicle.

That's when I noticed the entire wheel was missing from her SUV, and the axle was sitting on the ground! I said, "Oh -----!" and then said a prayer for her. I should have said one for myself as well.

For just then, a black menacing object came rolling toward me. Yep, the tire off her vehicle crossed the highway, jumped the median and rolled under my car. Then I could see it in my review mirror as it somehow continued on its way looking for more victims. I pulled over and checked my car. My little Escape Pod had escaped injury. My nerves were rattled, and I was definitely awake now. The moral of the story is to stay focused and pay attention. Don't become a spectator when driving — especially in the dark. You never know when a wild, carnivorous wheel is going to try to chomp on the underside of your vehicle.

> Della Williamson Joint Base San Antonio-Randolph, Texas

LIGHTNING **STRIKES** WEATHERMAN

Weather forecaster Senior Airman Erik White stands in front of a newly installed portable Doppler radar May 4 at the 386th Air Expeditionary

BY STAFF SGT. AUSTIN KNOX

COMMAN

Asia. White is deployed with the 386th Expeditionary Operations Support Squadron and is tasked to accurately predict the weather based on current conditions and weather models.

Wing, Southwest

SOUTHWEST ASIA (AFNS) — A weather Airman who issues warnings when lightning strikes take place within five miles of an air base here knows the danger: He's a lightning-strike survivor.

Senior Airman Erik White, a 386th Expeditionary Operations Support Squadron weather journeyman, was taking pictures when he was struck by lightning as a thunderstorm rolled in while he was stationed at Barksdale Air Force

Base, La. He suffered second- and third-

degree burns from his knee to his foot, but he was lucky. According to the National Weather Service, lightning has killed 9,235 people in the United States since the agency started tracking fatalities in 1940.

"It gave me a strong understanding of how powerful and how dangerous weather can be," White said.

White's recovery included more than two months of convalescent leave and an early end to his amateur weather photography career. He still feels the effects of that electrifying day, he said.

"I have some nerve damage in my leg, and it feels like that tingling feeling when your foot falls asleep," he explained. "It was about a year and a half before I fully got back to normal. I can tell you, it was a shocking experience."

After graduating from basic training, White spent the next eight months at Keesler Air Force Base, Miss., learning about the power of weather. "Weather is interesting — it's 90 percent boring and 10 percent all craziness," he said. "There are two aspects of our job: the flying world and the personnel and resource protection aspect." The flying aspect of White's job provides pilots and crews the

information necessary to complete their mission.

We provide flight weather briefs and tell them about any haz-

ards they may encounter en route," he explained.

The other aspect of White's job aims to protect personnel and the resources on the base.

"We provide the 'lightning within five' warnings that you hear across the loudspeaker to keep people safe," he said. "We also issue certain warnings to help base commanders take preventive actions like tying down or moving aircraft."

Today, these warnings have a special meaning for White. "I always tell people, of all of our 'big boy warnings' like tornadoes, damaging winds and hail, I think 'lightning within five' is the most important, because lightning kills more people every year."

Understandably, thunderstorms still trigger stress for the Bloomfield, Ky., native.

"When the thunder roars, I go indoors," he said.

— Senior Master Sgt. George Thompson 386th Air Expeditionary Wing Public Affairs

"I have some nerve damage in my leg. ... It was about a year and a half before I fully got back to normal. I can tell you, it was a shocking experience."

AIRMAN RECOUNTS DRUNK DRIVER

"A drunk driver sideswiped [my parents].

Dad lost control of the car and hit a tele-

phone pole head on. Mom wasn't wearing her

safety belt, and her face went through the

windshield. ... Dad suffered a broken back."

BY SAMMIE W

Some things occur in life that you never forget — things that leave a scar or never heal — but still serve as teaching moments. My lesson in drunk driving came at the tender age of 11.

It was Friday, date night for my parents.

I was 11, and my little sister, Jen, was 9.

It was awesome! Jen and I had the whole house to ourselves. At around 2 a.m., however, excitement turned to fear. ...

Someone was knocking on our front door.

I didn't grow up in the best neighborhood, so there was no

way I was opening that door. As the knocking persisted, we grew more terrified. Jen and I actually hid under the bed. Was someone trying to break into our house?

We eventually fell asleep, huddled together, still cowering under the bed. When we woke up later that morning, we cautiously crept out from under-

neath the bed. We tiptoed to mom and dad's room and knocked on the door.

No answer.

I opened the door. ... They hadn't come home!

I picked up the phone to call my grandpa and found it had been off the hook since last night.

Grandpa told me mom and dad had been hit by a drunk driver. He said it happened around 1 a.m., and he had tried to call us. When he couldn't reach us, he had driven to our house and knocked on the door and windows.

SOBERING FACTS

 Every day, almost 30 people in the United States die in motor vehicle crashes that involve an alcohol-impaired driver. This amounts to one death every 48 minutes.
 In 2010, 10,228 people were killed in alcohol-impaired driving crashes, accounting for nearly one-third (31 percent) of all traffic-related deaths in the United States.
 Among drivers with blood-alcohol content levels of .08 percent or higher involved in fatal crashes in 2010, more than one out of every three were between 21 and 24 years of age (34 percent). The next two largest groups were ages 25 to 34 (30 percent) and 35 to 44 (25 percent).

— National Highway Traffic Safety Administration

Once safely with our grandparents, we were told the details of the accident. My father was driving home when a drunk driver swerved into their lane and sideswiped them. Dad lost control of the car and hit a telephone pole head on. Mom wasn't wearing her safety belt, and her face went through the windshield. Dad had this crazy adrenaline rush and pulled my mom out of the car. But he also was badly injured ... he suffered a broken back.

After my grandpa gave us the news, Jen freaked out and I cried. I'm not sure if I was crying from sadness or because I was angry as

hell ... probably both.

The good news is my parents miraculously survived. As a matter of fact, they came home from the hospital Sunday evening, just two days after the accident.

My dad still had a long recovery ahead — his broken back put him out of commission for nearly seven months. And

my mom wasn't in much better shape.

Our lives changed drastically. No more family outings to the park, no more fun or normal things for kids our ages. Instead, the next several months consisted of Jen and me taking care of

our parents.

What upsets me the most is that this didn't need to happen; responsible decisions could have prevented the entire event. My life was affected by an irresponsible, selfish guy who couldn't make the right decision concerning drinking and driving and almost killed my parents. Don't be that guy.

> — Tech. Sgt. Crystal Lee Armed Forces Network, Incirlik Air Base, Turkey

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SALT AND ICE, CINNAMON SPICE TWO CRAZY CHALLENGES THAT DON'T END NICE



With a cross burned onto his back, this 12-year-old boy experienced the dangers of the "salt and ice challenge."

They are the latest, greatest fads for kids and young adults: the "salt and ice challenge" and the "cinnamon challenge." The problem for many is these wildly popular games can be dangerous and are sending people to the emergency room.

Videos of these dares have gone viral on social media sites such as Facebook and YouTube. Teens and young adults are posting videos by the thousands to get a laugh and prove their own "salt," so to speak.

To play the salt and ice challenge, people press salt and ice against their skin until the ice melts completely or for as long as they can tolerate the pain. In the cinnamon challenge, they must try to swallow a tablespoon of cinnamon in 60 seconds or less without using water.

But what most of the videos don't show are the serious risks these so-called challenges pose.

Last summer, a 12-year-old boy from Pittsburgh, Penn., sustained second-degree burns on his back taking part in the salt and ice challenge with his twin brother and a friend, according to the *Pittsburgh Post-Gazette*. The injuries required treatment at a burn center.

The unidentified youth lay on his stomach during a sleep-over at his house as his brother and a friend put salt in the form of a cross on his back, then put ice cubes atop the salt before applying pressure, the *Post-Gazette* reported.

Ariel Aballay, director of the West Penn Burn Center, held a news conference to alert parents of the serious injuries the challenge can cause. In just moments, the challenge can cause first-degree cold injuries of redness that can take a few days to heal. The Pittsburgh youth's injuries caused severe blistering and required drug treatment with a lotion that had to be applied four times a day for months. He was not allowed to swim or go outside without a shirt all summer.

"The injury is similar to frostbite," Dr. Aballay said. "The longer (the exposure), the more serious the injury."

The boy's mother said her son withstood the challenge for 20 minutes, eventually losing any sense of pain or feeling, the *Post-Gazette* reported. She stressed the need to let the public know the potential consequences of the challenge.

Suffering second- or third-degree burns might make the "cinnamon challenge" seem like a walk in the park, but it turns out it's no picnic either.

A person could go on YouTube and watch tens of thousands of videos showing people shoveling a spoonful of ground cinnamon into their mouths. The task is not easy, because the spice in large quantities triggers a gag reflex. The videos show people coughing, choking and lunging for water, usually as friends watch and laugh



The "cinnamon challenge" involves shoveling a spoonful of the spice into your mouth. The problem is the powder can be caustic to the airways and cause scarring of the lungs.

as the first puff of cinnamon — A.K.A. "dragon breath" — comes spewing out of the contestant's mouth.

But doctors and poison control experts are warning people that this seemingly harmless dare is more dangerous than it appears. A report published in the Journal of Pediatrics found that the stunt has led to a growing number of calls to poison control centers and visits to emergency rooms. Some teenagers have suffered collapsed lungs and ended up on ventilators, according to an article in the *New York Times*.

"People are being poisoned and sickened because of this," said Dr. Steven E. Lipshultz, an author of the new report and a professor of pediatrics at the University of Miami Miller School of Medicine. "We have seen a rise in calls to poison control centers around the United States that mirrored the rise in YouTube videos and their viewing."

The report found that in 2011, the American Association of Poison Control Centers received 51 calls related to the cinnamon challenge. Then, in the first six months of 2012, the number of calls rose to 178. Thirty of those incidents were serious enough to require medical attention.

Dr. Lipshultz found that calls to the Florida Poison Information Center in Miami about cinnamon toxicity showed a similar pattern in 2011 and 2012. Most involved adolescents who were suffering from burning in the airways and in some cases nosebleeds, vomiting and difficulty breathing.

Although the spice is harmless and potentially even healthful in small amounts, it can be caustic to the airways when inhaled, causing inflammation and scarring of the lungs, the *New York Times* article said. Laboratory studies show that just one instance of inhaling a large dose of the powder can produce progressive lung damage.

— Tim Barela, from wire reports

RISK MANAGEMENT FORMULA COULD HAVE HELPED MANAGEMENT FORMULA COULD HAVE HELPED Sunscreen is designed to prevent people from getting humad

Sunscreen is designed to prevent people from getting burned, right? That desired result turned out to be an epic fail for Brett Sigworth. Last summer the Stow, Mass., resident sprayed on some Banana Boat Sport sunscreen, went to tend to some hot charcoal briquettes in his barbecue pit and instantly went up in flames!

"I walked over to my grill, took one of the holders to move some of the charcoal briquettes around and all of a sudden it just went up my arm," Sigworth told CBS Boston. "I went into complete

panic mode and screamed. I've never experienced pain like that in my life."

Sigworth's friends and girlfriend helped put out the flames and saved his life. He got second-degree burns on his chest, ear and back that correspond with the lines where he applied sunscreen.

Appying risk management — by both Sigworth and the Banana Boat company would have actually gone further to protecting him from burns.

Warnings on the bottle, which was pulled from stores shortly after the incident, state the product is flammable and should not be applied near heat or an open flame. But it doesn't give any warnings about once the product is applied.

Perhaps if Sigworth had identified the hazard and assessed the risk, he would have came to the conclusion to wait to apply the sunscreen until after he finished with the barbecuing. Or he could have rubbed in the product better and waited a few minutes before approaching the fire, as it's the fumes from the aerosol spray that likely caught flame. Or he could have simply used a non-aerosol sunscreen, which is not flammable.

The company, on the other hand, should have had more comprehensive warnings to help people gauge the risk better because aerosols contain propellants, which are flammable gasses. Or even recommend using a lotion sunscreen if near an open flame.



Brett Sigworth suffered second-degree burns to his chest, ear and back when his spray-on sunscreen caught fire.

RISK MANAGEMENT TRANSFORMATION

In its continuing pursuit to make risk management a part of its everyday culture, the Air Force released the latest, greatest guidance to this endeavor. Here are some highlights of Air Force Policy Directive 90-8.

• It dropped the "O" from "operational risk management" and changed it to "risk management." The "O" tended to give folks the feeling that risk management only applied to the operational flying side of the Air Force, which couldn't be further from the truth.

• It revised the steps in the risk management process from six to five (see illustration).

• It directs Air Education

and Training Command, along with the Air Force Academy, to integrate risk management into curricula for all education and training programs, including accession training, professional military education, continuing education and technical training.

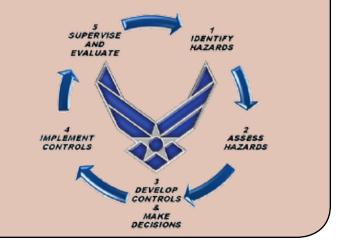
• A big change to the accompanying Air Force Instruction 90-802 is the addition of periodic refresher briefings or presentations. The wing or unit commander will direct these, and the topic will be at the discretion of the commander. Refresher training should be scheduled on safety days, training days, commander calls, etc.

• AFPAM 90-803 — the risk management toolbox —

gets into great detail on ways to do proper risk analysis with many examples of how to do it.

• Visit the risk management Web site, which you can access through the Air Force Portal to the AFSEC site. If you have any questions, you might contact your local wing risk management advisers, or contact the major command representatives at DSN 487-5817.

— Randy Schavrien AETC Safety Directorate



When his boat didn't stay anchored to shore, it set into motion a sequence of events that almost cost an Airman his life.

Anchor's Away!

The tide took his boat; then it tried to take his life

By Staff Sgt. ALBERTO V. DA SILVA Photo by Tech. Sgt. SARAYUTH PINTHONG

I couldn't feel my arms anymore; they hung uselessly at my side. My legs had gone numb and were barely responding. My eyesight had become a small shadowy tunnel full of fireworks that were growing dimmer by the second. I sank under water again. My heart beat so loudly it made my ears hurt. Desperate for a breath of air, I inhaled sea water. It burned — burned worse than any rot gut whisky a person could conjure up. So was this it? Was this the way I was going to die? On a beautiful Sunday in February, a good day turned bad very quickly off the coastal waters of Panama City, Fla., just a hop, skip and a jump from my duty station at the 325th Fighter Wing, Tyndall Air Force Base, Fla.

That day, the temperature was perfect, winds calm and tide low. Ideal conditions for boating and for one of my wife's favorite hobbies ... scouring the beach for seashells to use in our art projects.

We went to the far end of Crooked Island where, if you swam across, you would be on the east tip of Tyndall beach. Everyone had an awesome time. Our little girl, Naomi, and our dogs ran and played all day. My wife, Pam, and I found a large bounty of perfect shells and sand dollars.

As it got later and the wind grew cooler and stronger, we piled back in the boat. We were in shallow water, where normally I would push the boat out into deeper water and take off. But this time I decided to make things more interesting. I untied the anchor from the cleat, stood on the bow of the boat, and threw the anchor out while hanging onto the end of the rope to which it was attached. Then I used the anchor and rope to pull the boat out to water deeper where I cranked the engine.

Unconventional but effective!

We passed the tip of Tyndall beach when Pam asked to make a quick stop to see if we could find any "cool" shells on this side. No one was ready for the great day to end, so, of course, we stopped. We got into the shallow water near the beach and dropped anchor. Then Pam, Naomi, our dogs and I got out of the boat and did some more exploring.

We went for a short walk around the tip, but far enough to where we lost sight of the boat.

On the way back, I noticed the boat looked much farther from where we had

originally left it. As we drew closer, panic set in. We got a clear view of the boat and realized it had drifted about a half-mile into the middle of the bay. There sat the anchor ... still on the sand where I left it with the entire rope still attached to it.

Then it hit me. When I was "playing" with the anchor, I hadn't refastened the rope to the cleat. There was nothing tying the anchor to the boat.

We were stranded.

And we hadn't taken anything off the boat for this "short" excursion — including our cell phones.

66 No more than 30 yards from being able to walk out, it may as well have been 10 miles. I had nothing left. I thrashed wildly but had no control over my limbs. With one last scream for help, I went under.??

It would be completely dark in less than an hour. Something had to be done.

With everyone's adrenaline pumping, I decided to go after the boat.

I'm a good swimmer. Under favorable conditions, I can stay an entire day in the water. The boat wasn't too far. And with the wind and current all pulling me in the same direction as the boat, I reasoned it would be easy for me to catch up to it.

I walked as far as I could off the sand bar. Then, without a life vest, which was still in the boat, I dove into the water and began my swim toward the boat.

On a nice, steady pace, I began to make great distance from the shore. Behind me my wife, daughter and dogs began to get smaller and smaller.

About 15 minutes in, I noticed some-

thing I had never felt before. My hands were numb, and I could not move my fingers. I couldn't feel my toes either. While I had considered my swimming ability, I hadn't calculated the effect the colder water this time of year would have on my body.

I stopped and looked at the boat. I didn't seem any closer to it than when I started. I peered back toward shore. To no surprise, I was really far from the beach. My years of training in the military and Jiu-Jitsu, combined with my experience in swimming and doing high-risk sports, had taught me not to panic.

That said, I knew I was in *BIG* trouble. Immediately, I weighed my options. The boat was the closest thing to me, but there was no way I could reach it with the tide constantly moving it. The opposite shore was at least another mile — even if I floated I'd freeze before getting there.

Going back to my original starting point proved to be my only viable option.

I turned back, saw the tiny figures of my family members on the shore and started swimming toward them.

Now I was working against the wind and the incoming tide, so I had to swim at a 45-degree angle toward shore. Of course, this meant my trip back just got a tad bit longer and tougher.

After a few minutes of swimming, my condition deteriorated quickly.

I no longer had feeling in either of my arms up past the elbow. My legs were moving via my hips and gluteus muscles only. I couldn't take a full breath no matter how hard I tried.

Nevertheless, I made progress. When I got to within 200 yards of the shore, I felt a ray of hope. If I could swim another 120 yards, I'd reach a sandbar and be able to stand. I felt confident I could make it.

That confidence disappeared when



I suddenly lost control of my arms.

I sank under water.

I forced myself not to panic. I began to swim with my arms pinned at my sides and my legs kicking like a dolphin. Within a few kicks I gulped air and began moving forward.

I could hear Pam screaming, "You can do it! You can do it!"

I knew I was in a race against the clock. My body was quickly shutting down like a stopwatch winding down to its last tick.

I sank a second time, sucking in water instead of air. The pain was unbearable.

I thought about my wife, my daughter, my family, my dogs, my school, my teammates. I thought about not watching my little girl grow up, get married. I couldn't go down like this. I had to fight. I had to see my wife and child one last time.

I pushed with every bit of strength I could muster. It wasn't cohesive, it wasn't pretty, but I moved. I hurt and felt like I was tugging concrete, but I moved.

It seemed like an eternity before I broke the surface of the water. I could see Pam standing at the edge of the sand bar. I hungrily gasped for bits of air.

No more than 30 yards from being able to walk out, it may as well have been 10 miles. I had nothing left. I thrashed wildly but had no control over my limbs. With one last scream for help, I went under for the last time.

This time when I inhaled the water, it didn't burn so much. It just tasted weird. I felt my entire body cramp, and it began to shake. I desperately needed air.

Were these my last moments on Earth?

As I started to lose consciousness, I felt something touch me. I could hear a faint screaming. Suddenly, there was a hand under each of my armpits, and I could hear grunts and groans coming from behind me. I tried to use my limp limbs to help, but, in agony, I passed out.

A few minutes later I came to in about 3 inches of water. Ironically, for the first time, panic really set in. I got on my hands and knees, crying and screaming incoherently. I didn't want to be in any water at that point — not even 3 inches.

With assistance I managed to get my

LESSONS LEARNED FROM THE DAY I ALMOST DIED

1 Never, ever play with boating equipment, and remember to secure it.

2 If you leave your boat, take everything with you, including life jackets (keep spares in the boat).
3 Always ensure the anchor is properly secured (and two anchors are better than one).
4 Always bring a few pieces of warm clothing to the beach. You never know when something may cause you to camp for the night.
5 Never try to swim down a boat that is adrift.

– Staff Sgt. Alberto Da Silva

body on dry sand. I looked up and noticed the sky was beginning to turn dark blue. Then everything went black again.

I awoke two minutes later, able to think more clearly at this point. I saw my wife. My beautiful Pam had risked her own life and plunged into the frigid waters to pull me out. She had left our toddler on the shore with our dogs. There had been no time to think. She had acted out of desperation.

As I slowly regained feeling in my limbs, I was able to move and eventually stand on my own two feet. It felt like I weighed two tons.

With the world spinning around me, I must have looked a fright. My breathing was shallow. Grunting and drooling, I couldn't form words.

When I attempted to speak, my body gave way again. I felt this fire in my stomach, all my joints began to hurt, my heart squeezed, and it felt like something exploded in my head.

I fell over and couldn't move. My eyes were open, but I was unresponsive.

I began to expel anything inside my body that wasn't attached to something. I laid there, losing all control.

I felt shame.

Fifteen minutes later my heart rate finally started to slow. In agony from my cramped limbs, I got up from my sandy bed and walked into the water to rinse off. After walking around for another 15 minutes or so, almost all my cramps were gone. ... Progress!

We walked more than 5 miles in the soft sand and finally reached the NCO beach boardwalk. Fortunately, we had turned on the "find my phone" feature on our cell phones, which helped us to pinpoint the exact location of our boat.

A friend helped me locate the vessel, untouched and unharmed.

In reflection I risked my life and the lives of my wife and child by making some poor decisions. Thankfully, Pam and Naomi weren't hurt, and I made a full recovery. But I'll never forget that good day gone bad.

Sergeant Da Silva is with the 325th Fighter Wing safety office at Tyndall AFB.



These snapshots of Staff Sgt. Alberto Da Silva; his wife, Pam; and his daughter, Naomi, were nearly the last happy moments the family spent together after Da Silva almost drowned.

Memorial Day

Alone in the middle of a lake in a foreign country, a man with a busted jet ski has to figure out how to get to shore ... alive!

By **Robert L. Spence** Photos by Tech. Sgt. **SARAYUTH PINTHONG** ack in the 1999 NBA playoffs on Memorial Day, Sean Elliot of the San Antonio Spurs rose up on his tippy toes and hit a game ending three-point shot that defeated the Portland Trailblazers in a nail-biter of a game. The shot helped define Elliot's illustrious basketball career and was quickly

dubbed the Memorial Day Miracle. Preparation met opportunity, and Elliot had made the most of it. Years later, I had my own Memorial Day miracle ... no three-point play but lots of alley oops ... well, *oops* anyway. Because, unfortunately, it was my lack of preparation that defined this moment.

I had been on a long work stretch preparing for an Operational Readiness Inspection at Misawa Air Base, Japan. The inspection was finally over, and we received an excellent rating. Time to celebrate! It was the Memorial Day holiday, the weather was beautiful, I had the jet ski, and Lake Ogarawara was only 20 minutes away. Two plus two equals a great day on the water!

I called a few friends and asked them if they were up for a day at the lake, but they had other travel plans. Then I asked some neighbors, but they just wanted to stay home and rest.

So I decided to go by myself (oops).

I would normally start the ski before taking it out just to ensure all was well — i.e., the contacts were clean, basic tools were in the ski, license and insurance were on board, and all emergency equipment was in the proper compartment.

Miles from shore, Robert Spence had to make it to land by swimming – with his broken jet ski in tow.

This day, however, I just hooked up the ski and headed out (*oops*).

I had been to this same spot 50 times or more and knew I didn't have anything to worry about. I arrived at the lake about 10 a.m., backed the jet ski into the water and tried to start it up. It took a few attempts to get it started, which was abnormal. But I finally got it fired up, so I figured everything must be OK (*oops*).

As I headed out on the lake, I noticed no one else was boating or fishing. Usually, Japanese fishermen were all over the lake fishing or harvesting fresh water clams and mussels until about noon. Perhaps that should have set off some alarm

bells in my head, but instead, I thought to myself, "This is awesome; I have the lake all to myself (*oops*)."

Since I had Lake Ogarawara all to myself, and I didn't want to squander the opportunity. I decided to do some exploring.

I saw a landmark a few miles away and set my sights for it. It was what they call "The Elephant Cage." It

comprised of a dozen communication towers in a circle on the far side of the air base. I'd always wanted to see it up close but never took the chance on going the distance.

Today was the day I would stretch the limits (oops).

I was like a kid in a candy store and wanted to explore farther. So I saw a park in the distance and decided to go check it out too.

After wandering several miles from my starting point, I figured I better head back. But then I saw some old Japanese architecture and decided to take a closer look. It was all the way on the other side of the lake, but I went anyway.

When I had finally satisfied my curiosity and started the long trip back, I decided to make the voyage more interesting by doing a couple of stunts along the way. I began doing side slides, similar to a car skidding sideways. I had done these many times before, but this time I was going faster than usual (*oops*) and was ejected from the ski (*double oops*).

I must have been thrown 30 feet!

The impact was so hard that my water socks flew off. I was rattled, but, thankfully, unhurt.

"No problem," I thought. "I lost the water socks; but I have a life vest on, and I can swim back to the ski."

I made it back to the ski and climbed on. But when I put

the key into the ignition and turned it, nothing happened!

I thought the contacts must be loose. I opened up the battery compartment and discovered the contacts were corroded. I also noticed the compartment was empty — no tools or paddle (*oops*). Then I remembered that a few weeks before I'd let a friend use the ski. He'd dumped it over, and

it had filled up with brackish water. We'd gotten the ski out of the water and emptied the water out. I had to take out all the tools, the insurance and the license, as well as the emergency equipment to dry them out. I had forgotten to put them back in the jet ski (*oops*).

I was stranded several miles away from my truck in the middle of the lake with no one around for assistance and no way to call for help. Normally, I would have my cell phone with me, but I'd forgotten that, too (*oops*). I sat on the ski for about 45 minutes hoping someone would come by and tow me back, but no luck.

The wind started to pick up, and I was being blown farther away. I decided I had better do something. I tried to paddle with my hands, but that was useless. Thank heavens I had some rope. I tied it to the front of the ski, jumped into the water, and began to swim, with the jet ski in tow.

When I finally reached shore, I was exhausted and still more than 5 miles from my truck. A fence line that stretched for miles along the shore prevented me from making land. So, still pulling the jet ski, I began to wade through the water along the shoreline. I felt hundreds of razor-sharp clams slicing my bare feet as I walked in roughly 4 feet of water.

After about an hour of walking, I looked up at the sky and saw dark clouds moving in. I began to

An avid fan of water

sports, Spence spends many days at lakes enjoying his jet ski. But all that experience didn't help when he lost his focus and let his guard down.

interesting by doing a couple of stunts along the way. I was going faster than usual and was ejected from the ski. I must have been thrown 30 feet!"

"I decided to make the voyage more



worry but kept trudging along. Another hour went by, and the storm got worse. The clouds were getting darker and the thunder louder. I saw lightning in the distance. Maybe this was the reason the lake had been devoid of people ... they had checked the weather report.

I was really getting worried now. I was the highest thing in the area, and if lightning struck, I was a goner. Luckily, about 15 minutes later the storm suddenly changed directions and moved away from me.

After four hours, with feet filleted by the clams, I finally saw a house past the fence line. It belonged to a Japanese fisherman. I had been told by other American jet skiers that the Japanese fishermen didn't like us because the skis interfere with their nets and scare the fish away. I also remembered I did not have my license or insurance papers with me ... still drying out at home (*oops*). If they called the police, it could be a \$20,000 fine; and my jet ski would be confiscated.

I tried to walk past the house in the water, but I came to



When water got into battery contacts that were already corroded, Spence's machine would no longer start!

a deep channel. The channel forced me out of the water and onto the fisherman's private property. I pulled the jet ski to the edge and tied it to a tree.

I walked cautiously toward the house. Long knives and bone saws hung from the side of the dwelling. I wanted to believe the residents used them to clean the large fish they caught.

My imagination got the best of me, and I really wanted to find another way around.

Suddenly, a fishing boat came roaring toward me.

Perhaps someone in the house had alerted the crew. A stone-faced fisherman got out of the boat and held a fish club as he approached. Fear replaced my pain.

I bowed deeply. I could not speak Japanese very well, so I used my hands to mimic breaking a stick and pointed at the jet ski. Then I put my hands together and asked for help as best I could. Thankfully, the fisherman understood. He gave me a glass of water and a small screwdriver. I used the screwdriver to remove the corrosion from the contacts, then held my breath as I tried the key in the ignition again.

The jet ski fired right up!

I had some money in my swim trunks pocket and tried to give it to the fisherman, but he refused the offer. With a wave of gratitude, I got back on the ski, and slowly made my way back to my truck.

Along the way, I thought of all the things I should have done differently, and the list proved long. But one thing was a sure slam dunk ... it was a miracle I made it out of there OK.

Mr. Spence is with the Defense Language Institute English Language Center Safety and Environmental Programs at Joint Base San Antonio-Lackland, Texas.



When jet skiing, pack your emergency gear.

Doops! What went wrong?

He didn't check or service his jet ski before going to the lake.
He went out on the lake alone.

He didn't make a plan and follow it, so no one knew exactly where he was as he went exploring.

There were signs that the jet ski wasn't acting right, but he ignored them.

🗱 He forgot to pack the emergency equipment and tools onto the ski.

He performed some stunts at faster speeds than he normally attempted them and was thrown 30 feet from the jet ski.

The jet ski's battery was corroded and the vehicle would not start, leaving him stranded in the middle of the lake, 5 miles from his truck.

🗱 Without a paddle, he was forced to swim to shore with his jet ski in tow.

He had no shoes and had to walk miles on razor sharp clams, which sliced up his bare feet.

A lightning storm moved in (he had failed to check weather reports), making the situation even more dangerous.

🐹 He forgot his cell phone, so had no way to call for help.

Bridge FOR BERG

When boaters hit an underground piling from an old bridge, the boat suffered nearly \$9,000 in damage.

CHERIS

Boaters crash into submerged structure

By Lt. Col. ERROL ROTTMAN JR.

o there I was, kitchen remodel com-

plete. ... Honey do? Done! That definitely earned me enough points for a day on the lake. Lt. Col Bob Gates, one of the guys who works with me at Laughlin Air

Force Base, Texas, has a Mastercraft ski boat modified to fish off the front. He calls it his Red Neck fishing boat.

He offered to show me some good fishing spots; so Saturday morning at 6:45, we were on the water at nearby Lake Amistad.

Bob and I, as well as my 13-year-old son, Ryan, were on the lake with the sun just barely up. It was 80 degrees, with just a slight breeze, and the fish were slapping the surface.

Driving along at 40 mph, we spotted some rams and deer on the shore that added to the ambiance of the beautiful morning.

It was the first time I'd been fishing in months, and I thought to myself, "If I catch just one, I'll be in heaven."

With Bob driving the boat and looking forward, Ryan and I sat on a bench seat next to the driver facing the rear of the boat.

Bob pointed to some big post off the starboard side, and as we turned to look, said, "You gotta watch out for that; lots of guys hit that post."

One potato ...

My eyes scanned the area he pointed to.

Two potato ...

I got a visual on the post.

Three potato ...

BOOM!

We hit something and went from 40 mph to zero in 1.8 seconds.

The boat "launched" forward, and I was

thrown up against the backrest and maybe the windshield. I looked at the back of the boat and down into the water and saw the "structure" we just slammed into, which turned out to be bridge piling from a previous road. The boat landed and coasted to a stop in roughly 15 feet of water.

I didn't see Ryan.

Thankfully, that was only because of my tunnel vision during the impact. Ryan was actually still right next to me and only hit the back of his head on the windshield.

My tackle box, which weighs between 25 and 30 pounds, sat right behind the driver.

I didn't know it at the time, but Bob hit his face on the steering wheel or windshield. I don't know if my tackle box helped push his face forward, but, regardless, it's a huge shift of mass.

Both of us jumped up and entered emergency mode. Bob killed the engine as if by a reaction to save the motor. I pointed out that it was running just fine. Then he started it again only to find out the tranny was gone. He jumped up and quickly tried to get the trolling motor working, but it wasn't.

We pulled open the cubby hole to check the batteries, and the positive cable was cut. Bob got positive connection by holding the open wires up to the positive end of the battery, and the trolling motor started to work. He handed me the task of maintaining contact with the positive wire, and he jumped back up front. He got the trolling motor going in the direction of a nearby boat ramp area.

The ramp was probably only a quarter of a mile away.

Water started coming in through the floor.

Taking on more and more water, Bob jumped down to start the boost pump, but it didn't work.

As the water continued to rise, I started to feel uncomfortable about holding the bare ended wire to the positive terminal. I stood in ankle-deep water, and every time the cable got a little loose it sparked upon reconnect.

When the water was about an inch from the top of the battery, I brought up the idea that maybe we needed to raise the batteries out of the water more. As I pulled up one of the batteries, it inadvertently tugged on a line and the boost pump started working.

I ordered Ryan to start bailing water as the boat continued to flood. We were taking on about an inch of water every two minutes. With Ryan bailing water and the boost pump now working, we were keeping the water level constant. We were able to keep the status quo until we beached the boat on a rocky shore close to a closed ramp.

We got the trailer and loaded the boat. Four hours later, we were driving to Bob's house and could see the 4-foot section of missing boat from the bow. All the hardware underneath was gone as well. I'd estimate the vessel suffered close to \$9,000 in damages.

Looking back, the lake was 28-feet low, so we were probably going too fast for conditions. Before getting on the lake, you should always check water levels and slow down in known shallow areas. Of course, it didn't help that the hazards were not marked. Park rangers said they were planning to mark the obstacle we hit. They marked it with three buoys later that day.

So, long story short, I haven't quite figured out where to fish this lake yet, but I now know where there's an underwater bridge that might be a good place to start.

Colonel Rottman is the chief of standardization and evaluation with the 84th Flying Training Squadron at Laughlin AFB. Colonel Gates is the 47th Flying Training Wing inspector general at Laughlin. "The boat hit something and went from 40 mph to zero in 1.8 seconds. ... I didn't see my son, Ryan."



Lt. Col. Errol Rottman Jr. and his 13-year old son, Ryan, ready a pole for a day of fishing. But the lake turned the tables on them when it "snagged" the boat they were in.



Hanging in the Balance

When an Airman suffers a severe head injury deep in the forests of Saddle Mountain, Wash., it's up to an Air Force helicopter crew to pluck him out of the wilderness to get him to desperately needed emergency medical care

By Senior Airman MARY O'DELL Photo by Tech. Sgt. MATTHEW HANNEN

An Airman injured while going through Air Force Survival School at Fairchild AFB, Wash., had to be hoisted into an UH-1 helicopter in an emergency medical air evacuation.

igh up Saddle Mountain, Wash., deep in a remote area of Colville National Forest, a 26-year-old Airman's life hung in the balance. ...



"I had to go slow and maneuver carefully because the student and the medic were suspended over a narrow logging trail. Any abrupt movement would have swung them into the trees on either side."

Training to become a survival, evasion, resistance and escape specialist at Air Force Survival School, the Airman had tripped on the rugged terrain, fell over a log and struck his head on the ground with a sickening thud. He vomited and then became lethargic and confused. He had suffered a severe head injury and needed immediate airlift.

When Capt. Ashly Barnes, a 36th Rescue Flight standardization and evaluation liaison officer at Fairchild Air Force Base, Wash., got the call that Aug. 10 morn, she was both concerned and focused.

"It's a bittersweet business," said Barnes, an UH-1N Iroquois pilot, "because we never want to have to search for a missing person or medically evacuate an injured student, but that's what we're here for."

While the chopper pilot was concerned about the student's deteriorating condition, she also had other worries. Because of the 6,000-foot elevation, as well as the patient being surrounded by 100-foot trees, flight planners determined the risk for this mission to be high. The tricky terrain would prevent the helicopter crew from landing, so they would have to hover over the mishap site and extract the injured Airman by cable. Also, because of the mountain's high density altitude, the air density is reduced and causes unfavorable impact on aircraft performance, Barnes said.

While en-route, the flight engineer calculated how much power would be required to execute the hoist based on weight and several other variables. The crew realized it would take 96 percent of the helicopter's power to hover over the student, meaning they would use 98 percent power for a dual pickup, Barnes said.

"This is less than ideal, and we would normally mitigate the risk by flying around to burn more fuel and increase our power margin," the pilot added. "However, due to the deteriorating condition of the student, we opted to continue in on the approach and execute the hoist."

Flying at maximum airspeed, the crew arrived on scene — some 60 miles north of Fairchild — within 20 minutes.

At the mishap site, Staff Sgts. Charles Mears and Jeffrey Tremel, 336th Training Support Squadron in-field independent medical technicians, had been tending to the injured student. Their medical assessment had determined that a ground evacuation would take too long.

In addition to the vomiting and state of confusion, the patient's pupils were slow to react, and his pulse and blood pressure were both abnormal, Mears said.

"Our main goal is to assist the patient as quickly and safely as possible," Mears added. "The last thing we wanted was for this student to get any worse."

So the medical technicians were more than relieved to hear the familiar *whop*, *whop*, *whop* of the approaching aircraft.

While many helicopter evacuations involve a stokes litter, allowing the patient to lie down while being lifted, Mears determined laying the student down could cause increased pressure inside his skull and further damage the brain.

Mears opted to be dually-hoisted into the helicopter with the student.

"When we initially picked up the medic and student, our 98-percent power required (for the extraction) continued to creep up because we lost the small amount of headwind we had and eventually got to the point where I was pulling 100 percent," Barnes said.

Hovering at 120 feet, nearly 20 feet above the treetops, the aircraft began to slowly descend. The student and medic were both still well below the treetops. Barnes didn't want to move them, but she also didn't want the helicopter to crash into the mountainside. So the pilot slowly maneuvered the helicopter forward, allowing it to pick up a couple of knots of airspeed, preventing any further descent.

"I had to go slow and maneuver carefully because the student and the medic were suspended over a narrow logging trail," Barnes said. "Any abrupt movement would have swung them into the trees on either side."

Once safely in the helicopter, Mears started intravenous therapy and monitored the student until arriving at a hospital in Colville, Wash., 10 minutes later. Doctors diagnosed the student with a severe concussion; but thanks to the quick actions of all involved, the Airman made a full recovery.

Happy to have saved a life, as well as keeping her crew and aircraft safe and sound, Barnes reflected on the rescue effort.

"From this mission, I learned to always have an escape plan," said the Minnesota native. "As a crew, we discussed what could go wrong during the hoist and how we would correct it before we came in to execute. We were able to prevent a bad situation from becoming a worse one."

For her actions that day, Barnes earned the 2012 Air Education and Training Command Aviator Valor Award, which was announced in December. The award is presented each year to a rated Air Force officer for a "conspicuous act of valor or courage performed during aerial flight during either combat or noncombat." She was credited with protecting the \$4-million aircraft, three aircrew members and two military personnel from harm, while helping to save the life of the injured member, according to the award citation.

"I am honored to win this award, but every mission our unit accomplishes is a team effort," said Barnes, an Air Force Academy graduate. "In my eyes, the entire rescue flight and 336th Training Group won this award."

The 26-year-old was surprised she won the prestigious honor, but her commander wasn't.

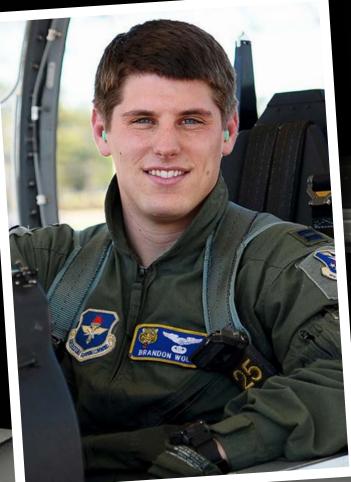
"Captain Barnes' determination and hard work enabled her to upgrade from a co-pilot to an instructor pilot within a single year," said Maj. Matthew Johnson, the 36th RQF commander. "Such a feat is rarely accomplished and then only by the best of pilots."

Airman O'Dell is a photojournalist assigned to the 92nd Air Refueling Wing Public Affairs Office at Fairchild.

<image>

Capt. Ashly Barnes (left and above), standardization and evaluation liaison officer, 36th Rescue Flight, Fairchild AFB, Wash., flies an UH-1N Iroquois helicopter. Barnes earned the 2012 Air Education and Training Command Aviator Valor Award for airlifting an injured Airman out of a heavily forested area in risky flying conditions.

OFF-THE-CUFF T-6 PILOT MAKES HARROWING EMERGENCY LANDING



The canopy glass shattered when the canopy fracturing system was inadvertently activated by the student pilot during a touch-and-go landing.



1-6 Texan II pflot Capt. Brandon Wolf earned the 2012 Daedalian Exceptional Pilot Award for Air Education and Training Command for his quick actions during an in-flight emergency. Wolf is a first assignment instructor pilot assigned to the 41st Flying Training Squadron, Columbus AFB, Miss.



By Staff Sgt. CLINTON ATKINS Portrait by Tech. Sgt. BRYAN FRANKS

BOOM The canopy shatters as if hit by a bowling ball. Inside the cockpit tiny shards of glass pierce the student pilot's eye. Debris from the blast also penetrates the skin and flight suit of Capt. Brandon Wolf, the instructor pilot. Bleeding from his neck, Wolf instinctively

takes control of the aircraft, which has just touched down on the runway but is still hauling at nearly 100 mph. He needs to get the aircraft stopped and fast. Easier said than done. The blast fogged the windscreen, creating a monster blind spot. He can't see anything in front of him! "We were doing just a touch and go landing," said Wolf, a first assignment instructor pilot with the 37th Flying Training Squadron at Columbus Air Force Base, Miss. "We touched down, and it was an uneventful landing."

Then all hell broke loose.

When the student pilot pushed the throttle up to take off again, his sleeve snagged the canopy fracturing system handle. So the handle pulled up as he pushed the power up. When the canopy fracturing system handle is pulled, it sends a charge to a detonation cord that is laced throughout the aircraft canopy's frame, causing the canopy to explode outward into two pieces.

So what went wrong?

"While the student pilot's sleeve caught the canopy fracturing system handle, the location of the handle in the aircraft also contributed to the mishap," said George Chappel, Air Education and Training Command flight safety manager.

Inside the T-6, the canopy fracturing system has a "T" shaped handle that is inauspiciously located on the left side of the cockpit in front of the throttle lever. When performing the action of increasing the throttle, there is considerable potential for a loose article of clothing, such as a sleeve, to catch on the handle, Chappel said.

Those two factors combined put Wolf in dire straits.

"At first, I was thinking to myself, 'That was a good landing.' Then all of a sudden, 'What the heck!? What just happened!?" the Saginaw, Mich., native said. "I felt the thump of the explosion, and at first I thought it was a bird strike. I thought we hit a really big bird."

The fracturing system activated with the T-6 traveling at nearly 85 knots, the same speed at which liftoff occurs if the control stick is pulled aft.

Wolf had to act quickly.

"I instantly grabbed the controls (from the student) out of instinct," he said. "It took a second for my brain to process, 'Hey, we're still at max power!' We could have been airborne at the speed we were going, so I pulled the power back to idle."

And even though he was injured and had no forward visibility, Wolf successfully brought the aircraft to a stop.

The canopy explosion caused minor injuries to both pilots. More than 35 tiny pieces of debris hit Wolf's body and even penetrated his flight suit. Micro shards of glass went into one of the student's eyes, which caused him to miss three weeks of training.

"I was bleeding from my neck and stuff," Wolf said. "The detonation cord actually went through the flight suit. My arm and neck had a bunch of pieces of (detonation) cord in them."

Wolf, an Air Force Academy graduate with three years of experience as a pilot, credits his quick reactions to the instructor pilot training he received.

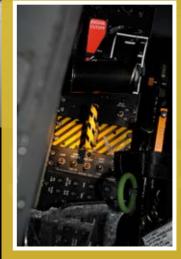
"(The student) let go, and I instinctively grabbed the controls," he said. "That's something we're taught here; IP defensive techniques is what we call them. I survived because they talk about those defensive techniques of having your hands near the controls ready to go in case something happens. ... My hands were right next to the controls. Especially for a student early on in the program, I'm going to be shadowing him closely — watching his every move.

"This was something that happened in the blink of an eye. If I hadn't been near the controls or if we'd gone airborne, who knows what would have happened?"

Because of his quick actions, Wolf was credited with saving the life of his student and the \$4-million aircraft. As a result, he earned the 2012 Daedalian Exceptional Pilot Award for AETC.

"Captain Wolf did a phenomenal job," said Lt. Col. James Sparrow, 37th FTS commander. "He made a quick decision in the heat of the moment when he had to, and I think that speaks well to his training."

Sergeant Atkins is with the Air Education and Training Command Public Affairs Directorate at Joint Base San Antonio-Randolph, Texas.



'PIN'-POINTING THE PROBLEM

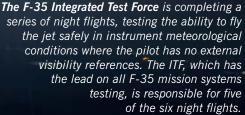
Two factors contributed to the T-6 Texan II mishap that caused an inadvertent activation of the aircraft's canopy fracturing system and some \$100,000 in damages.

1 The student pilot didn't fasten his sleeves, which snagged on the canopy fracturing system handle. All aviators should fasten the sleeves on their flight suits — not only because they can get caught up on things, but because fastening them offers better protection in the event of a fire as the suits are fire retardant. Additionally, it's required by regulation.

2 The canopy fracturing system handle is not in an ideal location. The command addressed these questionable cockpit ergonomics in May. It changed T-6 technical orders to require a safety pin be used on the canopy fracturing system handle. The pin prevents the handle from being inadvertently pulled.

— George Chappel AETC flight safety manager

The student pilot's loose sleeve got caught on the canopy fracturing system handle, which is located near the throttle of the T-6.



THE **NGHTSHIF** F-35 PILOTS WORKING IN DARK TO CERTIFY AIRCRAFT

EDWARDS AIR FORCE BASE, Calif. (AFNS) — The F-35 Integrated Test Force is wrapping up a series of night flights, which are testing the aircraft's capability when flying in instrument meteorological conditions.

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It is a necessary step in delivering a core competency to the warfighter — the ability to fly the jet safely when there are no external visibility references for the pilot, according to Lt. Col. Peter Vitt, F-35 ITF director of operations.

"This will increase the combat capability eventually," Vitt said. "But, in the interim, it will increase the training capacity. The capability to fly at night and in the weather is one of the core competencies that must be delivered to the warfighter. This is about safety, specification compliance and predicting operational utility. It's our job to find out how well the system works, how well our pilots interact with the displays and how the navigational system works."

The ITF, which has the lead on all F-35 mission systems testing, is responsible for five night flights, with Naval Air Station Patuxent River, Md., conducting the sixth.

For safety purposes and to ensure decision-quality data is collected, the ITF used a build-up approach to conduct the night flights. Pilots began with flying in visual meteorological conditions, familiarizing themselves with the F-35's mission systems.

Simulator flights, which occurred in February, also helped pilots prepare for the missions.

"The simulator does not exactly replicate actual flight conditions, so we flew to make sure the F-35 provides the displays, communications and other systems you need to safely fly at night or in weather when you're lacking the view of the outside world," said Maj. Eric Schultz, F-35 test pilot.

When the ITF completes the night flights, a variety of

capabilities will have been tested including ground operations and the pilot's ability to maneuver the aircraft without becoming disoriented. The test team also will evaluate the navigation systems, data from the instrument landing system and how well the radios work.

Just as important is the pilot's assessment, evaluating whether or not they are getting the necessary information and can adequately use it to make informed decisions.

"We evaluated ground operations and takeoff, followed by flying to a desired location with no external references," Schultz said. "The pilot performed a series of maneuvers to make sure climbs, turns and descents can be performed with precision without getting disoriented."

Conducting instrument meteorological conditions testing proved to be somewhat of a challenge and required some ingenuity to ensure pilots had no external visual references, while avoiding weather conditions the aircraft is not yet cleared to fly in.

"There are certain weather conditions we haven't tested yet, so we can't fly there yet," Vitt said. "We had to find a way to fly instrument conditions without flying in certain kinds of weather. The creative solution the team came up with was to fly over the water and remote areas over land where there isn't cultural lighting to provide a horizon for the pilot."

While still in the early development phase, the Integrated Test Force has used the night flights as an opportunity to identify areas of improvement for the mission systems to better serve the warfighter, Vitt said. As the ITF successfully wraps up the night flights, the team's input will ultimately result in a safer, more capable weapon system.

> — Laura Mowry Edwards Air Force Base Public Affairs

ARIZONA RESCUE GROUP AIRMEN PULL HIKER FROM MOUNTAIN RANGE

DAVIS MONTHAN AIR FORCE BASE, Ariz. (AFNS) — Airmen from the 943rd Rescue Group here set out in a HH-60G Pave Hawk for a training mission May 22 when they were notified that a hiker was unconscious from a fall and needed help.

The aircrew flew back to base, offloaded their weapons, fueled up and picked up a Guardian Angel team, special operators trained in trauma medicine and high-angle rescue. Then they flew to the hiker's aid.

Earlier in the evening, operators with the Arizona Department of Safety attempted to do a long-line rescue with their helicopter, but could not make it up the canyon as darkness set in. Wearing night vision goggles, the Airmen from the 943rd hoisted the 17-year-old hiker to safety around 11 p.m.

"We do so much training together as a rescue team that even with some of the limited communications we were experiencing with the (pararescuemen) on the ground; we knew exactly what their objectives were and what they were doing," said Capt. Brough McDonald, a HH-60G Pave Hawk pilot with the 305th Rescue Squadron. "It made this rescue mission seamless."

The hiker who needed help was in the Dragoon Mountains, part of the Chiricahua National Monument, about 50 miles east of Tucson, Ariz.

"The initial report on the patient was a very severe head injury," said Senior Master Sgt. Maurice Bedard, a pararescueman with the 306th RS. "When we got on scene, he was already on a backboard, so we hoisted him up to the helicopter. He was not as bad as the initial report had indicated."

Once the patient was hoisted out of the mountain, he was transported to a Life Flight helicopter in a landing zone about two miles away from where he had initially fallen. The 943rd Airmen also hoisted up the civilian search and rescue personnel, and then returned to base.

"Because of the location of where the hiker fell, it was a difficult hoist and the aircrew from the 305th Rescue Squadron did an excellent job with the hoist operations," Bedard said.

According to the rescue summary report, Airmen from the

943rd Maintenance Squadron got the HH-60G Pave Hawk helicopter prepared in record time.

"We train as we fight, and the great part about rescue is that does not have always have to be combat rescue," said Col. Harold Maxwell, 943rd RQG commander. "As Citizen Airmen we are always ready to help out our local community. The rescue mission is one of the noblest missions in the Air Force, and I'm extremely proud of the teamwork and effort by all involved with this mission."

— Master Sgt. Luke Johnson 943rd Rescue Group public affairs



Two pararescuemen with the 306th Rescue Squadron fast rope from a HH-60 Pave Hawk helicopter assigned to the 305th Rescue Squadron, part of the 943rd Rescue Group located at Davis-Monthan Air Force Base, Ariz.

INVESTIGATORS SAY PILOT ERROR LED TO C-17 CRASH

An Air Force accident investigation board determined pilot error led to the crash landing of a C-17A Globemaster III Jan. 23, 2012, at Forward Operating Base Shank, Afghanistan.

Investigators found that the pilot and co-pilot of the aircraft failed to identify the landing distance required to safely stop the aircraft exceeded the runway length. The accident report also said "failure to assess runway conditions for fixed wing operations at FOB Shank substantially contributed to the mishap." The C-17A, assigned to the 437th Airlift Wing at Joint Base Charleston, S.C., departed the prepared runway surface, struck an embankment and came to rest nearly 700 feet from the end of the runway, according to the report.

There were no fatalities or significant injuries to the six crewmembers aboard the aircraft. The C-17, however, sustained significant damage to the landing gear, cargo door, undercarriage, antennas and main structural components. Officials estimate it will cost \$69.4 million to repair the aircraft. There was no other damage to military or civilian property.

"No one is immune to mishaps," said Col Tal Metzgar, Air Education and Training Command director of safety and a former C-17 pilot. "What can seem like a routine mission can change in the blink of an eye. That's why it's so important to follow checklists and remain vigilant at all times when flying multi-million-dollar aircraft."

— Tim Barela