

# Aviation Human Factors Industry News

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*From the sands of Kitty Hawk, the tradition lives on.*

Hello all,

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In this weeks edition of *Aviation Human Factors Industry News* you will read the following stories:

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★Air traffic controller leaves control tower unattended as Boeing 737 passenger plane comes in to land because his relief worker was late

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★And Much More

## **Beyond Malaysia Airlines Flight MH370: 6 Other Planes That Disappeared (And Were Never Found)**

If the ever-growing mystery of Malaysia Airlines Flight MH370 has you wondering how a plane can simply disappear into thin air, consider this: Data from the Aviation Safety Network shows that [more than 80 aircraft](#) (capable of carrying more than 14 passengers) have been declared “missing” since 1948. Let’s take a look at six of those mysteries: 1950: Northwest Orient Airlines Flight 2501



Northwest Orient Airlines Flight 2501 is likely resting at the bottom of Lake Michigan, but good luck finding it. Divers 60 years ago turned up light debris, upholstery and a few body parts, but they were never able to locate the plane’s wreckage following what was, at the time, the deadliest commercial airliner accident in American history. Fifty-five passengers and three crewmembers are believed to have died aboard the DC-4 propliner as it traveled from New York to Seattle via Minneapolis. A local historian claimed in 2008 that many of the human remains from the accident washed ashore in the 1950s and were buried in an unmarked grave in a St. Joseph-area cemetery without the knowledge of the victims’ families.

It was March 16, 1962, when Flying Tiger Line Flight 739 took off on its fateful flight from Guam in the western Pacific to Clark Air Base in the Philippines. The 93 U.S. soldiers and three South Vietnamese onboard would never be seen or heard from again. The disappearance of the Lockheed L-1049 Super Constellation prompted one of the largest air and sea searches in the history of the Pacific. While ultimately fruitless, the Civil Aeronautics Board determined that the plane had suffered a mid-air explosion, the cause of which remains a mystery.

### [1965: Fuerza Aérea Argentina C-54](#)

Did it disappear in the dense Costa Rican jungle or the azure Caribbean Sea? That’s the as-yet unsolved mystery behind Fuerza Aérea Argentina C-54, a Douglas C-54 Skymaster leased by the Argentine military that disappeared with 68 people onboard on Nov. 1, 1965. Crew radioed in a distress call, stating they would divert to Puerto Limon, Costa Rica, but nothing more was heard from the flight.

Investigators later recovered 25 lifebuoys, personal belongings and some wreckage in the Bocas del Toro Archipelago, but the exact location of the airplane and its passengers remains unknown.

#### 1974: TAM-52

A Douglas DC-4 operated by Transporte Aereo Militar, the civilian branch of the Bolivian Air Force, disappeared on a non-scheduled passenger flight from Santa Rosa de Yacuma Airport to El Alto International Airport in La Paz. No trace of the aircraft, its three crew or 21 passengers has ever been found.

#### 1979: Varig Boeing 707-323C

A cargo aircraft of Varig Brazilian Airlines disappeared on Jan. 30, 1979, just 30 minutes after takeoff from Narita International Airport in Tokyo. The Rio-bound flight had just six people on board, but it was carrying 153 paintings valued at more than \$1.2 million, adding to the intrigue. The plane, people and paintings all remain missing.

#### 1995: Merpati Nusantara Airlines Flight 6715

Merpati Nusantara Airlines Flight 6715 went missing on a scheduled flight from Bima Airport to Satartacik Airport, Ruteng, Indonesia, on Jan. 10, 1995. The four crew and 10 passengers aboard the Twin Otter 300 are believed to have crashed in the Molo Strait in bad weather, but investigators were never able to find the plane or its occupants.

#### Other Famous Missing Aircraft Mysteries

#### 2003: Boeing 727-223

A former American Airlines Boeing 727 -223 departed from Quatro de Fevereiro Airport in Luanda, Angola, 11 years ago with its lights off and its transponder malfunctioning. That plane has yet to be found, despite a worldwide search by the FBI and CIA. Investigators believe flight engineer and private pilot Ben Charles Padilla was in the cockpit of the plane when it took off. His whereabouts remain a mystery.

#### 1937: Amelia Earhart

Early aviator Amelia Earhart disappeared on the last leg of her ambitious attempt to become the first woman to circumnavigate the planet. It's arguably aviation's greatest mystery, and while theories abound, there remains no concrete evidence as to what happened to the twin-engine Lockheed Electra after Earhart and navigator Fred Noonan offered their last voice transmissions on July 2, 1937, near Howland Island in the mid-Pacific.

## Air traffic controller leaves control tower unattended as Boeing 737 passenger plane comes in to land because his relief worker was late

- The government in Guyana announced the controller has been suspended
- Two other staff members have been suspended pending an investigation
- The controller abandoned his post ten minutes before a Caribbean Airlines Boeing 737 from Trinidad was due to land at the airport

An air traffic controller **has been suspended** after leaving his control tower as a flight was approaching the airport in Guyana, South America.

The Ministry of Transport in Guyana said the controller and two other staff members have been suspended pending an investigation.

The controller abandoned his post ten minutes before a Caribbean Airlines Boeing 737 from Trinidad was due to land at the airport.

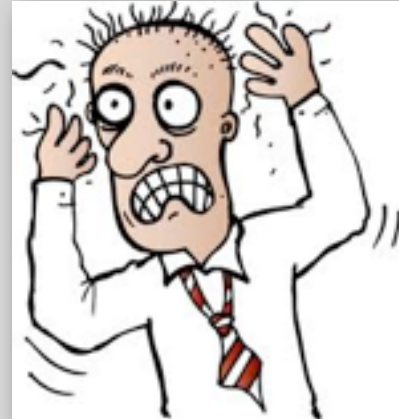
According to the Jamaica Observer, the flight had to circle Cheddi Jagan International Airport in Georgetown until a manager was able to guide the flight safely from the tower.

A Guyana Ministry of Transport spokesman said on Tuesday that the other two staff members who were suspended were a supervisor and a co-worker who had been scheduled to relieve the controller.

The controller walked off the job **apparently out of frustration** that his co-worker did not show up to relieve him of his duties last Friday.

At the time, a Caribbean Airways Boeing 737 with about 100 people on board was ten minutes from landing.

A manager went to the tower and took over.





## **ALPA Concurs With 14-Year Prison Sentence For Laser Attack On Aircraft**

California Man, Girlfriend Both Convicted Of The Crime In December

The Air Line Pilots Association, Int'l (ALPA) is praising the 14-year prison sentence handed down by a U.S. District Court against Sergio Patrick Rodriguez, 26, of Clovis, CA for aiming a laser pointer at a Fresno police helicopter during flight. The helicopter "Air 1" was investigating the apartment complex where Rodriguez and his accomplice, Jennifer Lorraine



Coleman, 23, resided following the report of laser strikes on an emergency transport helicopter for Children's Hospital of Central California. Rodriguez and Coleman were both convicted by a federal jury after a three-day trial in Fresno in December 2013. "ALPA applauds the Federal Bureau of Investigation (FBI), The Eastern District of California U.S. District Court, and the Clovis and Fresno Police Departments for their vigilance in the investigation and conviction of this case," the union said in a statement. "ALPA has collaborated with the FBI and local law enforcement to launch a nationwide campaign that raises awareness about the severity of illegal laser attacks on aircraft.

"Law enforcement and emergency transport helicopters are particularly vulnerable to these types of attack, since they typically fly at lower altitudes where laser pointers pose the most danger to an aircraft in flight. Mr. Rodriguez has been convicted of deliberately aiming a high-powered laser at multiple aircraft, and we hope that his sentencing, along with the future sentencing of his accomplice, will help to spread the message to others that intentionally aiming a laser at an aircraft is not a prank, but a federal crime with very serious consequences."

Earlier this year, ALPA launched the [Laser Threat Awareness](#) campaign to raise awareness of aircraft laser-illumination threats via public service announcements, billboards, and press releases.

FMI: [ALPA Laser Strike Awareness Website](#)

# The Human Factors Ladder Still Needs to Extend Higher

By Bob Baron, Ph.D

We have certainly come a long way in respect to human factors training for aircraft maintenance technicians. I have had the opportunity to work with organizations around the world teaching and helping to develop customized human factors programs. I have [measured both quantifiable and qualifiable changes in attitudes and behaviors](#) as a direct result of human factors training. That is the good news.

Then there is the not so good news. I have also observed a somewhat disappointing common trend throughout many organizations—the [lack of management participation in many of those human factors courses](#). We understand the basic tenet that human factors training really does require participation from all levels, including all levels of management, if it is to be truly effective. The same can be said about [Safety Management Systems \(SMS\)](#). Yet, I have observed a number of situations where the opposite is true. Upper-level management believe that they do not need to participate in human factors training because, "We don't need it, it's only for mechanics," "We don't make mistakes," and, "We just don't have the time for this kind of training." Well guess what? Managers do make mistakes. In fact, some of the most vivid aviation accidents have been precipitated by [management errors](#) that occurred at the very highest levels of the organization (sometimes referred to as latent errors, see Reason's Swiss cheese model). But even as history repeats itself over and over again there still appears to be an element of ["error insulation"](#) for those in management positions. And this type of management mindset has been one of the remaining [impediments](#) to successful human factors programs.



When this type of management attitude permeates an organization it can have negative consequences. First, it can negatively affect an organizations' [safety culture](#). Management is not only about making strategic business decisions and watching out for the bottom line—it also serves as [a model of safety behavior](#) that is clearly visible to employees at all levels of the organization. Thus if employees see that management is not buying into, or attending, human factors courses then it will certainly diminish the importance of human factors training to line employees.

Managers need to not only “talk the talk” but also “walk the walk.” Second, it can lead to a [disseverance in organizational safety philosophies](#). This is where line employees and management may have divergent views on how things get done. It is also how negative norms are propagated. “Them versus us” is not an admirable (or profitable) organizational virtue.

To put this in perspective, one of the most memorable human factors courses I taught was so positively received by the aircraft maintenance technicians that they wished the training lasted a few more days! Yet, in general, they were disappointed (but not surprised) that the highest level managers did not attend the course. When speaking with a few of the aircraft maintenance technicians individually it was quite apparent that they thought the training would be futile because of management’s lack of interest and participation in the course.

[In summary](#), the purpose of this article was to highlight one of the ongoing weaknesses in the progression of human factors training programs both in the United States and around the world. High-level managers need to understand that they can, and do, make mistakes. After all, to err is human. Management should attend a human factors class not only to learn about their own human performance limitations but also to understand what their aircraft maintenance technicians are learning in order to reduce errors and thus reduce error-related expenditures. Once we truly have management commitment and it is more than organizational “lip service” then, and only then, can we say that we have reached the highest step on the human factors ladder.

## **NTSB Cites Pilot Error In 2011 Rockwell 112 Accident**

### **Two Fatally Injured When Airplane Went Down In An Apartment Complex Parking Lot.**

The NTSB has released a probable cause report from an accident that occurred May 28, 2011 in Bryan, TX that fatally injured the pilot and a passenger on board a Rockwell 112.

A review of the pilot’s logbooks revealed that he had flown two flights in the airplane several days before the accident flight for a total of 2.8 flight hours. The airplane [was not refueled after those flights](#). About 1.4 hours after takeoff on the accident flight, the pilot reported that he was “running out of fuel,” and the airplane subsequently started descending.

A witness reported seeing the airplane at a low altitude and then suddenly turn and depart controlled flight, indicating that an aerodynamic stall had occurred.

The airplane impacted terrain in the parking lot of an apartment complex in a congested urban area. Engine data monitor information for the accident flight showed that, for most of the flight, the airplane had an average fuel flow of about 14.7 gallons per hour. The airplane had a total useful fuel capacity of 62 gallons. A post accident examination of the airframe and engine revealed no evidence of mechanical malfunctions or failures that would have precluded normal operation. It is likely that the pilot **improperly planned how much fuel he would need** for the accident flight and that the airplane ran out of fuel, which resulted in a loss of engine power due to fuel exhaustion, according to the report. The pilot's medical records revealed a diagnosis of **major depression**, and toxicology testing **found medications** in the pilot's body consistent with the treatment of this condition. The pilot's depression had been documented and treated since 1989, but the treatment and medications were inadequately reported to the Federal Aviation Administration on the pilot's recent airman medical applications and **would have disqualified him from obtaining an airman's medical certificate**. The NTSB indicated that the pilot's depression and the medications he was taking would have **significantly degraded his cognitive abilities**, including executive functioning and judgment, and likely led to his failure to recognize the fuel shortage earlier and his improper decision to fly with disqualifying medical conditions.



The National Transportation Safety Board determines the probable cause(s) of this accident to be the pilot's inadequate fuel planning, which resulted in a loss of engine power due to fuel exhaustion, and his improper control inputs following the loss of engine power, which resulted in an aerodynamic stall and subsequent loss of control. Contributing to the accident was the pilot's **impaired judgment**, which led to his failure to recognize the fuel shortage earlier and his improper decision to fly with disqualifying medical conditions.



## **Review Team Finds Boeing 787 Design Safe** **Recommendations Address Manufacturing Risk** **Mitigation**

The Department of Transportation's Federal Aviation Administration (FAA) released the findings of a review team formed in January 2013 to review the Boeing 787's design, manufacture and assembly processes. The joint team of FAA and Boeing technical experts found that the aircraft was soundly designed, met its intended safety level, and that the manufacturer and the FAA had effective processes in place to identify and correct issues that emerged before and after certification. The team **made seven recommendations** for further improvements in Boeing processes and FAA oversight.

FAA Administrator Michael P. Huerta asked the team to review the 787's critical systems on January 11, 2013, after a lithium battery fire on a 787 in Boston. The FAA members were engineers and other technical experts who were not closely involved in the original 787 certification process.

As one indicator of the B787's intended safety level, the team compared service reliability data from the time the aircraft first started service with similar data from other previous Boeing airplane models. They determined that the B787's reliability performance in the first 16 months of service was comparable to the reliability of other new Boeing models over the same time period, including the B777.



The team's report is posted online at: [http://www.faa.gov/about/plans\\_reports/media/787\\_Report\\_Final.pdf](http://www.faa.gov/about/plans_reports/media/787_Report_Final.pdf)

## **New Brain Technology Could Assist ATC**

Technology in development at Tufts University in Boston could detect when an air traffic controller's **over-tasked brain** is nearing the saturation point and instantly redistribute the workload, according to a report this week in the Boston Globe.

Computer scientist Robert Jacob and biomedical engineer Sergio Fantini are working together to create a headband that reads brain activity and transmits that data to a computer that can tell if the wearer **is bored, fatigued or sharp**. The computer could automatically distribute the workload to keep each controller working at peak efficiency. In tests conducted by the Tufts researchers, wearers increased their ability to safely navigate simulated airplanes by an average of **35 percent** when the computer adjusted their workload based on their brain activity, compared to at random, according to the Globe.



Jacob and Fantini envision that the technology eventually could be incorporated into a simple wearable device, such as Google glasses. "Computers have gotten phenomenally better in the last 50 years -- faster, more powerful -- and humans haven't," Jacob told the Globe. **"The bottleneck is now with the human, not the computer.** So it's important to put resources into communicating better with computers." The device measures the amount of light absorbed by the brain, which increases as the workload increases.

## **ICAO Releases Runway Safety Kit, Sets Loss of Control In Flight Symposium**

The International Civil Aviation Organization recently released a new Runway Safety Implementation Kit that it developed collaboratively with several other organizations and agencies involved in aviation safety, including IATA, FAA, EASA, EUROCONTROL, and the International Federation of Air Line Pilots' Associations (IFALPA). ICAO also announced it will **hold a symposium** May 20-22 at its Montreal headquarters on the topic of in-flight loss of control events. Speakers from the FAA, Boeing and Airbus, NTSB, IFALPA, CAE, and several other organizations are scheduled to participate in the event.



According to ICAO, loss of control in-flight (LOCI) accidents have resulted in [more deaths in scheduled commercial operations than any other category of accidents](#) during the past decade, so they are a global aviation safety priority.

The symposium is planned is intended to bring the aviation community together to examine the range of contributing factors and coordinate efforts to address the issue globally. Participants will discuss technologies and approaches to avoid pre-LOCI conditions, optimizing the management of automated systems, research on the management of unexpected, threatening events, and new ICAO provisions for upset prevention and recovery training.

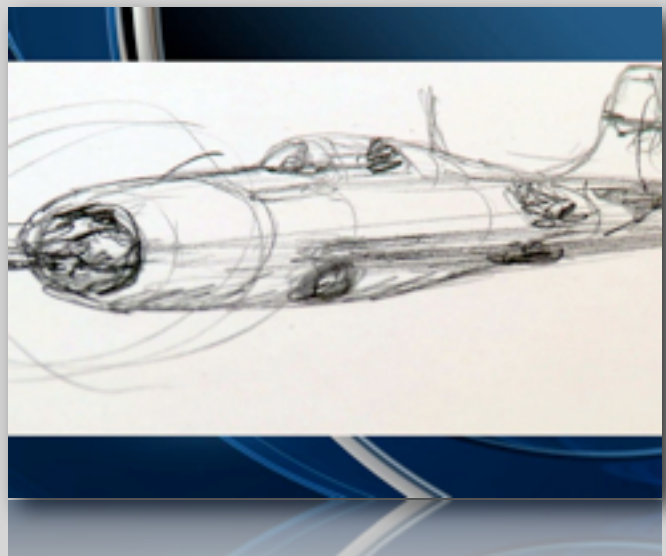
The new runway safety kit consolidates resources developed by ICAO and its Runway Safety Program partners in recent years and includes the latest guidance updates. "The ICAO Runway Safety Program is one of global aviation's best examples of how collaborative efforts on behalf of the world's states and leading aviation organizations can deliver practical, cost-effective results on the very complex, multidisciplinary challenges facing our sector," said ICAO Council President Dr. Olumuyiwa Benard Aliu. "ICAO and its partners in this area remain fully committed to delivering continuous improvement on global aviation safety results and to lowering runway-associated fatalities."

ICAO's announcement also said ICAO and its partners soon will launch a [Runway Safety GO-Team](#) program that will help establish focused runway safety teams at world airports, and they will conduct regional runway safety seminars in Africa and the Middle East.

## **Old Guys And Their Airplanes**

A Sioux Falls man has found a way to turn his childhood hobby of drawing airplanes into a unique business. His airplane drawings paint a picture worth more than a thousand words.

John Mollison has been drawing airplanes since he was three years old. Now with his artistic skills, he's launched a [unique show](#) on the internet called 'Old Guys and Their Airplanes.'



Mollison sits down with [war pilots](#) and draws them a picture of the plane they once flew in combat.

In exchange for the print, Mollison gets to interview them for his show.

"I've found when I talk to these old guys, [I get a lot of wisdom](#)," Mollison said.

Mollison says that wisdom is a valuable resource, just like oil and energy, that needs to be tapped.

"These are people, who not only experienced combat, but they've also lived the life afterwards and the amazing amount of wisdom that you get when you talk to some of these people, that's what the show is really about," Mollison said.

One guy he interviewed for his show is 93-year-old Claude Hone of Sioux Falls, who flew combat missions over Guadalcanal during World War II.

Mollison: What do you think of war now?

Hone: I think it's terrible. It doesn't solve anything; it doesn't solve a thing.

Hone is just one of 100 pilots Mollison has talked with for his half-hour long shows. In every interview, as Mollison draws a sketch of the airplane they once flew, he gets a pretty good picture of how we can all learn from these heroes.

Mollison: So the question I ask of you, is that a function of your wisdom or your age?

Hone: My experience, I think. I have no regrets. If I had to do it all over again, I'd make the same mistakes. I always say I never made any bad mistakes in my life, but I sure made some good ones.

Mollison's next mission is to leave next month for Vietnam. He plans to capture the meeting between a former U.S. Pilot and the North Vietnamese pilot who shot him down during the war.

To learn more about the show, visit the [Old Guys and Their Airplanes](#) website.

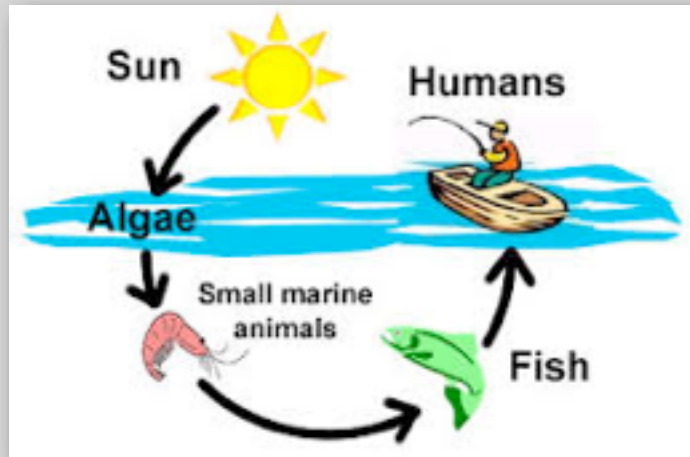
## Omega-3 Linked to Better Sleep

Higher levels of omega-3 DHA, the group of long-chain fatty acids [found in algae and seafood](#), are associated with better sleep, according to a randomized placebo-controlled study by the University of Oxford.

The researchers explored whether 16 weeks of daily 600 mg supplements of algal sources would improve the sleep of 362 children. The children who took part in the study were not selected for sleep problems, but were all struggling readers at a mainstream primary school. At the outset, the parents filled in a child sleep questionnaire, which revealed that four in 10 of the children in the study suffered from regular sleep disturbances. Of the children rated as having poor sleep, the researchers fitted wrist sensors to 43 of them to monitor their movements in bed over 5 nights. [This exploratory pilot study showed](#) that the children on a course of daily supplements of omega-3 had nearly 1 hour (58 minutes) more sleep and seven fewer waking episodes per night compared with the children taking the corn or soybean placebo. The findings are due to be published in the Journal of Sleep Research. The two-phased study looked at sleep in 362 healthy 7-9 year old UK schoolchildren in relation to the levels of omega-3 and omega-6 long-chain polyunsaturated fatty acids (LC-PUFA) found in fingerstick blood samples. Previous research has suggested links between poor sleep and low blood omega-3 LC-PUFA in infants and in children and adults with behavior or learning difficulties. However, this is the first study to investigate possible links between sleep and fatty acid status in healthy children.

At the start of the study, parents and carers were asked to rate their child's sleep habits over a typical week (using a three-point scale). Their responses to the well-validated Child Sleep Habits Questionnaire indicated that 40% of the children had clinical-level sleep problems, such as resistance to bedtime, anxiety about sleep, and constant waking in the course of the night.

The study finds that higher blood levels of the long-chain omega-3 DHA (the main omega-3 fatty acid found in the brain) are significantly associated with better sleep, including less bedtime resistance, parasomnias, and total sleep disturbance.





It adds that higher ratios of DHA in relation to the long-chain omega-6 fatty acid AA (arachidonic acid) are also associated with fewer sleep problems.

Lead author Professor Paul Montgomery of Oxford University says in a release: “To find clinical level sleep problems in four in ten of this general population sample is a cause for concern. Various substances made within the body from omega-3 and omega-6 fatty acids have long been known to play key roles in the regulation of sleep. [For example](#), lower ratios of DHA have been linked with lower levels of melatonin, and that would fit with our finding that sleep problems are greater in children with lower levels of DHA in their blood.”

Co-investigator Dr Alex Richardson of Oxford University says: “Previous studies we have published showed that blood levels of omega-3 DHA in this general population sample of 7-9 year olds were alarmingly low overall, and this could be directly related to the children’s behavior and learning. Poor sleep could well help to explain some of those associations.

“Further research is needed given the small number of children involved in the pilot study. Larger studies using objective sleep measures, such as further actigraphy using wrist sensors, are clearly warranted. However, this randomized controlled trial does suggest that children’s sleep can be improved by DHA supplements and indicates yet another benefit of higher levels of omega-3 in the diet.”

## **“Flight through Fire” chronicles Bombardier test pilot’s final days, devotion to aviation**

Bombardier experimental test pilot Eric Fiore lived 36 days after being pulled from a burning Challenger 604, which crashed during takeoff in Wichita in 2000.

Test pilot Bryan Irelan, 36, and flight test engineer David Riggs, 48, died in the crash at Wichita Mid-Continent Airport.

Fiore’s wife, Carol Fiore, has now completed a book, [“Flight Through Fire,”](#) an “unforgettable love story centered on a deep devotion to aviation,” according to a release. Eric Fiore was a former Air Force fighter pilot and instructor who joined Bombardier in 1999 after stints with Cessna Aircraft and Fairchild Aircraft.



The book is the story of Eric's final days, as he lost the battle with his burns in the Via Christi Regional Burn Center.

It's also a big step in a promise Carol Fiore made to her husband: To tell people about a little boy who wanted to fly "high and fast in the sky," Fiore said in a trip to Wichita in 2010.

The book describes the "aftermath of the accident, the response of a billion dollar company and an entire Kansas town, [the intense pressure placed on a hospital](#), the tragic realities of severe facial burns, the evolution of an eating disorder in her teenage daughter, and the raw emotional pain of her nonreligious family," the release said.

It's a story of [what it takes](#) to be a test pilot and what it costs to love one.

The book has been published by Flying Kea Press and is available through Amazon.com.

## **Watching Out for Signs of Trouble**

It's well known [that weathering a disaster or a financial setback](#) can cause individuals to increase their consumption of alcohol, prescription medications, or illegal drugs. People with past or current substance use issues are considered more likely to have difficulties during or after such events. If your company does not have a random drug testing program and an employee assistance program in place, there are resources available from various agencies to help you understand the warning signs and provide

assistance to a worker who may be experiencing this. The Substance Abuse and Mental Health Services Administration's Center for Drug Abuse Treatment, public health agencies, and published studies confirm the link. SAMHSA even offers the Disaster Behavioral Health Information Series Resource Collections--resource collections and toolkits to help people affected in this way by disasters--and added resilience and [stress management resources](#) to them in 2010 as more and more Americans were reporting rising levels of economic stress.

An example of the phenomenon was reported 12 years ago. A group of eight researchers, some of whom were from the Johns Hopkins Bloomberg School of Public Health or the Columbia University Mailman School of Public Health,



published a paper in 2002 in which they reported that smoking, alcohol consumption, and marijuana use increased substantially among surveyed residents of Manhattan, in New York City, in the two months following the 9/11 attacks. Those who increased their smoking of cigarettes and marijuana were [more likely to experience post-traumatic stress disorder](http://aje.oxfordjournals.org/content/155/11/988) than those who did not increase those behaviors, the researchers reported. (<http://aje.oxfordjournals.org/content/155/11/988>)

According to SAMHSA, this occurs because disasters frequently happen with little warning and also can create chaos for families and their communities. Those who are affected may feel sadness, grief, and anger. Being equipped to help individuals manage these behavioral health issues during the recovery period is part of the disaster response preparedness tools the agency considers essential.

"The trauma and upheaval resulting from a disaster can have a profound impact on those with substance use disorders, [who may already be struggling](#) with many challenges in their lives. The ability to quickly find and access resources to provide treatment and services is especially important during such an event," said Dr. H. Westley Clark, M.D., MPH, director of the Center for Substance Abuse Treatment.

"Behavioral health is essential to health, which also makes it an integral part of helping Americans overcome disasters," SAMHSA Administrator Pamela J. Hyde has said. "When disaster strikes, it is critical that people and communities get the tools and resources they need as soon as possible so that they can begin the recovery process."

SAMHSA offers a free, confidential Disaster Distress Helpline ([call 1-800-985-5990](tel:1-800-985-5990) or [text "TalkWithUs" to 66746](text:TalkWithUs)) that offers crisis counseling 24/7 year round, utilizing a network of call centers. The helpline's brochure, available at <http://disasterdistress.samhsa.gov/>, notes that disaster victims' loved ones and also first responders and rescue/recovery workers are more at risk than others.

It lists these [12 warning signs](#) of distress that safety managers and employers should be aware of:

- Sleeping too much or too little
- Stomach aches or headaches
- Anger, feeling edgy, or lashing out at others
- Overwhelming sadness
- Worrying a lot of the time; feeling guilty but not sure why
- Feeling like you have to keep busy
- Lack of energy or always feeling tired

- Drinking alcohol, smoking or using tobacco more than usual; using illegal drugs
- Eating too much or too little
- Not connecting with others
- Feeling like you won't ever be happy again
- Rejecting help

<http://aje.oxfordjournals.org/content/155/11/988>

<http://disasterdistress.samhsa.gov/>

## **Prevent Accidents With A Good Safety Attitude**

Having a good safety attitude isn't just about following procedure. It's staying alert to possible hazards and taking the extra time to use PPE. It also means that you're **willing to listen to suggestions** that might protect you. To have a good safety attitude, you need:

**Focus:** A good safety attitude means you focus on the task, you concentrate on the job. If you have other things on your mind, you may be distracted. And if you're bored, an accidental slip is easy.

**Strength:** No, this doesn't mean muscle strength; it's the strength to do the right thing, even when you are under pressure to take shortcuts. A good safety attitude means you have the strength to stick with the procedures.

**Time:** A good safety attitude means taking the time to do things correctly. Is saving a few minutes worth a lifelong injury? If you add up the life costs due to injuries, it's obvious that it's cheaper to do the job the right way the first time.

**Responsibility:** If you care about yourself and your co-workers, you will take responsibility even when a task "isn't my job." A good safety attitude means thinking of yourself as part of the team.



## Your Participation Is Requested

The Federal Aviation Administration announced it is seeking comments on an Advance Notice of Proposed Rulemaking (ANPRM) that would require drug and alcohol testing of maintenance personnel [who work on aircraft operated by U.S. air carriers \(Part 121\) in facilities outside the United States.](#)



In the Federal Register notice, the FAA noted that it is considering developing a rule-making that would require employees of FAA-certified foreign repair stations and certain other maintenance providers who perform [safety-sensitive work](#) on U.S. air carrier aircraft to be subject to a drug and alcohol testing program. Consistent with the Congressional mandate for the rule-making, the testing program would have to meet FAA standards and be consistent with the applicable laws of the country where the repair station is located. Currently, the FAA's drug and alcohol testing regulations do not extend to companies or individuals who perform safety-sensitive functions, including aircraft and preventive maintenance, outside the United States. The public comment period will help the FAA develop a proposed rule and to assess its likely economic impact. Today's notice invites comments on a variety of issues related to proposing drug and alcohol testing requirements for the relevant employees of covered maintenance providers. [These issues include:](#)

- Which drugs are most misused in a particular country? If testing programs exist, are they administered by a national regulatory authority? Are industry participants required to establish such programs under the country's laws and regulations, or does industry do that voluntarily
- Should the program require testing for the same drugs the FAA requires tests for in the United States? At what concentrations should alcohol and drug tests be considered "positive?"
- Does a particular country allow or require random drug and/or alcohol testing? If so, what is the process?
- If a country does not allow or require random drug and/or alcohol testing, are there laws that prohibit random testing? What other methods might successfully deter employees from misusing drugs or alcohol while



performing safety-sensitive duties, or within a certain period of time before performing such duties? How would such misuse be detected?

What are the standards that employees who have violated drug and alcohol regulations should meet before they are allowed to return to performing safety-sensitive maintenance work?

The FAA's action responds to a mandate in the FAA Modernization and Reform Act of 2012.

The FAA will accept comments for 60 days after publication in the Federal Register. Here you can [view the Advance Notice of Proposed Rulemaking](#). (PDF)

## **ERAU To Offer Second Open Online Course On Human Factors In Aviation Accidents**

### **Free Course Offered To The First 2,000 To Register**

The [mental and physical factors](#) that contribute to aviation accidents will be examined during a free, massive open online course (MOOC) offered by Embry-Riddle Aeronautical University – Worldwide.



Registration for [The Human Factor in Aviation](#) is open to the public. The class, which runs from April 7 to May 11, is limited to 2,000 students.

“We offered a similar MOOC last fall and experienced overwhelming success,” said Dennis Vincenzi, lead course instructor and department chair of the undergraduate aeronautics program at Embry-Riddle Worldwide. “Understanding the [human element](#) of aviation is critical as we look to prevent situations like last year’s Asiana Airlines Flight 214 accident at San Francisco International Airport. The MOOC also gives interested parties an opportunity to experience complimentary instruction from Embry-Riddle Worldwide.”

Students enrolled in the MOOC will have the flexibility of viewing lectures and working on assignments based on their own schedules. There will also be live sessions where students can watch the instructor and ask questions in real time. Much of the learning experience will focus on student interaction on discussion boards and through social media platforms such as Twitter.

FMI: <http://worldwide.erau.edu/degrees-programs/free-online-courses/index.html>



Researchers with Embry-Riddle Aeronautical University-Worldwide are requesting that [Aircraft Maintenance Technicians and Airframe and Powerplant Mechanics](#) participate in their research study titled "[Prevention of Back Injuries in Technicians and Mechanics](#)". The purpose of the study is to identify protective factors and risk factors associated with back pain and back injury. The ultimate goal is to identify factors that are protective so that they can be implemented within organizations to curtail back pain and back injuries and to identify factors that can be improved to enhance safety for aircraft maintenance technicians and airframe and powerplant mechanics. Participation in the study is strictly voluntary. You will briefly answer questions about your work activities, perceptions of your workplace and your health. This questionnaire takes approximately 10 minutes to complete. All responses are anonymous as no personally identifiable information is collected.

To participate in this important study please access the following link: <https://www.surveymonkey.com/s/CT8G2LH>

Thank you,  
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## Inspiration

Two high school wrestlers, facing off against each other for a Minnesota state championship, proved that compassion can surface in the heat of a competition.

Sophomores Mitchell McKee and Malik Stewart wrestled for the 120-pound state title on March 1. For McKee, the tournament meant a lot since his father, [who has been battling terminal cancer](#), was present in the audience.

"I prayed 'God help me win this match so I can go win a state title for my dad,'" McKee told KARE-TV.



See what happened next.

<http://www.cbsnews.com/videos/cancer-patients-son-dreams-big-and-wins?tag=api>

## Only Kidding!

### Aircraft Mechanic Troubleshooting Chart

