

# 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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## Work nearly done on British Airways jet that caught fire in aborted Las Vegas takeoff

"Safety is always British Airways' first priority," a spokeswoman for the London-based airline said in an email. "A team from Boeing is carrying out the repair work, **which will be certified to the same high standards as if the aircraft was brand new**. The aircraft will resume flying once stringent checks have been completed."



The spokeswoman said no timeline has been set for when the aircraft would resume flying. While parked at McCarran, British Airways is paying \$375 a day in fees and by the end of February, the bill would reach more than \$53,000.

The jet, a twin-engine Boeing 777-200ER, was scheduled to fly as British Airways Flight 2276 from McCarran to London's Gatwick International Airport on Sept. 8.

Midway through its takeoff run, before the plane lifted off the ground, the jet's left engine experienced an uncontained failure that started a fire. Debris spewed out of the engine and onto the runway.

The pilot shut down the engine and aborted the takeoff and while McCarran's emergency response crews sped to the burning plane, the plane's 157 passengers and 13 crew members began evacuating on emergency slides.

A preliminary National Transportation Safety Board report in October said the "left engine and pylon, left fuselage structure and inboard left wing ... were substantially damaged by the fire."

Officials reported 14 people suffered minor injuries, most of them as a result of a rough ride down the emergency chutes. The runway was closed for four hours.

Aviation experts initially said they expected the plane's insurers to declare the aircraft a "hull loss," meaning that it was too damaged for repair and that it would be disassembled for parts.

In December, the airline determined [that the plane's damage was suitable for repair](#) so a plan was established to bring repair crews to McCarran to make the jet airworthy.

## **Chief Pilot: Working for the Largest Jet Airline in the World**

Always concentrate on being a great pilot and the leader on your airplane.

Capt. Brian Beach is one of four chief pilots that supervise 2300 pilots at American Airlines' Miami base. Beach starts his day at 5:30 am, often choosing to meet arriving international flights so that he can check-in with flight crew about any operations issues they might have experienced. When you meet American Airlines Miami-base Chief Pilot Capt. Brian Beach, you [know he likes his job](#). Watch him interact with a few of the 2,300 pilots he leads and you'll begin to think that Beach is good at his job too. You'll have to get up pretty early in the morning to catch him at his desk though.



"I like to come in around 5:30 a.m. as the international flights are landing and the first domestic flights of the day are prepping for departure," he says. A typical day includes answering a barrage of emails, studying flight operations and consulting with the other three Miami-base chief pilots, and then meetings. Somewhere in there, Beach takes time [to walk the gates to meet his crews and talk with them](#) about how they think operations are going. In his eyes, they are the front line.

The retired Marine pilot came to American in 1990 as a line pilot, and he still practices that art but mostly on the weekend. "I'll take a trip from one of my pilots and fly it to give him or her a weekend off.

I think it is important for them to have a family life," he explains. "I'm an advocate for my pilots. My phone is on 24/7, and if you do the right thing, I'm there for you," he says.

He got his first taste of leadership as an instructor pilot in the Marines. But it was stints the union [safety committee](#) and then time as the union's [National Accident Safety Investigator](#) that brought him to the attention of both pilots and management. The union honed his leadership skills and his focus.

"I learned so much about the [Aviation Safety Action Program \(ASAP\)](#) and how to use it to make the airline better and safer," Beach says. ASAP encourages pilots to report mistakes so that the FAA and airline can analyze them and create systems to prevent them. Pilots who participate in ASAP are not penalized. After two years as chair of the safety committee he was offered the chief pilot job.

Not every airline hires chief pilots the same way. At Delta Air Lines chief pilots rotate through two-year terms, moving from chief pilot to an operations position or back onto the line.

What is Beach's advice to pilots? First, you should [concentrate on being a great pilot and the leader on your airplane](#). Then learn the company's operations and look for a place you might fit in. "The pilot's union is another great place to both give back to your profession and hone leadership skills," he continues.

Chief pilots at major airlines are sometimes compensated as management on salary and sometimes paid as captain on an hourly rate plus a bonus. The median income in the U.S. is \$182,030 and ranges to more than \$220,000. Beach will warn you, however, not to do this for money. You work more hours than a typical line pilot. That being said, you sleep in your own bed more nights too.

## **Not a Good Friday - ASRS Report**

***It Could Never  Happen to Me!***

When ASRS Analysts screen safety incident reports, they can tag certain ones for their relevance to upcoming *CALLBACK* topics. Other reports can be tagged for the Editor's "Miscellaneous" file simply because they are "interesting."



A year-end review of the Miscellaneous file found several reports that fit into the “DOH!” (“Different Or Humorous!”) category and are worth sharing.

No matter what our level of experience, [there is an important lesson to be learned from these reports](#). No one is immune to error and, while some of these mistakes may seem rather improbable, those who think, “[It could never happen to me](#)” may be setting themselves up for embarrassment or worse. Wise aviation professionals recognize that we are all just a brief mental lapse away from one of those memorable moments we’d like to forget. Or, as a pilot stated in the first sentence of a recent report, “After years of reading incident reports and thinking, ‘How could a pilot do something so stupid?’ now I understand. [I have met the moron and he is ME!](#)” Obviously, mistakes attributable to lack of experience tend to happen earlier in our flying careers. One of the factors often affecting newer pilots is a tendency to focus [so intently on one thing](#) that their sense of the “big picture” is lost. An integral part of the big picture is what some old timers refer to as “headwork” or common sense. This B99 pilot may have been a little too focused on the mechanics of a checklist to step back mentally and question whether it fit the situation.

■ Enroute ... I started to perform my required “Weekly Checks” Checklist, going through item by item. The checklist calls for the weekly fire-test; [the first item is to pull both fire handles](#). As I pulled them I noticed a sudden loss of performance on both engines. My gauges indicated that both of them flamed out. I pushed the handles back and started to troubleshoot. I determined that my right engine was still operational. Meanwhile, the aircraft was losing altitude but it was under control. I advised ATC about my situation and they told me there was an airport ten miles away along my route.... Being a new pilot on this airplane, under these circumstances I decided the best course of action was to secure the inoperative engine and land as soon as possible. Having my right engine operational, I was able to stabilize the airplane and started my VFR descent. I completed my Emergency Checklist and then performed a safe single engine landing.

I am a new pilot on this airplane, having just completed my upgrade training one week ago. During the flight training, [this part of the checklist was never mentioned and the checklist was not available in the training aircraft](#). On the checklist, the fire test appears to be among the inflight test items. This situation was the result of me following the checklist that I believed I was supposed to perform. Had I received the proper training, I am sure this situation could have been avoided.

## When 3 out of 4 is bad

It started out as just another day in the VR-55 maintenance department. Our power plants shop had been awaiting four rubber spacers so that we could install a bleed-air check valve that was giving us a low-bleed-air check. **I was eager to get the job done.**

My coworker and I had checked out our tool box, our pubs, support equipment and parts. We proceeded to the aircraft to start our job. The bleed-air line ran from the load control valve on the auxiliary power unit (APU) to the manifold.

The check valve kept air from entering back into the APU. It mounted to the load-control line (the line for the manifold) and was secured with four bolts, four spacers, and two V-band clamps with gaskets. We connected the line. Then we installed the V-band clamps and gaskets, and three of the four mounting bolts. **The fourth mounting bolt, however, was a problem.**

A large APU exhaust duct ran up from behind the APU. It kept us from installing that last bolt. I tried for more than an hour, and my frustration kept mounting. My LPO and another CDI were less than 200 feet away, installing a new turbine on one of our motors. I could've asked them for help, but I didn't. I could've gone to QA for assistance, but I didn't. **I just decided to not install that fourth bolt.** I didn't think it would affect the operation of the valve. I was wrong in so many ways.

The MAF was later signed off as completed after our night check brought the BAC from 16 seconds to 20 seconds, which is our limit. I held onto the bolt in case anything happened. **I knew what I had done was wrong.**

Three weeks later, the bird came back from a functional check flight with a low-bleed-air check. One of the easiest forms of troubleshooting in maintenance is to look at what was worked on last. Our night check did just that. They tore into the valve only to find three of the four mounting bolts installed. Fearing one of them had fallen out, they got with QA to do a FOD search. My night check CDI called me and asked about it. I told him the truth and drove the bolt in from home.



The next morning, I came into work, checked my tools, and waited for my LPO to arrive, knowing he would ask about the situation. He did, so I pulled him and my division chief into his office to explain everything. I knew at this point my career was going to take a drastic turn. My CDI was revoked and my plane-captain qual was suspended by the maintenance officer, and rightfully so. [I had betrayed his trust](#), and I would've done the same thing in his situation. I was embarrassed and ashamed.

An investigation was launched. Everyone involved wrote statements, and the legal proceedings began, starting with a disciplinary review board (DRB). Before this incident, I'd been the number one "early promote" two cycles in a row, so disciplinary action was foreign to me. I'll never forget the things that were said at the DRB. [The ramifications of my actions could have been disastrous](#). Several of our chiefs have been at commands that had lost aircraft. They knew the pain a squadron goes through after losing an aircraft and fellow Sailors. Since [I hadn't used my resources or asked for help](#), I was recommended for captain's mast via XO1. I certainly deserved it.

At captain's mast, I was given a suspended bust for six months, an adverse evaluation so I couldn't take the next advancement exam, and extra military instruction for 30 days. I was beyond grateful to be given a second chance, although I knew that I wouldn't be able to get back to where I was before the situation.

I still try to hold my head high and use my experience as motivation to come back to work every day and work my tail off. Taking care of the aircraft, so our pilots and aircrew can take care of their missions and come back to their families, is paramount. [Integrity means](#) doing the right thing no matter what emotions are going through your head. It means being willing to take responsibility for your actions and [learn from your mistakes](#). I'm determined to be a better Sailor, a better mechanic, and eventually a better CDI.

## New certification standards for mechanics in the works

A group chaired by AOPA has been tasked with developing new certification standards, handbooks, and test development guidance for aircraft mechanics.

The Aviation Rulemaking Advisory Committee's Airman Certification System working group has already taken on similar tasks for the private, commercial, authorized instructor, and airline transport pilot certificates, as well as the instrument rating. The formal announcement adding aircraft mechanic certificates with airframe and/or powerplant ratings to the list of certificates the working group is addressing appeared in the *Federal Register* on Feb. 4. In the announcement, the FAA said it would add up to five new members to the working group, and encouraged those with expertise in aviation maintenance training and testing, specifically involving Part 65 or Part 147 operations, to apply. [Interested parties have 30 days to apply.](#)



Details of how to apply are included in the [Federal Register notice](#).

## Human factors passion leads to aviation safety scholarship

A former commercial pilot with a passion for [understanding the 'human factors' of aviation safety](#) has been awarded the 2016 Jilly Murphy Memorial Scholarship for Aviation Safety.

Kate Cook now works in the operational safety team of Airways New Zealand in Christchurch, and is currently completing a Bachelor of Aviation Management degree through Massey University.



She will use the \$5000 scholarship – jointly offered by Christchurch International Airport Ltd and Airways New Zealand in memory of the late Christchurch air traffic controller Jilly Murphy – to help fund her post-graduate study in human factors, [including areas like](#) fatigue, distraction or impaired reasoning that can impact on human performance. Jilly Murphy was a controller at Christchurch control tower and died in central Christchurch during the earthquake of 22 February 2011. Aviation safety was very important to Jilly, so in her honor, scholarship applicants are required to demonstrate a tangible benefit to aviation safety.



Kate says her experience as a commercial pilot set her on a path to learn more about the [impact human behaviors](#) can have on safety in the aviation sector.

“I find it a fascinating subject. During my time as a pilot, I found that [talking with more experienced pilots and reading accident reports](#) was a great way to learn and understand where improvements could be made in this area,” Kate says.

Airways Chief Executive Ed Sims says he and fellow judges John Murphy (Jilly Murphy’s father) and Christchurch Airport Manager of Quality and Security, Ford Robertson felt that Kate stood out as a truly dedicated aviation safety professional.

“We were also struck by her emphasis on the ‘mana’ of winning the scholarship over and above any financial gain. She shares the same unwavering commitment to aviation safety as Jilly, and that makes her a very deserving winner,” says Mr Sims.



# Press Release

## **TACG Announces Research Agreement with WestJet for the Co-Development of Cabin LOSA!**

**Myrtle Beach, SC, January 29, 2016:** The Aviation Consulting Group is pleased to announce WestJet as its research collaborator for the development and initial deployment of the Line Operations Safety Audit for Cabin operations (LOSA-C). LOSA-C is a proactive, formal process that requires expert and highly trained observers to observe operations in real-time and to collect safety-related data on environmental conditions, operational complexity, and human performance in the cabin. Numerous threats exist in the cabin. These threats can emanate from passengers, equipment, procedures, and more. A LOSA-C is an ideal way to identify these threats and understand cabin crew responses. LOSA-C also reveals how errors and undesired cabin states are managed by the cabin crew.

LOSA has been hugely successful on the flight deck and now is the time to incorporate LOSA into the cabin. Airlines that have a Flight LOSA program in conjunction with a Cabin LOSA program will be able to obtain a complete picture of flight deck and cabin operations. They will see how the flightdeck interfaces with the cabin and the cabin with the flightdeck.

TACG President Dr. Bob Baron commented that, "We are extremely excited to be collaborating with WestJet, an airline that truly believes in proactive and predictive safety. Cooperatively, we intend to make WestJet the world model for LOSA-C."

For additional information on LOSA please visit [www.tacgworldwide.com/losa.htm](http://www.tacgworldwide.com/losa.htm)

## Interactive Aviation Safety Reporting Visualizations

Aviation has long been at the leading edge of [safety and human factors data collection](#) due to the high consequences, visibility, and economic impact of accidents. Large and complex sets of operational and safety data offer many potential insights into emerging risks, trends, and hazards. [However, deriving meaningful conclusions from these data sources](#) has become increasingly difficult and labor intensive. Fort Hill Group has developed two interactive aviation safety visualizations to demonstrate the power of safety data analytics to drive operational safety intelligence. The visualizations are available at [Analytics.FortHillGroup.com/](http://Analytics.FortHillGroup.com/).



### About the Visualizations

These visualizations are based on a set of 180,000 aviation safety reports collected by [NASA's Aviation Safety Reporting System](#). The first visualization provides an overall view of commercial aviation safety reports based reports filed between 1988 and 2014. The second visualization focuses on recent human factors trends by including reports citing specific human factors issues between 2009 and 2014. Together these visualizations provide a foundation for analyzing and tracking both broad aviation safety issues and recent human factors trends.

The visualizations are available at [Analytics.FortHillGroup.com/](http://Analytics.FortHillGroup.com/).

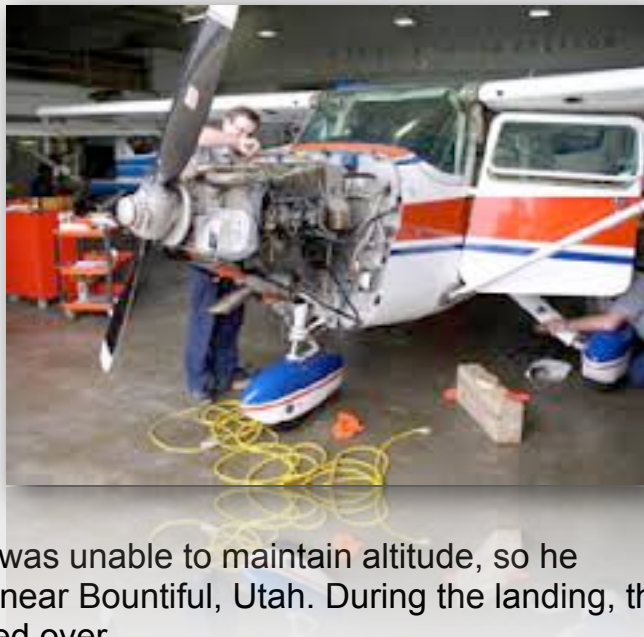
26 Years of Aviation Safety Reporting Visualization: [Analytics.FortHillGroup.com/](http://Analytics.FortHillGroup.com/)

Human Factors in Aviation Safety Reports: <http://Analytics.FortHillGroup.com/aviation-human-factors>

## **First flight after annual ends in crash**

The flight was the first flight in the Cessna P210N since its annual inspection, which occurred about six weeks before the accident.

The pilot conducted a thorough preflight inspection and run-up. Before takeoff, he added full power with the brakes applied, and, after noting no abnormal engine or instrument indications, he took off. When the airplane reached about 150 to 200 feet above the ground, the engine started to run roughly. The airplane was unable to maintain altitude, so he executed a forced landing to a field near Bountiful, Utah. During the landing, the airplane sunk into the mud and nosed over.



Post-accident examination of the engine revealed that the fuel lines connected to the input and output of the fuel flow indicator **were loose and leaking**.

After these lines were tightened **about 1.5 turns** and pressure was applied, a third leak was found in the vicinity of a metal label on the fuel line between the fuel manifold and the fuel pressure gauge.

The aircraft manufacturer's service manual states that the engine compartment rubber hoses must be replaced every five years or at engine overhaul, whichever occurs first. According to the airplane's maintenance logbook, the most recent engine overhaul occurred about 18 years before the accident.

The mechanic who conducted the annual inspection reported that, during the inspection, he removed the fuel lines to and from the engine-mounted fuel flow transducer to troubleshoot a lack of indicated fuel pressure at the cockpit-mounted instrument.

**It is likely** that the mechanic failed to adequately tighten the fuel lines when he reinstalled them.

The NTSB determined the probable cause as fuel starvation due to the in-flight loosening of the fuel lines attached to the fuel flow indicator **as a result of inadequate maintenance**.

NTSB Identification: [WPR14LA118](#)

This February 2014 accident report is provided by the [National Transportation Safety Board](#). Published as an educational tool, it is intended to help pilots learn from the misfortunes of others.

## **United Pilots To Receive Special Training**

### All 12,000 Pilots To Participate In Day-Long Sessions

Pilots flying for United Continental Holdings will get some specialized training designed to **boost safety and improve communications**. And while the airline says the program is "forward-looking", it does follow a strongly-worded letter sent to to pilots last year concerning "major safety events and near misses." Bloomberg Business relays a report from The Wall Street Journal which indicates that the program was developed with the participation of the Air Line Pilots Association (ALPA) and individual pilots.





The airline says its goal is to improve [inter-generational communication](#) as younger pilots come online and graduate into the role of captain. Another goal is to [encourage mentoring](#) of younger pilot by veteran aviators.

United spokesman Charlie Hobart said that a pilot in his or her 20s may rely more heavily [on mobile devices](#) than an older pilot, but did not specifically mention any particular communications issues that have arisen in the cockpit.

The day-long training will consist of [five modules](#); two focusing on operational issues and three looking at cultural and generational differences.

## **Flight Attendants Cement Essential 10 Hour Rest Provision and Other Safety Priorities in House FAA Reauthorization Bill**

The Association of Flight Attendants-CWA, AFL-CIO (AFA) cheered the members of the House Transportation and Infrastructure Committee for their action to amend the Aviation Innovation, Reform and Reauthorization Act of 2016 (AIRR Act) [to include a 10 hour minimum rest provision based on science](#) and sought by Flight Attendants for decades. This FAA Reauthorization Bill will set the priorities and funding for U.S. aviation for the coming years. "Proper rest is

critical for Flight Attendants to do our work as aviation's first responders. We worked very hard to achieve this common sense regulation and [we will continue to push](#) until the minimum 10 hour rest becomes law. Science confirms Flight Attendant fatigue is real and [we must all commit to combat fatigue](#) for the continued safest transportation system in the world. AFA commends members of the House Transportation and Infrastructure Committee for working with us on proper rest and all of our safety initiatives for this bill," said AFA International President Sara Nelson.

[Currently](#), after working 14 hours federal regulations all Flight Attendant rest to be reduced to 8 hours from the time the plane arrives until it departs again.



Passenger deplaning, preflight preparation and passenger boarding is included within the rest period which means that the opportunity to actually sleep is closer to 4 or 5 hours before potentially working another 14 hour duty day. AFA's "Fight for 10" also includes a [Fatigue Risk Management Plan](#) (FRMP) for reporting instances of fatigue. The FRMP also provides education for Flight Attendants to determine when they are fatigued and what steps in addition to proper rest that can be taken to avoid it.

## **Aeroflot: from world's deadliest airline to one of the safest in the sky**

On the anniversary of Aeroflot's founding we examine its Cold War safety record and modern day transformation

Aeroflot, founded on February 13, 1923, is one of the world's safest airlines. The website [AirlineRatings.com](#) – which judges the vulnerability of carriers according to a number of criteria – [gives it the maximum seven stars](#), placing it alongside the likes of Qantas and BA (and ahead of Ryanair) in its latest ratings. The Russian airline has been involved in just one fatal accident in the past 20 years.



But it wasn't always thus. Aeroflot's safety record was once the stuff of nervous fliers' nightmares – and the numbers are truly staggering. During 1973 alone, it was involved in 27 incidents in which a total of 780 people lost their lives, according to the Aviation Safety Network.

In 1974, there were another 21, while in 1975 the figure fell to 19. But 1976 was a real tragedy with a total of 33 accidents or major incidents.

In fact, barely a Cold War year went by when scores of travelers didn't spend their final moments strapped into an Aeroflot seat. Its planes fell from the sky with unerring consistency.

That's a total of 721 incidents in 44 years. Yes, Aeroflot wasn't the only airline to suffer during the Sixties and Seventies – [the deadliest decades for flying](#). But it was involved in far more than any other.

The Aircraft Crashes Record Office reports 8,231 passengers have died in Aeroflot crashes. Air France is next on its list, with 1,783, followed by Pan Am (1,645), American (1,442), United (1,211) and TWA (1,077).

[Why was Aeroflot so accident prone?](#) Its sheer size was a major factor. Aeroflot was once the only airline in operation throughout the whole of the Soviet Union and by the mid-Sixties it was already carrying a remarkable 60 million passengers a year. At the height of the 1970 summer holiday season, it was flying 400,000 passengers a day. By comparison, Pan Am welcomed just 11 million passengers throughout the whole of 1970. Aeroflot's figures grew yet further to 100 million in 1976, more than the likes of easyJet (62 million in 2014) and Ryanair (86 million in 2014) carry today.

Its all-Russian fleet was another factor. The reliability of Russian aircraft can be summed up by the fact that AirlineRatings.com continues to deduct a star for any airline that operates using only Russian built aircraft. Marks are also lost if the airline is not audited by IATA (International Air Transport Association), is not endorsed by the FAA (Federal Aviation Administration), is on the EU's blacklist or has had a fatal accident in the last decade.

Back in 2013, AirlineRatings.com released a list of the 10 least safe aircraft models. Topping the chart was the Czech LET410, introduced in 1970, but five Russian aircraft were also present, including a staple of Aeroflot's Cold War fleet – the Tupolev Tu-154. Wikipedia lists more than 50 major incidents involving this model, eight involving Aeroflot, and 39 of which resulted in the loss of lives.

The Nineties were the turning point. The breakup of the Soviet Union saw Aeroflot rapidly shrink, dividing into a number of smaller regional airlines (it carried just 5.9 million passengers in 2003, although it has since expanded to 26 million passengers a year). In 1994, the same year the Russian government sold off 49 per cent of its stake in the airline, Aeroflot was involved in nine incidents or accidents. That fell to just two for both 1995 and 1996. Since then, it has been as safe as houses, barring, that is, the 2008 crash of Aeroflot Flight 821, due to pilot error – [and possible alcohol](#)

Those Soviet aircraft have been replaced by Western-built jets. The Tupolev Tu-154 was retired in 2009, and its fleet now consists almost exclusively of Airbus and Boeing aircraft, including 777s and A330s, both rated among the safest models by [AirlineRatings.com](http://AirlineRatings.com).

Its efforts to redefine itself as a modern and reliable aircraft extended to hiring rebranding consultants in the early 2000s. In 2013 it scored the coup of an official partnership with Manchester United and it even gave its cabin crew uniform a makeover – though the hammer-and-sickle logo remains.

## **First 727 To Fly One Final Time**

Sometime around March 1, the very first Boeing 727 ever built will take off for one last time, to fly to its permanent home at the Museum of Flight in Seattle, the museum has announced. The airplane, which entered service in 1963, [hasn't flown since 1991](#), when it was donated to the



museum by United Airlines. It has been undergoing restoration ever since by crews of volunteers at Paine Field, in Everett, Washington. The final 727 flight will help celebrate the Boeing Company's centennial year. After the flight, the jet will become part of the museum's permanent collection, and there are no plans for it to ever fly again. The criteria for the final flight is "[safety, safety, safety](#)," according to Bob Bogash, a volunteer who maintains a website about the project. "The flight will be made when the restoration is complete, the airplane is deemed safe for the proposed flight, approvals are received from the FAA, the pilot is happy, and — especially — when the weather is good," Bogash wrote. The flight will carry essential crew only — a pilot, first officer, and flight engineer — and no passengers. The 727 then will join the museum's prototype 737 and 747 in a new Aviation Pavilion set to open this summer.

## PILOT RESOURCES

### **AOPA Safety Briefs**

The Air Safety Institute's *Safety Briefs* are short (2-4 page) publications designed to offer expert guidance and useful tips for every pilot. The current training topics include causes and prevention of fatigue, braking action reports, and wing contamination prevention tips... [Download Briefs](#)

### **#FlySafe Topic for February – Perform Advanced Preflight After Maintenance**

What items should you focus on and/or add to your preflight inspection checklist after maintenance?

Check out the fact sheet at [1.usa.gov/20bcGFL](https://www.1.usa.gov/20bcGFL).

### **Co. Launches Drowsy Driving Tool**

An Australian company that has made a name for itself in the [fight against drowsy driving](#) has now launched its signature product in the United States. [Seeing Machines](#) uses computer and video technology to alert drivers and fleet managers that fatigue is becoming a risk before an accident occurs.

The Seeing Machines Fleet tool can analyze a driver's eye movement and facial patterns to detect the development of drowsiness. With its ability to detect where the driver's gaze is focused, the product can also recognize if a driver is distracted from the road. "[Driver fatigue and distraction are clearly major contributing factors in vehicle accidents,](#)" said Seeing Machines [General Manager of Human Factors](#) Dr. Mike Lenné.



“Drivers who are tired or who have microsleeps, or who are distracted by activities including texting, drift in and out of lanes or off the road, vary their speed unnecessarily and are fundamentally unable to react in time to other drivers and other potential hazards on the road.”



If Seeing Machines detects fatigue or distraction, it immediately issues a dual alert. Alarms in the cab go off and the seat vibrates to get the driver's attention. At the same time, [the fleet manager receives data on the event](#) so they can ensure the driver takes the necessary steps to correct the situation.

“Unlike competitors’ passive recording technology that is used for post-event analysis and driver coaching, our technology assists operators and truck drivers in avoiding accidents in the first place,” said CEO Ken Kroeger. “This has helped our customers reduce fatigue and distraction related incidents, helping keep people, cargo and equipment safe, as well as increasing efficiency, productivity and profitability.”

Seeing Machines is used in transportation, mining and automotive industries throughout Australia, Europe and South America. Its new U.S. offices are located in Tucson, Ariz., and Mountain View, Calif.

## **Southwest Airlines Profit Sharing Hits Record \$620 Million in 2015**

Southwest Airlines announced on Thursday that their profit sharing program will distribute \$620 million to eligible employees by April 29. The 2015 profit share is the largest in company history and more than the cumulative contributions over the program's first 25 years (\$559 million from 1974-1998). Over the four decades of profit sharing, Southwest's contributions will have totaled over \$3.4 billion—and more than \$1.4 billion for the past five years alone (2011-2015).

"Behind every milestone Southwest Airlines has celebrated — and there have been many — **our Employees are the driving force**. I'm incredibly proud of the Teamwork and Heart behind every accomplishment," said Gary Kelly, chairman, president, and CEO of Southwest Airlines. "Our people have built one of the world's most admired companies, and they share in Southwest's success with this third consecutive record-breaking profit sharing contribution."



## **TED - Ideas Worth Sharing**

### **Martin Pistorius: How my mind came back to life — and no one knew**

Imagine being unable to say, "I am hungry," "I am in pain," "thank you," or "I love you," — losing your ability to communicate, being trapped inside your body, surrounded by people yet utterly alone. For 13 long years, that was Martin Pistorius's reality. After contracting a brain infection at the age of twelve, Pistorius lost his ability to control his movements and to speak, and eventually he failed every test for mental awareness. He had become a ghost. But then a strange thing started to happen — his mind began to knit itself back together. In this moving talk, Pistorius tells how he freed himself from a life locked inside his own body.



[https://www.ted.com/talks/martin\\_pistorius\\_how\\_my\\_mind\\_came\\_back\\_to\\_life\\_and\\_no\\_one\\_knew](https://www.ted.com/talks/martin_pistorius_how_my_mind_came_back_to_life_and_no_one_knew)