

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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★And Much More

Despite improved design, human factors can mean difference between disaster or close call

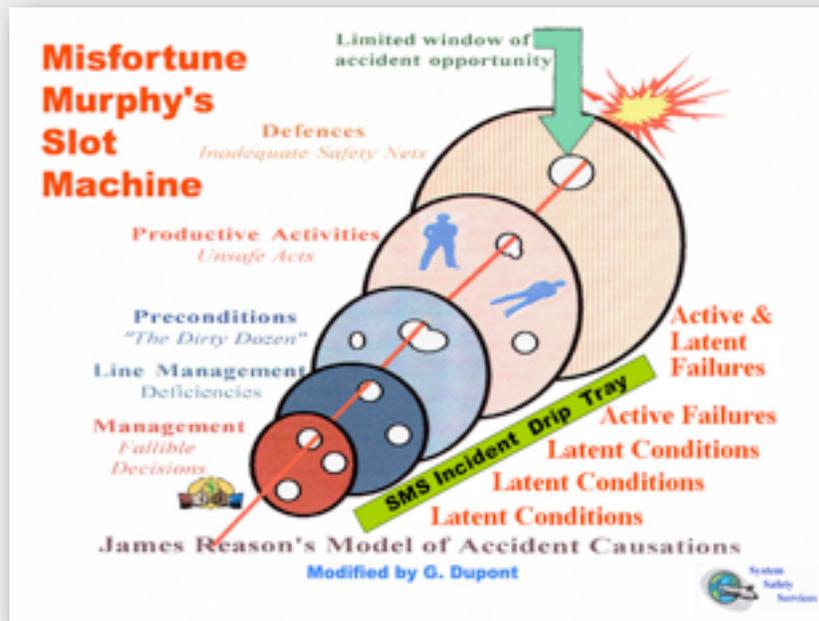
As planemakers build ever-safer jets, it's often the split-second decisions by humans at the controls that can make the biggest difference between a smooth landing and a flight that ends in disaster.

The last moments of Asiana Airlines Inc. Flight 214, which inexplicably slowed on its final approach,

underscore the stakes in the cockpit even in aircraft as sophisticated as Boeing Co.'s 777, according to safety consultants, retired pilots and aviation scholars following the U.S. investigation. Technological advances such as ground-warning systems and seats that can withstand greater impact helped produce the longest fatality-free run in U.S. aviation since the jet age began, based on data compiled by Bloomberg. Now, U.S. investigators are working to determine whether Flight 214's pilots, with all the safety features at their disposal, could have done more to prevent a crash that left two passengers dead. "Whether it's a disaster or a close call comes down to the pilot," said Les Westbrooks, a former commercial and military pilot who now teaches airline operations at Embry-Riddle Aeronautical University. "Airplanes have incredible automation. **But when the human has to exercise judgment, you can't design around that.**"

The July 6 crash was the worst on U.S. soil since 2009, and the first involving fatalities on a large jet in the U.S. since 2001. The focus on avoiding crashes spans advances such as the 777's automatic systems to keep from flying too slowly **to cockpit-behavior studies identifying common pilot lapses.**

Yet even with those safeguards, **risks as simple as fatigue remain.**



"Show me a pilot who's ever flown who hasn't been in that condition at some point," said Ross "Rusty" Aimer, an aviation safety consultant in Los Angeles and retired United Airlines pilot with 30,000 hours of flying, including 1,500 hours on the 777.

Aimer recalled being at the controls of a Boeing 747 nearing Tel Aviv airport about 30 years ago when, worn out from delays and tight schedules, he briefly fell asleep and missed a couple of pre-landing checklist items recited by his co-pilot.

Trying to track an expanding array of safety-enhancing features, including 3-D weather radar and data projected so that pilots see it while looking through the windscreen, [can be a distraction. Increased automation of basic flight functions may dull pilots' response times.](#)

"The stick-and-rudder skills get lost sometimes," said Mark Epperson, a retired Boeing 767 captain who supervised pilot training as a former chief pilot for AMR Corp.'s American Airlines in San Francisco.

An [abundance of instruments](#) also can't prevent a misreading of the data and a flawed response. Investigators said pilots failed to react properly to stall warnings in the February 2009 crash of a regional jet operated by Pinnacle Airlines Corp.'s Colgan unit, which killed 49, and the loss of an Air France jet four months later with all 228 people aboard.

"Pilots may think the aircraft is in a particular flight control state when in fact it is not," said Todd Curtis, founder of safety consultant AirSafe.com and a former safety analyst at Boeing. The National Transportation Safety Board "will very likely be looking at" those issues in the Asiana probe.

Investigators will review whether [a cultural aversion to disagreeing](#) with a colleague played a role in the Asiana crash, said David Greenberg, a former executive vice president of operations at Korean Air Lines .

In a 1997 fatal crash in Guam, a Korean Air captain ignored misgivings voiced by other crew members and followed a radio signal he wrongly thought was a glide-slope indicator that gives pilots a steady descent path, investigators found.

["Respect for age and seniority runs very deep"](#) in Asia, said Greenberg, who spent five years at Korean Air after that accident helping retrain pilots to [improve cockpit culture.](#)

NTSB On Boeing-777 Crash: Too Much Information?

by John Goglia

In the hours, days and weeks after a major airplane crash, the public demand for information puts NTSB investigators in a bind. How much information is appropriate for release and how much is too preliminary or too speculative to publicly broadcast? That is the very issue that the NTSB is grappling with in its press briefings and statements on the Asiana Flight 214 accident at San Francisco International Airport this past weekend. Clearly at least one organization, the US Airline Pilots Association, disagrees with how the NTSB is handling this. Truth be told, investigators would much prefer to quietly gather the relevant data, review it privately with appropriate experts, formulate their opinions in private and then brief the public on their findings, conclusions and recommendations when they are ready. [Working in the glare of the media is not easy for them.](#) Their work gets distracted by calls for explanations of the data released and the interpretations of that data. They spend much more time than they would like on those media calls and that detracts from their investigatory duties. They particularly dislike the time they have to spend shooting down sometimes bizarre opinions from so-called experts that could be described charitably as off-the-wall.



But the NTSB is not the NSA. It does not conduct its investigations in secret. In fact, [transparency is one of the NTSB's virtues](#) and a reason its probable cause determinations and recommendations are so well-respected around the world. On the other hand, as ALPA points out, releasing too much information prematurely can destroy reputations, invade the privacy of individuals and ultimately impede the investigatory process by making witnesses potentially less forthcoming. [It's a delicate balance.](#)

So far the information actually released *by* the NTSB appears to me to be consistent with the type of factual information normally released during a transportation accident investigation. It is unfortunate that some of the information released has been used by outside ["experts" to reach conclusions about pilot performance or pilot errors prematurely.](#) All the evidence is not in yet and *conclusions* about pilot errors are inappropriate.

British Airways Jet Engine Fire Showed Airbus Plane Damage Risk

Airbus SAS single-aisle jets may suffer more extensive damage from engine door separation **than previously thought**, the U.K. safety agency investigating an incident involving a British Airways airliner said.

The single-aisle plane took off from London Heathrow on May 24 and lost the fan cowl covers on both engines, forcing the crew to return to the hub after the jet sustained damage, the Air Accident Investigation Board said in a report. It was the first such event leading to an engine fire, it said.



"This event has shown that the consequences of fan cowl door detachment are **unpredictable and can present greater risk to flight safety than previously experienced**," the AAIB said. The cause of the engine fire remains under review, it said.

The engine doors on the flight to Oslo were **not properly latched after maintenance** and detached on takeoff, the London-based organization said. The event created secondary damage to wing control surfaces, landing gear and a fuel pipe.

The right engine caught fire, causing the plane to leave a trail of smoke as it overflowed London on its return to Heathrow. The crew shut down the power plant, built by the International Aero Engines joint venture, with the other still functioning.

Although extinguishing equipment was activated, the fire was **not entirely suppressed**, leaving it to airport emergency personnel to put out the flames after the plane landed, the AAIB said. The 75 passengers and 5 crew members escaped the incident uninjured.

Airbus alerted airlines a year ago about how to properly inspect the part in response to 32 door detachments, with 80 percent occurring on takeoff, the safety authority said. The AAIB recommended Airbus instruct operators to assure the latches are secured by undertaking visual inspections.

Attaching the latches typically requires maintenance personnel to lie on the ground to secure the doors, the AAIB said. The fan cowl door latches [are difficult to see unless](#) a mechanic crouches down so that the bottom of the engine is clearly visible, the AAIB said.

NTSB: Financial pressures contributed to helicopter crash

New information was released Tuesday about a helicopter crash that killed a mayo clinic heart surgeon and technician on Dec. 26, 2011.

A detailed report released by the National Transportation Safety Board contains what they believe the probable cause of that crash. A year and a half later, the images of the December 2011 helicopter crash are still disturbing.



Inside the chopper were cardiac surgeon Dr. Luis Bonilla, pilot and owner of SK Logistics Hoke Smith and procurement technician David Hines.

The three were en route from Jacksonville's Mayo Clinic to Shands Gainesville when the crash happened. The report said the pilot reviewed what the weather was like at the site where he was taking off and where he was landing to prepare, [but he did not obtain a standard weather briefing from an FAA-approved source.](#)

It also says a temporary condition during his ETA near Gainesville with visibility of 4 miles in mist and overcast ceiling at 400 feet.

The report said the pilot likely selected the route so he could navigate by landmarks and fly low in order to stay out of the clouds.

The pilot contacted an air traffic controller 4 minutes before the crash to ask about the status of restricted airspace, which he learned was inactive at the time.

The accident site was located about a half-mile from the last radar turn, which is consistent with a significant change in course and left turn with a continued descent.

The report said examination of the wreckage found no evidence of any malfunction of the engine.

The NTSB said the chopper **was not certified for** instrument flight rules flight and did not have an autopilot or radar altimeter, nor did the chopper's GPS system have an optional modification that would've included a terrain and obstacle warning feature.

The report said the pilot's **financial pressure as owner of the company likely influenced his decision to continue flying into deteriorating weather conditions**, adding the pilot's business had declined several years before the accident as a result of the recession.

The company, SK Logistics, filed for bankruptcy in February 2012. At last check, on May 29th, the court ordered an extension of time for petition for discharge as it relates to the death certificate of Hines.

ATSB Releases Final Report On A380 Engine Failure

Australia's aviation accident investigation agency, the ATSB, Thursday released its final report on an uncontained engine failure that occurred November 4, 2010, on a Qantas Airbus A380 over Indonesia and severely damaged aircraft systems.



Investigators concluded that an oil pipe in the jet's Rolls-Royce Trent 900 engine had been "made with a thin wall section" that "did not comply with the design specifications." That pipe cracked, investigators concluded, led to an oil fire that eventually caused one of the engine's turbine discs to separate from its drive shaft. The disc then over-accelerated, broke apart and burst through the engine casing "releasing other high energy debris" that damaged the aircraft's structure and caused a "multitude of system failures." The jet was carrying 469 people out of Singapore at the time and returned to the airport safely. Rolls-Royce issues a statement, Thursday, supporting the ATSB's conclusions and saying in part, "On this occasion we clearly fell short."

In the company statement, Colin Smith, director engineering and technology for Rolls-Royce, called the event "serious and rare" and one "which we very much regret." Said Smith, "the robustness of the Airbus A380 and the professionalism of the Qantas crew members assured that the aircraft and all its passengers landed safely." Rolls-Royce has already applied preventive measures through its engineering manufacturing and quality assurance procedures "to prevent this type of event from happening again." Adjustments include modifications made to engine software that Rolls-Royce says will prevent a turbine disc from bursting as a result of over-speed due to similar failures. The disc failure knocked out the aircraft's anti-lock brakes caused serious damage to a flight control motor, severed wiring, damaged a forward wing spar and tore open a fuel pipe. A hydraulic system was also damaged. In the aftermath of the incident, Qantas temporarily grounded its A380s and Rolls-Royce paid the carrier \$88 million in compensation.

http://www.atsb.gov.au/publications/investigation_reports/2010/aair/ao-2010-089.aspx

QF32 fallout: warning to check design rules

Air-accident investigators have warned US and European regulators they will need to review design standards to ensure planes can sustain engine explosions similar to what occurred to a Qantas A380 in late 2010.

Releasing their final report into the mid-air explosion on flight QF32, the Australian investigators said they were satisfied jet-engine maker Rolls-Royce had learned from the accident and taken steps to fix problems found in its manufacturing.

However, they have made recommendations to air-safety regulators in the US and Europe, whose job it is to set and ensure manufacturers meet certification standards.

The Qantas A380 suffered a catastrophic failure to its number-two Roll-Royce engine about 15 minutes after take off from Singapore's Changi Airport on November 4, 2010. It resulted in debris exploding from the engine, causing major damage to the aircraft carrying five pilots, 24 cabin crew and 440 passengers.



The A380's pilots turned the back to Singapore, where it landed safely.

In the final report, the Australian Transport and Safety Bureau found the extent of damage to the Qantas A380 showed design standards needed to be reconsidered.

"We have said to the [European Air Safety Agency and the US Federal Aviation Administration] that they should [review their guidance material about certifying aircraft in this area to deal with uncontained engine failures](#) to see if it remains reliable," ATSB chief commissioner Martin Dolan said on Thursday.

"It is an opportunity for the regulators to learn, because these are rare events, but when they happen they have potentially major consequences."

The European and US regulators have 90 days to respond to the investigators' recommendations.

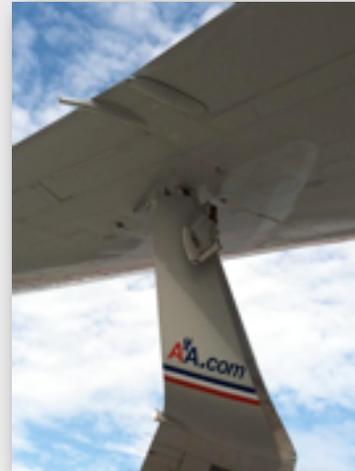
Airline 777-300ER Backs Into 757 Wingtip at JFK

John F. Kennedy International Airport in New York, an American Airlines Boeing 777-300ER had a run in with the wing tip of a 757 (N173AN), causing damage to the 777's wing.

A spokesman for the airline said; "We did have an incident involving two aircraft this afternoon at JFK. Both aircraft were empty, no passengers were on board."

The mechanic finished his work and was taxiing the 777 back but he **taxied to the wrong spot not designated for a 777.** American flight 951 to Sao Paulo, Brazil was cancelled, a flight operated by the 777-300ER, presumably as a result of the accident. The accident is yet another in a recent string of bumper planes at JFK.

Just last week, a TAM Airbus A330 had its winglet embedded into the side of a hangar. In March, the winglet of an Air India 777 sliced through the rudder of a JetBlue A320. Back in 2011, an Air France Airbus A380 spun around a Comair CRJ700 like a toy.



Am I mentally and physically prepared to perform the task?

The mental challenges we all face during this time of recession as well as the monumental changes to the aviation industry in the last decade can't help but keep us preoccupied. Competition for aircraft maintenance has grown fierce as companies try to raise production while maintaining lower cost. In order to be the best maintenance facility in the industry, **we must all remain mentally focused and physically prepared for what we do each day.** Before you start work, take a for a couple of deep breaths.

Check your senses, sight, hearing, touch and smell for acceptable responses. Make a conscious effort to put aside annoying issues of the day and focus on the job at hand. Do a simple and quick stretch routine to prep your body. If you have known aches or pains, pad up with supports or wraps to help you get through your routine. While working, lessen the stress by keeping appropriate approved data available to help you flow from step to step as effortlessly as possible. Use all the safety equipment the company has provided to protect you and avoid unneeded delays from slips or bumps.



NTSB: Pilot warned plane wasn't flight worthy

The NTSB says a pilot of a plane that crashed and killed him and a passenger **was warned** before takeoff that the craft shouldn't be flown.

Newsday says the National Transportation Safety Board report says a mechanic told David McElroy the plane **had a faulty tachometer** and shouldn't be flown. The instrument measures engine revolutions. The report also says that a friend of the pilot told investigators the single-engine Socata TB10 had problems climbing three days before the crash.

The lone survivor, Erik Unhjem, said **he was unaware** of the conversation between the mechanic and the pilot. His wife, Jane, was killed in the crash.

The Unhjems, of Goshen, N.Y., were interested in buying the aircraft and had taken it for a test flight when it crashed last August.



Study: Too Many Pilots Continue Unstabilized Approaches

On average, 96 percent of unstabilized approaches **do not result in a go-around**, according to preliminary findings from a go-around study being conducted by the Flight Safety Foundation's international and European aviation committees. "Data and anecdotal information are showing there are increased exceedances in aircraft performance and rates of violation of air traffic control instructions," the FSF noted. Foundation president and CEO Kevin Hiatt said the data indicates that flight crews often continue an unstabilized approach **"because the pilot has enough confidence in the airplane or the situation."**

Using 2011 statistics, the FSF said data analysis shows that potentially 54 percent of all aircraft accidents that could have been prevented by a go-around decision. “This is based on 65 percent of that year’s accidents being in the approach and landing [ALA] phase, and using our analysis that 83 percent of ALAs could be prevented by a go-around decision,” FSF director of global programs Rodolfo Quevedo told AIN. The foundation’s international and European aviation committees are still gathering data for the go-around study via the FSF website. According to Hiatt, the go-around study will be completed by the end of this year, and a white paper on this topic—to include guidelines for safe go-around operations—will be available on the FSF website by early next year.



<http://www.flightsafety.org/>

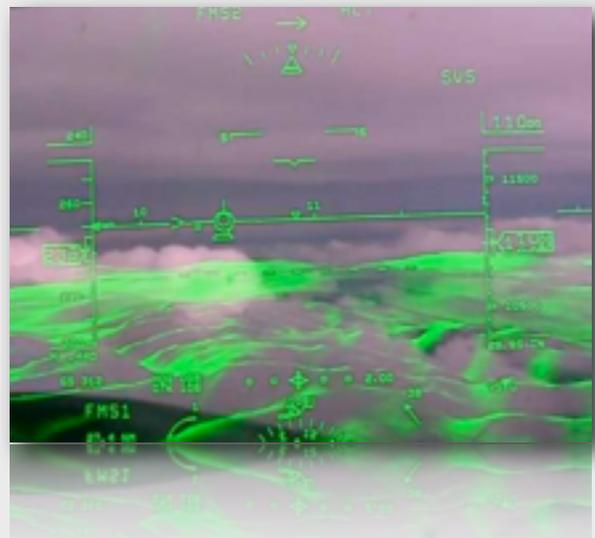
High-Tech Screens For Pilots Are Making Your Flights Shorter And Safer

Flying commercial jets is getting easier, safer, and more efficient, thanks to the increased use of a technology that the military has used for more than 50 years.

More and more airline pilots now have access to head-up displays, or HUDs, which display crucial information where the pilot can see it without taking his eyes away from the windshield.

HUDs make life easier for pilots, but they also have great benefits for passengers.

Safer FlightsThe sales pitch for the HUD is safety, efficiency, and reduced pilot workload, Kent Statler, Executive Vice President at Rockwell Collins, a leading HUD manufacturer, said in an interview at the Paris Air Show.



A whopping **70% of accidents could have been avoided** with the use of a HUD, he argued, because the device makes taking off and landing — the most dangerous parts of any flight — easier.

Using a HUD, the pilot sees critical information, like altitude and **air speed**, while still looking out the windshield.

"Eyes up and out is a much safer and more efficient way to fly," Statler said.

For takeoff, the device eliminates chance tailstrikes, when a pilot pulls up too quickly and the tail of the plane hits the ground. During landing, it accounts for factors like crosswinds, and **projects the perfect trajectory** for the pilot to follow. If he keeps to that, Statler explained, he "will hit right at the right contact point."

Shorter Flights

Besides the obvious benefits of safer flights, HUDs can offer passengers shorter flights.

Currently, "decision height" for most commercial aircraft is 200 feet. If a pilot cannot see the runway markers by the time the plane is 200 feet above the ground (if, for example, the weather is poor), he must pull up, circle around, and approach the landing again.

Accelerating Adoption

For most plane models still in production, airlines can choose to pay extra for HUDs. Southwest is "very focused on efficiency," Statler said, and usually opts for dual devices, one for each pilot. Both American Airlines, which flies into airports with short runways, and Alaska Airlines, which deals with a lot of rough weather, equip their planes with the displays.

China is really pushing the technology, with a mandate that all new planes have the device by 2025. Statler expects U.S. airlines and plane makers to follow the same trajectory voluntarily, predicting at least a single HUD setup in every new commercial aircraft by 2020.

Some of that growth will come from new types of planes. Boeing has made dual HUDs standard in the 787 Dreamliner. With that kind of exposure, according to Statler, the technology "will gain tremendous momentum going forward."

Rockwell Collins does not disclose pricing, but notes the cost of HUDs is dropping rapidly — by 40 to 50% over the past decade. A compact unit, small enough to fit in a business jet or turboprop plane, is in development.

The quality of commercial air travel may be downhill fast, but at least passengers may be able to spend less time in the air.

Cecelia Crocker, Other Plane Crash 'Sole Survivors' Share Tales of Guilt, Pain and Triumph

Cecilia Crocker, the sole survivor of Northwest Airlines flight 255 that crashed in 1987, shares her story.

At just 4 years old, Cecelia Crocker became known as [America's orphan](#) after being the only survivor in a 1987 plane crash, which, to this day, she doesn't remember.

In 1987, Northwest Airlines flight 255 crashed minutes after taking off from Detroit's Metro Airport, killing 154 people on board and two people on the ground, but leaving behind [one tiny miracle](#).

Cecelia Cichan, whose married name is now Crocker, was the lone survivor of the crash. Her mother, father and 6-year-old brother, David, who were on the flight with her, were all killed.

Now, almost 26 years later, that little girl is all grown up, and she is speaking out for the first time about the tragedy that forever changed her life. It is believed that Crocker's mother, Paula Cichan, [shielded her in the crash](#).

"[I think about the accident every day](#)," said Crocker, 30. "It's kind of hard not to think about it when I look in the mirror. [I have visual scars](#), my arms and my legs and I have scars on my forehead." At the time of the crash, Crocker's family lived in Tempe, Ariz., but her aunt and uncle raised her afterwards in Birmingham, Ala., and kept her out of the spotlight. Although she doesn't remember the crash, Crocker said she knows when she first understood what happened to her.

"When I realized I was the only person to survive that plane crash, I was maybe in middle school, high school maybe," Crocker said. "Being an adolescent and confused, so it was just extra stress for me. I remember feeling angry and [survivor's guilt](#). Why didn't my brother survive? Why didn't anybody? Why me?"



Crocker is one of four people, all of whom are lone survivors of airline crashes, featured in a new documentary, "[Sole Survivor](#)," which will hit theaters this [August](#). Another person featured in the film is George Lamson, who, at age 17, was the only person found alive after Galaxy Airlines flight 203 went down in Reno in 1985. The documentary follows Lamson as he connects with the few people who know what it's like to go through what he went through.

Another one of those people is John Polehinke, the [co-pilot on Com Air flight 5191](#), which went down seconds after takeoff in Lexington, Ky., in 2006. Even today, he said he still struggles with survivor's guilt. "[I've cried harder than any man has ever cried, or any man should be able to cry](#)," Polehinke said. "My wife was there to support me to where I could just put my head on her shoulder and cry. It's that constant struggle where my inner voice wants to keep going forward and the good voice says, 'Yeah, come on,' you have the inner strength to do that, but the bad voice says, no stay here, [have another shot of liquor](#)."

Then there is Bahia Bakari, who was 14 when she survived after Yemenia flight 626 plummeted into the Indian Ocean in 2009, and spent nine hours clinging to plane wreckage before she was rescued. Since 1970, there have been only 15 instances where a commercial plane crash left a single survivor. Amazingly, roughly 95 percent of people involved in plane crashes live to tell about it, according to National Transportation Safety Board statistics on accidents studied from 1983 to 2000.

In 1996, 50 people out of 175 on-board survived the Ethiopian Airways flight that crashed off the coast of Africa. Then there is the most remarkable plane crash survivor story of recent memory, when U.S. Airways Captain Chesley "Sully" Sullenberger safely landed in Hudson River shortly after take-off. All 150 passengers and five crew members survived the so-called "miracle on the Hudson."

To find the secrets to surviving a plane crash, Ed Galea, a professor of mathematical modeling and engineering at the University of Greenwich in London, interviewed 2,000 survivors of 105 plane crashes. "[There is no magic seat on board an aircraft](#)," Galea said. "There is no one seat that is the safest seat on the aircraft."

Discovery Channel's "Curiosity: Plane Crash" investigation compiled a team of experts who rigged a 727 jet with cameras, sensors and test dummies and then crashed it, on purpose, in the Mexican desert to see whether there are ways to help passengers survive when tragedy unfolds. Their conclusion: [Bracing for impact can indeed be a lifesaver](#).

"You're limiting the opportunity for movement of the upper torso, and hence, you're limiting the impact speed of your head against an obstacle," Galea said. "So the brace position is designed to reduce your chances of being knocked unconscious during a heavy impact, and you must be conscious, obviously, to evacuate."

For those who survive plane crashes, it is a life-long struggle to understand why they made it out alive when others perished. An exclusive screening of "Sole Survivor" was held in Royal Oaks, Mich., near the 1987 Northwest Airlines flight 255 plane crash site. The film's director, Ky Dickens, said being a sole survivor is [both a blessing and a burden](#).

"The most important thing that people can take away [from the film] is that [survivors are really victims too](#)," Dickens said. "There is this misperception that if you survive something, you are lucky... But their life is altered forever, and it's not easy for them to pick up and go on and there's very little of it that feels lucky to them."

In the audience were family members of victims who were killed in the 1987 crash, the one in which Crocker was the only survivor.

"When you see the footage of the wreckage, it's just a complete miracle and blessing that somebody walked away from that," said Jeff Krappitz, who lost his grandfather in the crash. Also in the audience was John Thiede, the firefighter who first spotted Crocker in the wreckage.

"When we found it and found her, it was just elation," Thiede said. "A moment you couldn't describe: 'Hey, we found somebody.'"

Crocker is now happily married, studies art therapy and flies regularly. [She even got a tattoo of an airplane on her wrist](#).

["So many things, scars were put on my body against my will, and I decided to put this on my body for myself,"](#) Crocker said. "I am happy. I'm just, I've never been happier." [She is a sole survivor who took control, and turned tragedy into a life of triumph](#).

Survey Says...Renewed Commitment to Safety Needed

Each year, Kimberly-Clark Professional conducts a survey of safety professionals to identify the current status, trends, and use of **personal protective equipment** (PPE) in the workplace. We share its findings each year to help safety across North America with insights that create safer, healthier, and more productive workplaces. The surveys have included responses from safety professionals who are responsible for purchasing or influencing the purchase of PPE. Respondents are from companies of various sizes, having fewer than 100 employees to more than 500 employees, and industries ranging from **aerospace**, metal manufacturing, oil and gas, construction, and utilities to food processing, just to name a few. In the latest survey, it shouldn't be surprising that, based on the professionals surveyed, 85 percent state that safety is a top priority within their organizations.

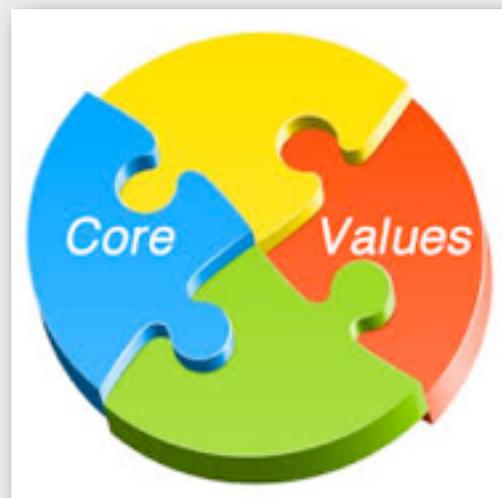


<http://ohsonline.com/articles/2013/06/01/survey-says.aspx?admgarea=ht.PPE>

Treat Safety As a Core Value, Not Just As a Priority

It's wrong to label safety a priority, according to Merlin Preuss, vice president of government and legislative affairs for the Canadian Business Aviation Association. "That's because it's much too easy to change priorities as the world evolves," he told the Business Aviation Safety Seminar in Montreal (BASS).

"Safety should be a core value for every business aviation operation, not just a priority," he said. "Safety is good for business. It's a cliché but it's true." But that doesn't mean a one-size-fits-all approach to safety, in Preuss's view.



For example, a safety management system (SMS) “must be scaled to the flight department’s size and complexity or the safety benefit won’t justify the cost. [The current crop of SMS systems is too complicated.](#)” He also believes the term safety risk management is a better moniker than SMS. “I’m staying away from mentioning SMS [these days] because that acronym has become synonymous with inappropriate overhead and regulatory burdens that would fail any cost-benefit analysis,” said Preuss. “And SMS was never designed to fail a cost-benefit analysis.”

Once an organization becomes serious about risk avoidance, Preuss says a system need not be onerous to build and operate. Realistically a manager need only “look at the problem, then fix the problem, then make sure it really did get fixed and lastly write it all down.” Put another way, he concluded, “Look at what’s costing money. Find out why and then formalize it a bit and you’ll have something concrete. How each operator then handles this knowledge—with a large preformed SMS or a computer spreadsheet—is up to them.”

[Rail chief blames employee in Quebec train crash](#)

[This CEO needs a introduction to human factors training.](#)

The president and CEO of the railway's parent company said Wednesday an employee [failed to properly set the brakes of the train](#) that crashed into a town in Quebec, killing at least 15 people.

Edward Burkhardt, president and CEO of Rail World Inc., made his comments during his first visit to the town where dozens of people are still missing following Saturday's fiery crash. "It was questionable whether hand brakes were put in place at this time," Burkhardt said. "I don't think any employees removed brakes. They failed to set the brakes."

He said a train engineer has been suspended without pay.



"I think he did something wrong. It's hard to explain why someone didn't do something. We think he applied some hand brakes but the question is did he apply enough of them," Burkhardt explained. "He said he applied 11 hand brakes we think that's not true. Initially we believed him but now we don't."

Burkhardt, who arrived with a police escort, was heckled by angry residents said that he had stayed in Chicago to deal with the crisis in his office, where he was better able to communicate with insurers and officials in different places during what he described as 20-hour work days.

The railway boss promised an energetic response to the humanitarian crisis.

Enough!!!

