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Board Says Pilots Were Responsible for 2006 Fatal Plane Crash in Kentucky

Engines are seen in the burned wreckage of Comair Flight 5191 at Blue Grass Airport in Lexington, Ky., in this Aug. 29, 2006 file photo. The flight crashed on takeoff Aug. 27 after using a runway that was too short, killing 49 people.

The pilots were primarily responsible for the crash of a regional jet last year that killed 49 people at a Kentucky airport because they failed to notice



obvious signs that they were headed to the wrong runway, safety investigators concluded yesterday.

The National Transportation Safety Board concluded that the pilots' errors and their failure to "cross check" that they were on the proper runway were the principal causes of the accident. The board also blamed "non-pertinent" chitchat between the pilots about colleagues' job prospects just before the crash.

The plane, a Delta Connection regional jet operated by Comair, crashed while trying to take off from a too-short runway in the pre-dawn darkness of Aug. 27 at Lexington's main airport. The accident was the worst U.S. commercial jet crash since November 2001.



Though the cause of the crash was apparent, board members said they were frustrated at being unable to determine why the pilots made the mistakes.

"No matter how many people we interviewed, no matter how much evidence we collected, the accident would offer no easy explanations," board member Deborah A.P. Hersman said during yesterday's meeting.

It was dark when the pilots pushed back from the gate in their Bombardier CRJ-200, investigators said. Pilot Jeffrey Clay taxied the jet while co-pilot James Polehinke conducted checklists. Polehinke was the only person to survive the accident but has said he does not remember what happened.

The crew was cleared by the tower's lone controller to taxi to Runway 22, the longer of two landing strips at the airport, the report said. The pilots had to cross the shorter runway -- which did not have lights and was used only by small planes in daylight -- to get to the proper one. Despite signs and markings and a lack of lights on the shorter runway, they turned onto it and started to take off just after 6 a.m., investigators said.

The controller told investigators that he turned to do paperwork after making sure there were no obstructions on the runway and did not see the accident.

A few seconds into the takeoff, Polehinke is heard on the cockpit voice recorder as saying it was "weird" that there were no lights on the runway, investigators said. Board Chairman Mark V. Rosenker said that the experienced pilots should have noticed they were on the wrong runway because it did not have lights. Commercial jets rarely use runways without lights in dark conditions, he said.

"I scratch my head to understand" how they made the error, Rosenker said.

The board's staff proposed that the controller's decision to do paperwork was a contributing factor in the crash. They argued that he should have been focused on the plane, not administrative tasks. "I know the controller did not fly down the wrong runway," said investigator Sandy Rowlett. "But he didn't do anything to prevent it, either."

However, some board members said they did not think the controller was required under Federal Aviation Administration rules to monitor each plane on the tarmac. They added that he may not have been able to see that the plane was taking off on the wrong runway because of the airport's configuration and the darkness. The board voted 3 to 2 to remove the controller as a contributing factor.



NTSB: 2006 Louisiana Helo Accident Could Have Been Prevented

50-Hour Fuel Nozzle Inspection Neglected To Lock Wire.

A probable cause report issued by the National Transportation Safety Board says a 2006 helicopter accident in Patterson, LA that killed two people was due to a missing piece of wire.



A Bell 206L helicopter took off from the Perry Flying Service in Patterson on March 14, 2006 on an air taxi, cross country flight with three passengers. Shortly after takeoff, "the helicopter had a loss of engine power while in cruise flight," according to the NTSB report.

The pilot was forced to make a "hard landing" in a marshy area after which two of the three passengers were able to exit the aircraft. The helo then caught fire before the pilot and a third passenger could extricate themselves.

"An examination of the engine at the accident site revealed that the fuel line to fuel nozzle "B" nut could be turned by hand, and did not contain a lock wire as required. All other fittings and nuts on the engine were found to be secure," said the report.

The fire caused a marsh fire that burned for several weeks, according to KLFY-10.

The evening before the accident, a mechanic performed a 50-hour fuel nozzle inspection. This required the removal, disassembly, cleaning, inspection,

reassembly and reinstallation of the fuel nozzle.

According to the report, the mechanic apparently then failed to secure it with a lock wire.

When NTSB investigators re-enacted the sequence of events, "The test revealed that the engine would experience a substantial loss of power that could conclude in a flame out. Testing further revealed that conditions would have been conducive for an in-flight fire."

The probable cause is listed as, "The improper installation of an engine fuel line fitting by other maintenance personnel, which resulted in a loose fitting and a loss of engine power during cruise flight. Factors associated with the accident are a tailwind, and the lack of a suitable site for a forced landing."



Woman Dies Following Rotor Blade Strike

Hit By Main Rotor on Takeoff

A woman from Italy has died from injuries she received from being struck in the back of the head by a helicopter's main rotor blades Tuesday.

The 31 year-old woman was struck while a two-seat Robinson R22 helicopter lifted off from an outback station near Larrimah in Australia's Northern Territory, according to the Australian Associated Press.



The woman was taken by car to a clinic in Mataranka and was met on the way by a ground ambulance. A Royal Australian Air Force medical helicopter from Katherine was dispatched, but the woman passed away prior to the air ambulance's arrival.

A team from Katherine and Darwin is investigating with assistance from the Australian Transport Safety Bureau.

Counseling has been offered to the 35 year-old pilot involved.

Airline safety – Brazil's deadly questions

It was a horrific experience in Sao Paulo. Those who were lucky were able to flee for their lives as the Tam Airlines (Tam Linhas Aereas SA), apparently slid on the wet illprepared and inadequate runway after attempting to land. A futile attempt by the pilot to take off again to avoid plunging into a busy road only resulted in a fatal crash into a fuel depot and cargo warehouse.

The impact caused an explosion which turned into a fiery inferno that consumed the 186 people aboard the Airbus 320 plane, and also took the lives of people on the ground. This is Brazil's worst air disaster, and it is being remembered by three days of national mourning for the estimated 200 victims.





Undoubtedly the search for answers as well as the assigning of blame will begin in earnest, for what is the worst loss of life in the international airline industry in 2007.

But the elements which helped to create this disaster involving the chaos of the management of the air traffic control system, the state of construction of the runaway and the delays and misdirection in taking decisive decisions, all play a part in what may involve many other variables in this difficult equation of human and technical error. Sao Paulo's Airport is reported to accommodate around 18.5 million passengers a year.

Investigators examining the cause(s) must divorce themselves from external influences to produce a credible document which not only Brazilian authorities can study, but the document should be made available for the entire airline industry around the world, to examine the strengths and weaknesses contained in this terrible learning experience.

What is quite clear is that specific problems did not develop overnight and appear to have been long in coming. Logically, there is the need to change certain processes urgently.

Unfortunately, there probably will not be an overwhelming stampede to effect changes immediately, particularly with the existence of a bureaucratic structure. It is important to remember that a federal court briefly banned three types of large jets – the Fokker 100, Boeing 737-800 and Boeing 737-700 – from using the airport because of fears that the airport was too close to residential areas and its runways are too short.

This disaster should demand our special attention, particularly since similar conditions for a future disaster may exist to a greater or lesser extent in the airports of other jurisdictions.

Airline travelers deserve better. It is the responsibility of governments and the management of airlines, to ensure that adequate standards of safety and quality are put into place and are rigorously adhered to. These standards should never be allowed to be sacrificed on the altar of expediency, profiteering and corruption.

Which passenger in his right mind would complain of too much security or be upset if a flight is delayed in the interest of making sure that the mechanical elements in a plane are safe or that the conditions within an airport is satisfactory for a proper landing!

In looking at the question of airline safety, I thought it would be interesting to look back in time at some of the worst airline disasters starting in 1987. This is by no means an exhaustive list, but rather a look at some of the worst crashes in a particular year.

1987: South African Airways 747 crashes off the island of Mauritius in the Indian Ocean; 160 killed.



1988: Iran Air A300 Airbus shot down by USS Vincennes over the Persian Gulf; 290 killed.

1994: Taiwanese airliner crashed at Nagoya airport, Japan. Some 264 killed in Japans second worst disaster.

1996: Saudi 747 collides shortly after take-off with a Kazak Ilyushin-76 making its landing approach; 349 killed.

1997: A Korean Air Boeing 747 crashes near Guam Island; 228 killed.

1998: Swissair Flight 111 from New York to Geneva crashes off Nova Scotia; 229 killed.

1999: Egypt Air Boeing 767 crashes into Atlantic after taking off from John F. Kennedy Airport in New York on flight to Cairo, Egypt; 217 killed.

2000: Alaska Airlines Flight 261 plunges into ocean off Southern California on flight from Mexico to San Francisco; 88 killed.

2001: An American Airlines flight and a United flight en route to Los Angeles from Boston crash into the World Trade Center after being hijacked; less than 3,000 dead and missing, including 157 on planes.

2002: A Boeing 747 belonging to Taiwan's national carrier – China Airlines – crashes into the sea near the Taiwanese island of Penghu, with 225 passengers and crew lost.

2003: Union des Transports Africains (UTA) 727-200; near Cotonou, Benin. The aircraft crashed shortly after take-off, 140 people were killed.

2004: Flash Airlines 737-300; near Sharm El-Sheikh, Egypt. The aircraft crashed into the Red Sea. All 135 passengers and 13 crew members were killed.

2005: Kam Air 737-200; near Kabul, Afghanistan. The aircraft crashed in mountainous terrain, killing all eight crew members and 96 passengers.

2006: A Russian Tupolev-154 passenger plane with 170 people on board crashes north of Donetsk, in eastern Ukraine.

In terms of numbers of people on an airplane, the worst crash in history occurred in 1985 when a Japan Air Lines Boeing 747 crashed into a mountain killing 520 people. Before the crash, the plane lost a 15-foot section of its tail.



Back to the factory for Dreamliner

The party's over, and the plane is back in the factory.

Now it's back to work to make the 787 fly.



One day after The Boeing Co. took time out to celebrate the debut of its 787 Dreamliner, work resumed almost around the clock Monday inside the Everett factory to get the plane ready for its all-important first flight.

That's supposed to happen in late August or September.

Much work remains, though, to meet that deadline.

As pretty as the Dreamliner looked on the outside at Sunday's rollout party, the stuffings inside that help to make it fly are missing. Many systems still must be installed.

"This is when the fun starts. Now I get the airplane," Mike Sinnett, Boeing's vice president of 787 systems, said Sunday as he and his wife admired the newest member of the Boeing 7-series family.

In addition to the systems work that remains, mechanics must replace about 1,000 temporary fasteners that are still in the wings and fuselage.

An industrywide shortage of fasteners, which help hold airplanes together, meant the large composite structures of the Dreamliner arrived at the Everett plant for final assembly with tens of thousands of temporary fasteners. Many have since been replaced with permanent ones. All temporary fasteners must be out before first flight.

Boeing has not set a specific date for that flight, nor will it.

"It will fly when it is ready to fly," said Mike Bair, head of the 787 program.

To meet its delivery deadline in May, Boeing has a window of about a month, starting in late August, to get the plane in the air so the test flight program can begin.



Accident Caused by the Wrong Glue

Investigations into the death of Milena Del Valle from Boston a year ago in July, who died when the ceiling of the tunnel she was crossing caved in on her has brought to light a startling fact, CSI style – a wrong type of epoxy glue used to fasten the anchors on the ceiling was responsible for the accident.



This collapse occurred in the Interstate 90 tunnel connector. Milena was on her way to the Logan International Airport with her husband, Angel, when 12 tons of the ceiling panel fell on top of their car and smashed her to death.

Investigators from the National Transport Safety Board (NTSB) looking into the death were focused on one important question – what led to the collapse?

Finally investigators have the answer: wrong adhesive used in the construction of the Big Dig tunnel.

Investigators said the contractors, in an attempt at cost-cutting, used an epoxy to connect the ceilings and panels. The epoxy chosen was, however, not strong enough to hold the structure together for an extended period of time. Add to that shortsightedness at the time of ceiling design – they did not take into account 'creep', a process by which certain epoxies lose their adhesive properties over time – and you have the ideal recipe for disaster.

The tunnel accident has resulted in extensive investigation in tunnels all across the country that were constructed as part of the Big Dig Tunnels project. But how did the ceiling collapse happen in the first place?

Not only was the epoxy used one that did not have long-term adhesive properties, there were also air bubbles between the glue itself and the surface it was being applied to, i.e. the bolts on the ceiling. The air bubbles reduced the adhesive strength of the glue by a whopping 40%, making it a disaster waiting to happen. Also, lack of an appropriate checking system ensured this flaw remained undetected until it was too late.

Basically, it is all slowly boiling down to one moot point – negligence on the part of the contractors. Investigators point out that this type of epoxy is generally used for ceilings that weigh much lighter. Fingers are being pointed at the Massachusetts Turnpike Authority and other companies who were responsible for executing the project.



However, the Massachusetts Turnpike Authority officials had their own version. While agreeing they did not inspect the tunnel between 2003 and 2006, they maintained it was not done only because they were waiting to put a database in place, and for federal highway inspections to complete.

Investigator Mark Bagnard of the NTSB put it in a nutshell when he said that the 'epoxy is inappropriate in all circumstances.' Milena's family has decided to file a lawsuit against the Massachusetts Turnpike Authority while the state attorney general is yet to arrive at the conclusion of pressing criminal charges against it. Nobody is ready to comment on how safe the Big Dig tunnels are anymore.

Proper Care and Feeding of Pneumatic Tools the rule of thumb is to always use the right tool with the job

Pneumatic tools are to aircraft technicians as scalpels are to surgeons: They are essential 'tools of the trade'. Yet despite this fact, some technicians either neglect or mishandle their air tools.

It can be something as small as using the same compressed air supply to drive paint guns and air impact wrenches; risking lubricating oil leaching into the paint and ruining the next 737 refinishing job. Or it can be as big as tossing precision



pneumatic tools around like baseballs, with the concrete shop floor serving as backstop.

Of course, the aviation industry isn't the only one where pneumatic tool abuse occurs. "Having a pin put in my broken hand, my orthopaedic surgeon asked his nurse to turn on the nitrogen tank used to operate his air drill," recalls Karl Matis.

He is vice president of HECAT Inc., known in the aviation business for its HECAT pneumatic heat exchanger flushing equipment. "Thinking she was opening the bottle, she cranked up the pressure regulator," Matis says. "When the drill did not work, the doctor jumped up and opened the bottle himself. When he pulled the trigger, the drill immediately screamed with rpm and disintegrated scattering shrapnel everywhere. Luckily no one was injured by debris."

Back to aviation: What constitutes the proper care and feeding of pneumatic tools? Here's some answers that will keep your air tools humming along for years to come.



Handle with Respect

Pneumatic tools are meant to be used repeatedly in harsh environments. This is why pneumatic tool manufacturers build their products out of hardened metals, with enough resilience and toughness to keep working day in, day out.

This said, even the toughest air tool has its breaking point, warns Jay Johnson, Mac Tools' product manager for power tools. Sometimes breakage occurs because a tool is being asked to do too much. Other times, a properly used tool will fail due to years of wear and tear.

"The most common things that break or get damaged on ratchets and impact wrenches are anvils," Johnson tells AMT. "Anvils often wear out and simply need to be replaced when they break. They're always under heavy torque, which leads to steel fatigue.

"Gears get damaged on tools like drills, grinders, and ratchets when the user puts too much load on the tool," he adds. "Pressing too hard on a grinder or hand tightening a fastener with a ratchet after the ratchet torque has maxed out puts a lot of stress on the gears."

To make pneumatic tools last, the rule of thumb is to always use the right tool with the job. Don't try to make smaller impact wrenches do the work of larger models. Otherwise, they will break sooner simply due to repeated overstressing.

In the same vein, respect that each tool has its wear limits. Take note of the manufacturer's hour ratings for a given tool, and keep track of its actual usage. This does not mean that you have to note every time a tool is used, but you should record when a tool enters service, and forecast when it will need to be checked for servicing and/or overhaul.

Finally, if you want your pneumatic tools to last forever, Karl Matis offers these three words of advice: "Never use them."

Handle With Care

In a perfect world, air tools and concrete floors would never meet. In the real world they often do, either by being dropped or tossed by careless technicians.

That's not all: "I've heard of tools getting run over by cars or forklifts on shop floors," Johnson says. "It's not uncommon."

Any time a pneumatic tool suffers this kind of shock, its internal mechanisms can become misaligned and/or broken. The result can be wrenches that don't turn, or compressor lines that leak. Whatever the damage, once it has happened, it has happened. Sometimes a pneumatic tool's workings can be repaired, but sometimes they can't.



The rule of thumb: Always have a safe resting place for pneumatic tools handy to the job site. By having this, technicians can put down the tools as needed, without dropping them on a concrete floor. If need be, put some kind of shock-absorbing padding around the resting place, to protect any tools that may slip off by accident. "It also helps to put 'rubber boots' on tools that are vulnerable to impact," Johnson says.

On a larger scale, never toss pneumatic tools. It doesn't matter if you were a star Little Leaguer or if you could have attended Notre Dame on a football scholarship. Don't toss those tools!

The Importance of Oiling

It may seem like a no-brainer, but pneumatic tools require regular oiling and lubrication. Without this degree of care, the parts inside will start to grind against each other. Eventually, the tool will erode itself into uselessness.

Amazingly, "we've seen many tools at our repair center that have never been oiled: Never," says Johnson. "This actually happens, even though almost all the air tools we sell say 'oil daily' right on the housing. All technicians know the need for grease and oil in automotive applications, yet a few of them don't see the need in their air tools!"

"For all air tools, a lack of grease and oil probably accounts for most damage," says HECAT's Matis. "The only other factor that consistently causes damage is water in the air line."

When you do oil your air tools, be sure to use the lubricant recommended for the job. As well, be sure that the oil doesn't get all over the tool, seeping onto rubber and other components that need to stay oil-free. Whatever you do, don't get oil in the air line!

One last piece of advice: "Oil tools daily at the end of the day," Johnson urges. "The inner components of air tools are often made of steel and will rust easily. By oiling the tool at the end of the day, then running it for a few seconds, the oil will stay in the tool overnight protecting it from moisture." Adds Matis, "For our use of company-owned assembly air tools; we require a few drops of air tool oil daily, and a tear down, inspection, and cleaning quarterly."

Keep 'Em Clean

Like oiling, being told to keep pneumatic tools clean seems obvious. Yet tool manufacturers often see pneumatic tools that have failed due to dirt buildup and water-caused corrosion.

In many cases, cleaning is a simple matter of wiping grime and moisture off the tool as needed. However, if an air wrench falls into a puddle, don't just wipe it off and keep working. Instead, take steps to ensure that the inside is properly dried and relubricated, as directed by the tool's service manual.



In the same vein, make sure that pneumatic tools are regularly stored in clean, dry containers. Protect them from moisture and shopfloor dirt, especially when not in use.

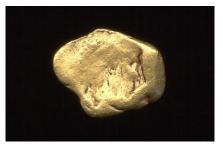
The Bottom Line

Take care of your air tools, and they will take care of business for you. Whether you are a shop floor technician, a foreman, or a general manager, this is the most important truth about the proper care and feeding of pneumatic tools.

Midnight Shift Nugget

Water and other drinks

Water enhances your energy level by easing the work of the kidneys, heart and lungs. It also aids digestion and helps prevent obesity, poor muscle tone and joint and muscle soreness. To get enough water:



- Consume the equivalent of 8 to 10 glasses a day.
- Don't count on thirst to guide you. You're usually dehydrated before you actually feel thirsty.
- > Avoid sports drinks, which are often high in sugar and sodium.
- Limit your intake of caffeine and alcohol, which are diuretics that flush needed water out of the body.

Human Interest Story

Al Blackman: Loving His Job for 65 Years

"Attitude is everything," says Al Blackman as he walks into the American Airlines Hangar 10 at JFK. Blackman, or "Blackie," has been working for American Airlines even before it was called American Airlines.

A graduate of Aviation High School in Manhattan, Blackie signed on as a structural mechanic with the American Export Steamship company repairing "flying boats" in 1942. "The flying boats were not as complex as today's airplanes," says Blackie.





"It was basically all mechanical and most of our job was patching hulls when they rubbed against a reef or some rocks to keep them water-tight."

Blackie was drafted into the Korean war and was assigned to the 102 light aircraft and the helicopter maintenance unit in the Uijonbu valley across from the 4077 MASH. When his term in Korea was up, he returned to his native New York and continued working as a lead mechanic with AA.

Blackie has worked under the leadership of at <u>least six AA CEOs</u> and has outlasted several managers, co-workers, aircraft fleet types and even a few company policies. <u>At age 82</u>, Blackie is one of AA's oldest (and most highly respected) employees.

Blackie's wife and family joined New York area employees at JFK's Employee Appreciation Day to honor this milestone of milestones anniversary. General Manager Mark DuPont and Aircraft Maintenance Manager Devon Erriah presented Blackie with what is thought to be a one-of-a-kind ruby and diamond anniversary pin. Blackie's wife, Delores, wears all of his anniversary pins on a charm bracelet.



"Blackie is an amazing person," said John Iuliano, President TWU Local 562. "He comes to work full of enthusiasm ready to take on the challenges of the day and eager to share his insight. And let's not forget your not going to make it through the day without hearing a joke or two. Blackie's work ethics and his contributions have been and will continue to be an essential part of American Airlines success."

"Al, to me, represents the soul and pride of what makes being an AMT so extraordinary," said Erriah. "Al's history speaks for itself, but I'm most impressed by his unwavering dedication and drive to produce our product and get aircraft on the ready line for flight. Al is my personal Hero of Aviation."

In his spare time, Blackman works with a group of people at Floyd Bennett field restoring historic aircraft. The group known as H.A.R.P. operates under the auspices of the National Parks Service restoring planes of a bygone era. "I like working and I can," says Blackie, who has a constant fascination working on something that "can get off the ground."

With no immediate plans for retirement, Blackie gets his greatest kicks working with other people in a craft that he loves. "Everyday my wife sends me to work and tells me to go play with your friends," he said. "I always consider myself fortunate to do what I like to do, and they pay me."



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ODDBALL INTERVIEW QUESTIONS

Asking an off-the-wall question is a favorite technique of some interviewers. Here's a list of some of some actual questions that job seekers said they were asked in the course of an interview:

- If you could be any character from fiction, who would it be?
- If Hollywood made a movie of your life, which actor or actress would you cast to play you?
- If you could be a superhero, what superpowers would you want to have?
- If someone wrote a biography about you, what would the title be?
- If you were shipwrecked on a deserted island and had all the food, water and other items to satisfy your human needs, what other two things would you want to have with you?
- If you had only six months left to live, how would you spend the time?
- If you could have dinner with anyone from history, who would it be and why?
- Which animal are you most like and why?
- If you were a type of food, what type of food would you be?
- If you won \$20 million in the lottery, what would you do with the money?
- If you were a salad, what kind of dressing would you have?
- How do I rate as an interviewer?
- If you were a car, what kind would you be?
- Who do you admire the most and why?
- In the news story about your life, what would the headline say?

Source: Quintessential Careers, <u>http://www.guintcareers.com/wild_card_interview_guestions.html</u>.



Care to join me for dinner--just don't order ze Beef Wellington!



Picture This!



END