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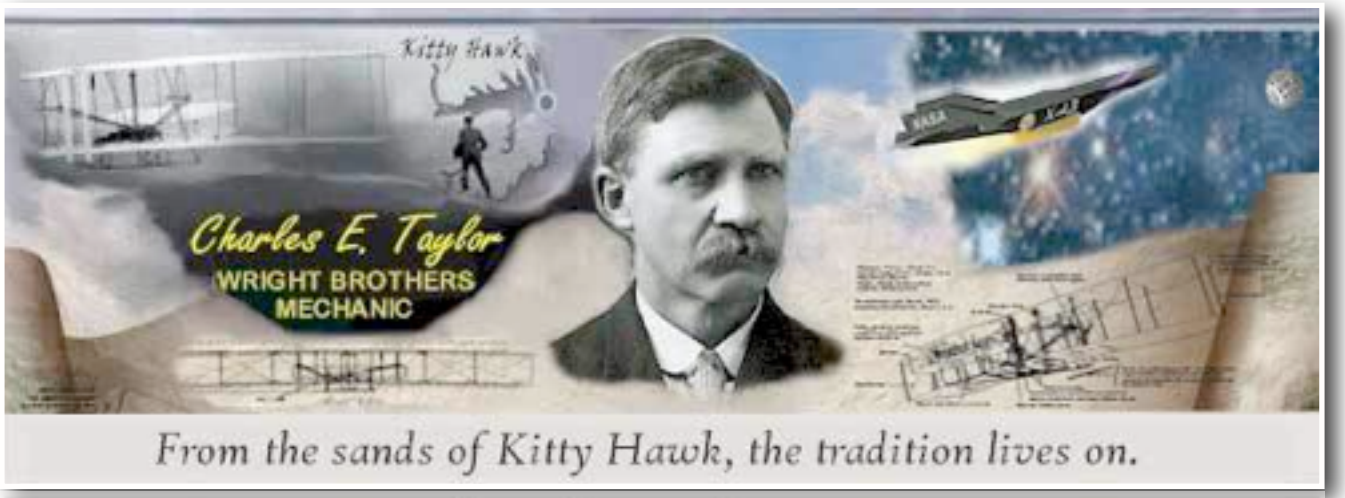

Hello all,
To subscribe send an email to: rhughes@humanfactorsedu.com
In this weeks edition of *Aviation Human Factors Industry News* you will read the following stories:

French Accident Bureau Convenes AF447 Human Factors Group

The French air accident investigation office, BEA, has convened a panel of human factors experts to help analyze information linked to the crash of Air France Flight 447. The BEA, when issuing its latest interim report, noted it would set up such a panel to help better understand the actions taken by the plane's pilots. The big question has been why the cockpit crew did not properly respond to stall warnings as the Airbus A330-200 flew from Rio de Janeiro to Paris. The aircraft crashed into the Atlantic on June 1, 2009.

The expert group comprises seven members, the BEA says, with three of its own human factors specialists participating, a psychiatrist, an outside aviation human factors expert, a test pilot and an airline A330 pilot. Airbus and Air France specialists also may be consulted during the review.

The panel will look at issues such as cockpit ergonomics, human/machine interface, and the actions of the crew. The panel's work should be completed this year and be included in the final AF447 accident report, due next year.

Air traffic errors climb

Air traffic controller operational errors - in which planes get too close to each other or to another object - skyrocketed 81 percent between 2007 and 2010, according to federal data, while errors in the Boston region shot up even more, 114 percent. The Federal Aviation Administration, which provided the information to the Globe via a public records request, attributes the increase to changes in the way errors are reported and categorized.

But some controllers, trainers, and the company that used to train controllers blame the rise on a range of other reasons, from inexperienced staffers to the training done by Waltham-based Raytheon Co.

http://articles.boston.com/2011-09-05/business/30116325_1_air-traffic-controller-operational-errors-controls-planes

Draft Runway Safety Best Practices for Airport Vehicles

From Airports Council International - North America:

1. Acquire and familiarize yourself with current NOTAM prior to entering movement area.
2. Acquire current ATIS (Insert local ATIS frequency & telephone number here) prior to entering movement area.
3. Plan your route of travel to avoid runway crossings. Make maximum use of existing service roads. Know your route prior to initiating contact with ATC.
4. Communicate your vehicle identification, destination and intended route of travel to airport operations or company communication center prior to entering movement area. Confirm you have current ATIS.
5. Read back all hold short and runway crossing instructions issued by ATC using proper phraseology.
6. Cross near runway ends wherever possible.
7. Be aware that an airplane on a runway with landing lights illuminated has been given a takeoff clearance.
8. Stop when approaching any runway, open or closed, and visually verify the runway is clear. Look right and left before proceeding.
9. Each vehicle operating on movement area should be equipped with:
a. Radio communications for appropriate ATC and airport operations or company frequencies.
b. Rotating beacon or light bar.
c. Airport diagram.

d. ATC signal light codes.
e. Accident/incident reporting form.
f. This movement area checklist.
10. Maintain your situational awareness at all times. Eliminate unnecessary distractions. Enforce a policy of "No Cell Phone" use for personnel while operating on the airfield.
11. All vehicle lights (high beams, flashers, beacons, and strobes) should be turned on when crossing or operating on runways, taxiways or the AOA.
12. Conduct opposite flow runway inspections. Runway inspections should be conducted toward the flow of aircraft landing and departing as much as possible.

Canada Lags In Runway Safety Regs, TSB Official Says

Canada has a rate of runway incursions that is three times that of the U.S., a rate of runway excursions that is higher than in the U.S., and wet runway incidents that are on the order of four times that of the U.S., says Mark Clitsome, director of air investigations for the Transportation Safety Board (TSB) of Canada. Additionally, controlled flight into terrain incidents are 5% of all accidents in Canada but account for 25% of all fatalities. "Canada is lagging behind the U.S. in regulations for these types of incidents," Clitsome said at the Air Line Pilots Association Air Safety Forum in Washington recently.

Noting that many runways at Canada's airports cannot be extended, Clitsome said the TSB is recommending equipping more runways with engineered mass arresting systems.

Concern in the cockpit: Does autopilot = rusty pilots?

Pilots are the people you trust with your life from takeoff to landing.

But pilots across America are coming under scrutiny after a recent FAA study concluded they're depending too much on autopilot and not enough on their own know-how. "When you rely upon this type of equipment and you don't have the full stick and rudder skills which we've traditionally taught our pilots, we get ourselves into a real bind," said Mark Rosenker, a former National Transportation Safety Board chief.

Take for example the 2009 crash of a regional airliner that killed 50 people in Buffalo, New York. Investigators said the pilot made a mistake responding to a stall warning, which led to the fiery crash.

At Eugene's Lane Aviation Academy, future pilots learn to fly airplanes in the midst of all the automation, said director Stephen Boulton.

Students must pass vigorous exams and prove they can manually handle in-flight emergencies.

In 2009, Captain Sully Sullenberger turned a could-be tragedy into triumph when he landed his plane on the Hudson River after it lost all engine power.

"I learned these fundamental skills very well," said Sullenberger, now a CBS News Aviation Safety Expert, "they were so deeply internalized that even after 40 years they were very accessible to me."

And Lane Aviation Academy students like Jacob Edmonds said there's no slacking when it comes to pilot safety.

"It's a generally good thing to know," he said. "Save yourself a lot of trouble."

http://www.kval.com/news/local/128920623.html?tab=video

Pilot's Crusade Against "Toxic" Cabin Air

John Hoyte flew for 30 years and says chronic fatigue and memory loss caused by toxins circulated in the air systems of the aircraft he flew forced him to walk away at the age of 49. Now 55, Hoyte wants to lobby the government to force airlines to recognize a link between toxic fumes on their aircraft and negative health effects for pilots. He has set up the Aerotoxic Association based on his belief that exposure to fumes in airliners caused him to suffer neurological damage. Hoyte's belief is generally unsupported by the industry and may be challenged by some studies. According to an Independent Committee on Toxicity, "fume events" take place on roughly one out of every 2,000 flights aboard jet airliners. A review concluded in 2007 that a link between cabin air and pilot health could not be established. That review stopped short of ruling out the possibility. The Department of Transportation's position is that there is no evidence for pollutants in the cabin exceeding guidelines for health and safety standards. The British Air Line Pilots' Association believes further testing should be conducted. Hoyte says he has been tested along with 26 other pilots as part of a university study and all the participants showed effects from exposure to toxins. He says that after the study he was told he suffered from aerotoxic syndrome caused by breathing oil fumes. A coming University of Amsterdam study will sampling 30 crew members with neurological complaints to see if it can establish evidence of a link to toxins in cabin air.

MIT fined over air cargo package fire

Massachusetts Institute of Technology is in trouble with the U.S. government for shipping a package that burned up before being loaded on a cargo jet.

The Federal Aviation Administration on Friday said it plans to fine MIT $175,000 for improperly marking and shipping electronic devices that caught fire on a conveyor at a FedEx sorting facility near Boston in August 2009.

The agency said MIT sought overnight shipping of a fiberboard box containing 33 small electronic devices from Cambridge, Massachusetts, to Seattle. Each device included a lithium battery attached to a circuit board and tube-like container. They were part of an experiment aimed at tracking the movement of trash.

Two of the devices, which were not identified, heated and melted, causing surrounding packaging to catch fire. FedEx employees noticed the burning package as it moved on a conveyor and unsuccessfully tried to extinguish smoke and flames.

The FAA said the batteries were not packaged to prevent a short circuit that could create sparks or generate a dangerous amount of heat. MIT did not properly mark or label potential hazardous conditions on the box, FAA said.

Documents showed the package involved researchers affiliated with an MIT-led project aimed at tracking trash in New York and Seattle to assess the costs of disposal and create awareness of the impact of trash on the environment.

A university spokeswoman could not immediately confirm where the package came from and had no comment on the FAA fine. The school has 30 days to appeal.

Sky Harbor worker gets trapped under baggage carousel

A Phoenix maintenance worker became trapped in a conveyor belt under a baggage carousel at Phoenix Sky Harbor International Airport last Tuesday morning.

The man is believed to be a maintenance employee who was working beneath the baggage carousel area in Terminal 2 where passengers pick up their luggage.

The man sustained multiple injuries but is in stable condition and was taken to a hospital. "It was downstairs in a very tight area," Phoenix Fire Captain Jorge Enriquez said. "It was hard to get to him, and it was a tough extrication because there wasn't a lot of room down there."

The cause of the incident is not known.

The man, who is an employee of the Phoenix Aviation Department, was doing maintenance on the carousel, Phoenix Sky Harbor spokeswoman Julie Rodriguez said.

Dawn Patton, a customer service representative who works by the carousel, said that at about 8 a.m. she heard the man screaming for help and another man asking for scissors. She immediately grabbed a pair of scissors from her service desk and went downstairs to the trapped man to help cut him free. She found a few men down there attempting to free the man from the belt.

"It was a little bit difficult, but with everybody pulling on it we ripped it a lot easier," Patton said.

Emergency crews arrived at about 8:30 a.m. to extricate the man out from beneath the baggage carousel area. They found out that he had his hand and one of his legs pinned in the conveyor belt, Enriquez said.

Fainting worker Sarah Maroney sues Qantas for almost $270,000

QANTAS is being sued for almost $270,000 by a former customer service agent who worked for seven hours straight without a meal break and then fainted.

The claim filed in the Brisbane District Court is the latest blow for the airline, which has been the target of industrial action by unions seeking more pay and better conditions for members. Insufficient staffing has been blamed by Sarah Maroney, 25, for the injuries she suffered when she fainted at work on December 12, 2008.

According to the court claim, Ms Maroney had begun working at 3.30 am in the check-in area of Brisbane Domestic Airport.

After a busy morning in which she and other employees were verbally abused by passengers angry over delays, Ms Maroney took a break at 10.30 am. Ms Maroney's solicitor said she felt "dizzy, sick and felt she couldn't breathe properly", before she lost consciousness and fell to the floor. Her injuries included "a soft tissue injury to her left shoulder, resultant subacromial bursitis and ongoing pain".

In addition to damages for pain and suffering of $60,000, Ms Maroney is claiming $184,982 for "economic loss due to the diminution in her capacity to earn an income" and $15,525 for lost superannuation benefits.

A Qantas spokesman said the airline would oppose the claim, saying it was Ms Maroney's choice not to take a break earlier in the day.

Torqued: The Case for Criminalizing Aircraft Accidents

John Goglia gets so sick of hearing pundits talk about how bad it is to criminalize aircraft accidents, how we need to be able to determine the cause of accidents without the threat of criminal sanctions such as fines and jail time impeding the free exchange of information. Some claim that the chilling effect of looming inquiries would thwart the NTSB's ability to determine probable cause and so on. Ever notice how often those pundits have clients with a big interest in making sure that no prosecutor looks too closely at the bottom-line pressures surrounding an accident? What if there was criminal negligence involved; or what if there were outright intentional crimes, like pencil-whipping required maintenance to meet a schedule or save money?

Let me finish before you dash off those tweets and emails. I am not talking about getting the FBI involved in aircraft accident investigations, unless, of course, it is pretty clear that terrorism was involved. I lived through the TWA 800 debacle where the NTSB investigation was put on hold while the FBI combed through debris for months, searching for what was probably obvious by the first week they would not find–evidence of a bomb or a missile or any explosive device.

In the case of TWA 800, looking for a terrorist cause for the accident just wasted time–and money–and frustrated the NTSB's attempts to get working on determining the real cause of the accident.

In the end, the Board determined the accident was caused by a spark from a frayed wire igniting oxygen in the fuel tank, resulting in an explosion as the aircraft took off from JFK one hot July night in 1996. But, of course, there could be situations where that time could make the difference in preventing another aircraft from encountering the same or similar problem.

Criminal Acts Deserve Punishment

When I talk about criminalizing accidents, I'm talking about determining whether criminal conduct was in any way involved or responsible for the circumstances leading up to the accident. And, if so, punishing that conduct with appropriate criminal penalties. Sometimes, the costs of accidents in lives lost, aircraft destruction and bad publicity are just not enough to deter the conduct that arguably led to the accident. FAA penalties–even fines and revocations–are often seen as just a cost of doing business. Criminal penalties still send a shiver through some of even the most jaded in aviation and may be needed to scare some people into doing the right thing for safety, as opposed to their bottom lines.

The Platinum Jet accident that began the FAA's look at operational control a couple of years ago is a perfect example of what I am talking about in terms of prosecuting criminal conduct that results in an aircraft accident. Platinum Jet was a Part 91 operator that rented an Alabama company's Part 135 certificate and operated Challengers across the country. One fateful day in February 2005, its improperly loaded, overweight and out of cg aircraft, flown by its improperly trained and qualified crew aborted takeoff from Teterboro Airport in New Jersey and smashed through a fence, dashed across a highway and into a storage facility. Miraculously, no one was killed, although the occupant of a car on the highway that morning was critically injured.

The NTSB conducted its accident investigation unimpeded by criminal investigators. But at some point, information obtained by investigators indicated potential criminal conduct, and the U.S. Attorney's office in New Jersey began a criminal investigation, aided by agents of the DOT's Office of Inspector General. After all, it is a crime to operate air carrier flights without an air carrier certificate, falsify weight-and-balance data and intentionally operate contrary to scores of other regulations on dozens of flights. Particularly egregious was the practice of tankering fuel and lying about the weight of the aircraft, which caused the aircraft to be overloaded and out of cg on the day of the crash.

Unfortunately, the lessons of Platinum Jet have not been heard in many corners of the aviation industry. Many aviation insiders I talk with seem to think that Platinum was a "rogue" operator and criminal penalties were properly applied to them–but would be inappropriate to other non-rogue operators. What's a rogue operator anyway? And when is their rogueness determined–before or after an

accident? After all, Platinum Jet was pretty in demand when celebrities like Beyonce, Jay Z or Jon Bon Jovi saw fit to fly on its jets.

And other criminal prosecutions of the past have been forgotten. Who remembers now the impact of the criminal case against Eastern Airlines, its maintenance foremen and its v-p of maintenance (although that case was later dismissed on a technicality) for falsifying maintenance records? For a long time, those criminal prosecutions gave mechanics and their supervisors the backbone to push back against corporate pressures to move aircraft even if required maintenance or inspections were not done. How many mechanics were able to say, “Look what happened at Eastern in refusing to pencil whip a maintenance entry?” I know quite a few who told me a lot of pressure was lifted in the aftermath of that criminal case.

But, alas, memories fade and the fear of criminal penalties lessens. And so those pressures to move aircraft, while oftentimes within the rules are sometimes clearly not. For those times when the pressure to move aircraft crosses the regulatory line and results in an accident, criminal penalties should be explored. As the U.S. Attorney stated in regard to the guilty verdict in the Platinum case, “Today’s verdict confirms that there are consequences when you break the law to boost your bottom line.”

Maybe some recent accidents–or near accidents–should be looked at to see whether regulations were intentionally flouted. Holding the right people accountable–criminally–might make others less likely to give in to the pressure of the expedient in favor of doing it right–and legally.