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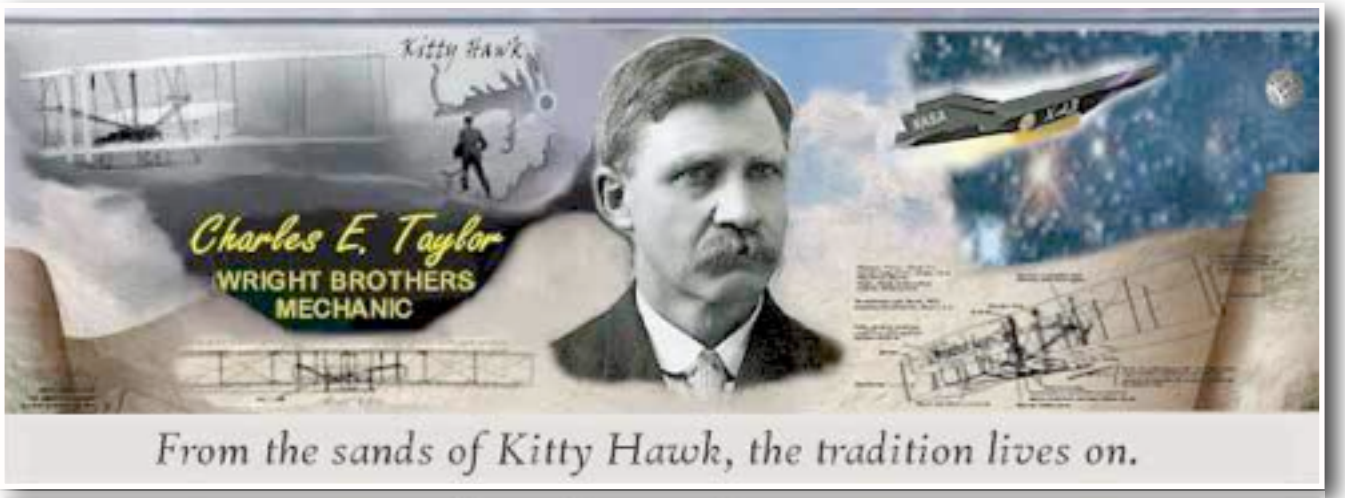


Hello all,
To subscribe send an email to: rhughes@humanfactorsedu.com
In this weeks edition of *Aviation Human Factors Industry News* you will read the following stories:

Aviation Safety Suffers Further Setback Following Helios Conviction

A Licensed Aircraft Maintenance Engineer has received a 10 year prison sentence by an Athens court for allegedly not resetting a cockpit switch following maintenance on the Helios Airways Boeing 737 -300 which crashed into a mountain near Athens in 2005 after its oxygen supply failed and the pilots and most of the passengers fell unconscious.It is difficult to grasp how aviation safety can be improved if the legal process surrounding an aircraft accident allows an engineer to be condemned to a prison sentence based on an "assumption" that a cockpit Switch (critical to flight safety) was set in the incorrect position. There was absolutely no evidence presented during the trial that the Engineers actions caused or even contributed to the accident. On the contrary, the conviction is based purely on the unproven supposition that the switch was left in the incorrect position although it was demonstrated by experts that that was unlikely. In fact some accident investigators maintain that the switch was still in AUTO (correct position) at impact. The factual evidence in the Helios case paints a rather different picture of the engineer than that suggested by this decision. The facts suggest an extremely conscientious and professional engineer performing the job at hand in an extremely professional manner.

Perhaps most importantly, the decision makes the ground engineer criminally responsible for the configuration of the controls of the aircraft, prior to the flight crew joining and carrying out their pre-flight and post take off checks. Such a proposition runs completely counter to the core proposition of division of responsibilities that every engineer and every pilot will recognize but which sadly various engineers and pilots called as witnesses on behalf of the prosecution felt able to deny.

Once again we are witnessing a judicial process that offered an opportunity to improve aviation safety failing to meet that challenge preferring instead to allocate blame on an uninformed and irrational basis and with a mindset that someone must pay because an accident sadly causing deaths has occurred and society demands a scapegoat.

The current trend of criminalizing aircraft accidents serves no other purpose other than to undermine safety and will ultimately lead to more accidents. Despite all the rhetoric about aviation safety being paramount, the introduction of safety and quality management systems, the simple fact remains that due to a failure on the part of Europe to create a centre of investigatory excellence for the industry and to eliminate the inappropriate use of accident reports for criminal purposes; instead pandering to the blame culture, safety systems will fail to deliver what air travelers want - Safety in the skies.

FAA Proposes $445,125 Civil Penalty Against Horizon Air

The Federal Aviation Administration (FAA) is proposing a $445,125 civil penalty against Horizon Air of Seattle for allegedly operating a Bombardier Dash-8-400 aircraft on 45 flights when it was not in compliance with Federal Aviation Regulations.
The FAA alleges Horizon failed to comply with an airworthiness directive (AD) that required the airline to inspect for cracked or corroded engine nacelle fittings on its Dash-8-400 aircraft. The AD, with an effective date of March 17, 2011, ordered inspections of the nacelles every 300 operating hours, and repairs as needed.

Between March 17 and 23, 2011, Horizon operated the aircraft on at least 45 revenue passenger flights when it had accumulated more than 300 hours of flight time since its last inspection.

Horizon has 30 days from the receipt of the FAA's enforcement letter to respond to the agency.

Pilots' Cockpit Argument Results In Both Being Fired

Flybe Crew On An International Flight Had A 'Massive Breakdown'

Two pilots flying for British budget carrier Flybe have been let go by the airline after they became engaged in a heated argument during a flight last May. Captain Stephen Bird and First Officer Stephen Akers have both lost their flying jobs.The argument reportedly began just before takeoff on the flight from Exeter in the UK to Malaga in Spain, when Bird said he had not completed some pre-flight paperwork "cos you're my b**ch," according to a report in the UK newspaper The Times. Later, the argument became more heated when the pilot refused to fly around some weather as the airplane encountered turbulence. Akers reportedly then called Bird a "control freak" and told him to "*bleep* off."

The situation got worse, and both men (in their 50s) wound up filing grievances against each other after the return flight, which took place mostly in stony silence. Akers reportedly read a newspaper on the return flight. A tribunal investigating the incident concluded that a "massive breakdown" had occurred in the cockpit which had resulted in a potential safety risk to the passengers and other crew. The U.K. newspaper The Mail reports that the tribunal had to rely on the testimony of the two pilots, as the argument happened on the outbound flight, and that audio on the CVR was overwritten on the return flight to Exeter.

Both Bird and Akers have appealed their firing. The tribunal hearing is ongoing.

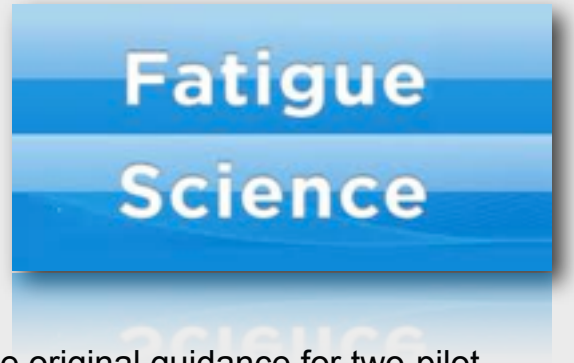
Voss Says Pilots Must Back Up Automation

"Five years ago we passed the point where automation was there to back up pilots," said Flight Safety Foundation CEO Bill Voss at last week's Flight Safety Foundation Corporate Aviation Safety Seminar in San Antonio. "Clearly today, the pilot is there to be the backup to the automation." Voss told AIN

"This is simply a realistic assessment of the world today, except we are not training pilots to be backups to automation. We have to own up to the fact that we need to develop new kinds of pilot training," he said. Voss added that human pilots too often lose the mental picture of the aircraft's automation. "If pilots have no idea of what the automation should be doing, they also have no idea of whether everything they observe on the panel represents a normal operation. That's what happened to Air France 447," he said.

"This is not just about better stick and rudder skills though," he explained. "What you die from is not understanding what configuration will keep the aircraft in the air safely. If pilots don't understand that level flight means two-and-a-half degrees of pitch and 93-percent N1, they have no way of manually controlling that aircraft if something breaks. But the training department can't fix everything. This is also an operational problem out on the line."

Part 91 Crew Rest Interpretation Debated



The FAA's recent reinterpretation of crew rest guidance sparked a vigorous discussion at the Flight Safety Foundation Corporate Aviation Safety Seminar in San Antonio last week. During a fatigue management panel, the NBAA's Doug Carr reminded the audience that, in January, the FAA's Chief Counsel posted a new interpretation of an old Part 91 controlled-rest definition, essentially outlawing use of the original guidance for two-pilot aircraft. "It could not have been a more baseless opinion," Carr claimed. "It contradicted all the science [on fatigue]."Many countries, including Canada, Australia, New Zealand and most of those in Europe, allow pilot napping. Many flight departments still have what were legal crew napping policies in their Flight Operations Manuals, something Alertness Solutions CEO Leigh White said, "They might want to remove."

White said her company is working with the FAA right now on new research to prove that naps are not a threat to flight safety, but will actually make flying more safe. "We're designing a data collection survey the FAA can sponsor. We want to make it easy for them to say yes to napping."

Carr agreed. "There appears to be a move on the part of the agency to allow an alternative means of compliance," he said.

Flight departments can contact White at lwhite@alertsol.com for information on participation in the survey.

NTSB Releases Aviation Accident Statistics For 2011

The National Transportation Safety Board (NTSB) last week released preliminary aviation accident statistics that showed a slight overall increase in U.S. civil aviation accidents for 2011.

Marked increases were seen in accidents involving on-demand Part 135 operations. However, for the second year in a row, there were no fatal accidents involving scheduled Part 121 air carriers or scheduled Part 135 commuter operations, NTSB said. U.S. civil aviation accidents rose from 1,500 in 2010 to 1,550 in 2011. Fatalities also increased, from 469 in 2010 to 485 in 2011. All of the fatalities were in general aviation and on-demand Part 135 operations (charter, air taxi, air tour and air medical operations). Twenty-eight accidents were recorded for scheduled Part 121 air carriers and four accidents were recorded for scheduled Part 135 commuter operations.

Total accidents involving on-demand Part 135 operations climbed from 31 in 2010 to 50 in 2011, while fatal accidents rose from six to 16, and fatalities rose from 17 to 41, NTSB said. The accident rate per 100,000 flight hours for on-demand Part 135 operations experienced the most dramatic rate increase among major U.S. civil aviation segments, rising from 1.00 in 2010 to 1.50 in 2011.

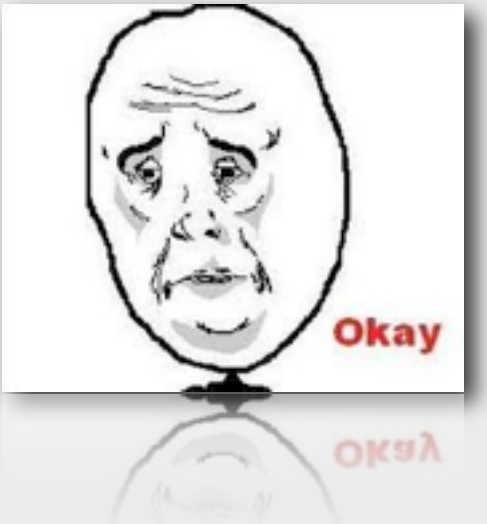
General aviation accidents, which continue to account for the greatest number of civil aviation accidents, reversed their downward trend over the previous two years, increasing from 1,439 in 2010 to 1,466 in 2011. However, there were 263 fatal general aviation accidents in 2011, down from 268 in 2010.

General aviation fatalities declined from 454 in 2010 to 444 in 2011. While the number of general aviation flight hours increased in 2011, the accident rate per flight hours decreased from 6.63 in 2010 to 6.51 in 2011.

The 2011 statistical tables showing accidents, fatalities, and accident rates for major segments of U.S. civil aviation may be accessed at http://www.ntsb.gov/data/aviation_stats_2012.html.

FAASTeam Maintenance Safety Tip April 2012

Cool It!



We all have heard the saying, "Cool It." It is slang for relax, calm down, take it easy. And, in this sense, it is safe to say we all need to do this from time to time - to avoid making mistakes – especially when feeling the pressure and stress from our work environment. But to you folks who maintain and operate aircraft engines, it takes on a whole different meaning.
Many engines may require you to "Cool it" down before shutting it down. Improper cool down could lead to sudden damage or even latent damage resulting in future failure.

Whether you operate engines frequently and have tremendous knowledge about them or you only operate engines infrequently, always use the engine run checklist. Whether you operate turbine and/or piston-powered engines, and especially if you operate a variety of make and model engines, the bottom line is to understand and comply with the manufacturer's current operating procedures. And always heed the "Notes, Cautions, and Warnings" for the engine you are working on.

As a result, when you "Cool It" properly, you will be able to relax, calm down, and take it easy!

An Unexpected Drop-In

The Maintenance Technician who submitted this ASRS report appeared to take all the precautions necessary for working in a compartment accessed through a floor opening in a B767, but he still received an unexpected visit.

■ I was assigned to work on [an aircraft] and when I arrived, the flight crew was already onboard. After I determined what the problem was, I walked to the jet bridge to call for another Technician. At the same time there was a Flight Attendant using the other phone on the jet bridge. As I was talking with the Technician, the Flight Attendant asked me if it was OK to board the passengers. I replied, "No, it is not OK to board. Please hold boarding." She then continued her conversation with the Gate Agent saying, "The mechanic said, 'No, it is not OK to board the aircraft. Hold boarding.'"

After I finished my conversation with the Technician, I went back to the cockpit to inform the Captain that I was holding boarding. I also informed the Flight Crew and the Flight Attendants that I had to go down into the E&E (Electrical and Electronic) compartment to do a test…and for them not to let anyone near this area. At that point I proceed to go into the E&E compartment through the floor entrance [near the main entrance door].

Shortly after I entered the E&E compartment I heard a noise. I looked to my right and that's when I realized that someone had fallen into the E&E compartment. I asked the passenger if he was OK and he confirmed that he was. At that point I called out for help. After a minute or two the passenger stood up. I asked him again if he was OK and he said he was. I watched him as he climbed out of the E&E compartment. I don't know who allowed passengers to start boarding.

History's deadliest plane crashes = 4904 Souls Lost

At least 121 people were killed Friday when a Bhoja Air Boeing 737-200 crashed in Islamabad, Pakistan, according to officials. Pakistan's Civil Aviation Authority has cited poor weather as a possible factor.

The following is a chronological list of commercial plane crashes with more than 200 fatalities. The list does not include crashes resulting from terrorist or military action.* March 3, 1974 – 346 people are killed when a Turkish Airlines (DC-10) crashes in Bois d' Ermenonville, France.

* March 27, 1977 – A KLM Royal Dutch Airlines Boeing 747 crashes into a Pan American World Airways Boeing 747 at the Los Rodeos Airport at Tenerife in the Canary Islands, killing 574 people (326 passengers on the Pan American airplane and all 234 passengers plus 14 crew members on the KLM plane). The accident occurs when the KLM airplane begins its takeoff while the Pan American airplane is still on the runway.

* May 25, 1979 – An American Airlines DC-10 crashes after takeoff from Chicago O'Hare International Airport, killing 275 on board and three on the ground. During takeoff, an engine on the left wing falls off; the FAA later faults American Airline maintenance techniques for the crash.

* November 28, 1979 – An Air New Zealand DC -10 crashes into Mt. Erebus in Antarctica, killing 257 people. The crash is believed to be the result of a navigational error.

* August 12, 1985 – The largest number of deaths in a single commercial airplane crash occurs when a Japan Air Lines Boeing 747 crashes into Mt. Ogura in Japan, killing 520 people.

* May 26, 1991 – Twelve minutes after takeoff, Lauda Air Boeing 767 Flight 004, stalls in midair and crashes 70 miles northwest of Bangkok, Thailand. All 223 passengers and crew are killed.

* July 11, 1991 – The landing gear of a Nigerian Airways DC-8 catches on fire shortly after takeoff and upon return to the airport, the plane crashes, killing all 261 people on board.

* April 26, 1994 – A China Airlines Airbus A300 crashes on approach to Nagoya Airport, Japan, killing 264 people. Just before the crash, the pilot informs the control tower that he intends to abort the landing and try another approach.

* July 17, 1996 – A TWA Boeing 747 explodes and crashes off the coast of Long Island, New York, killing 230 people.

* November 12, 1996 – A Saudi Arabian Airlines 747 and a Kazakhstan Airlines II-76 collide at the New Delhi, India airport. All 349 people on both airplanes are killed.

* August 6, 1997 – A Korean Airlines Boeing 747 crashes in the Guam jungle, killing 228 people.

* September 26, 1997 – A Garuda Indonesia Airlines Airbus A300 crashes in Buah Nabar, Indonesia, killing 234 people. A National Transportation Safety Board report from 2000 states an electrical short circuit that ignited vapors in the fuel tank is the most likely cause of the crash.

* February 16, 1998 – Flying through rain and fog, a China Airlines Airbus 676 makes a request for another landing approach at Taipei International Airport in Taiwan. In the process of turning around, the aircraft crashes into a neighborhood, killing all 196 on board and another seven on the ground.

* September 2, 1998 – A Swissair MD-11 crashes off Nova Scotia, Canada, killing 229. Investigators believe the plane lost all electrical power immediately before the crash.

* November 12, 2001 – An American Airlines Airbus A300 crashes in Belle Harbor, Queens, shortly after takeoff from JFK Airport, killing 265 people, including five on the ground. This is the largest number of fatalities from an accident involving a U.S. carrier.

* May 25, 2002 – A China Airlines Boeing 747 crashes into the Taiwan Strait 20 minutes after takeoff, killing all 225 on board. The crash is later attributed to metal fatigue and cracks throughout the aircraft.

* June 1, 2009 – Air France Flight 447 from Rio de Janeiro to Paris carrying 228 passengers and crew is lost over the Atlantic. The first bodies are recovered on June 6, approximately 600 miles off the northern coast of Brazil. The flight data recorder is recovered May 1, 2011, 12,800 ft (3,900 meters) underwater, by the BEA, the French air accident investigation agency. On May 27, 2011, the BEA announces that equipment malfunction (faulty speed regulators) was the cause of the crash.

Sources: The World Almanac 2008; Plane Crash Info; Landings.com