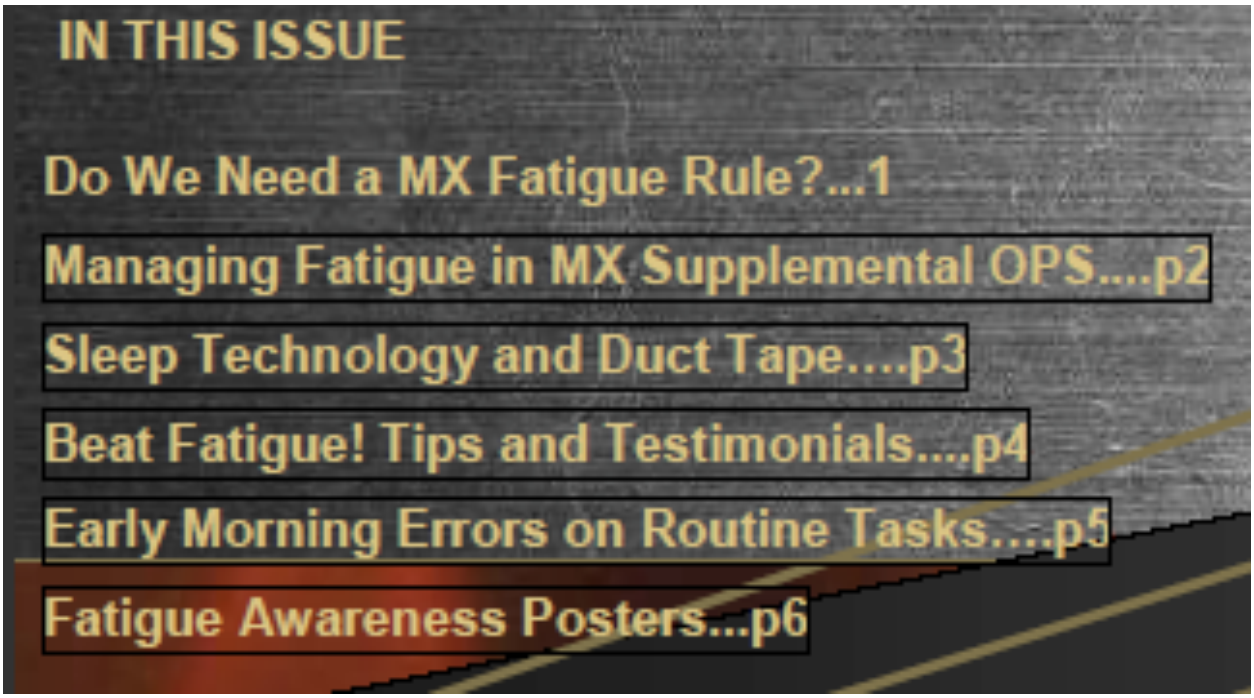
Aviation Human Factors Industry News

Volume VI. Issue 33, October 01, 2010

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:

New Release of MX Fatigue Newsletter



https://hfskyway.faa.gov/HFSkyway/FatigueNewsletter.aspx

Court dictating pace of Spanair MD-82 crash probe

Legal procedures mean investigators have yet to examine in detail an electrical component suspected of playing a role in the Spanair Boeing MD-82 crash at Madrid Barajas Airport two years ago.

The component, an electrical relay, is crucially linked to the take-off warning system on the type.

Pilots of the ill-fated aircraft had attempted to depart with the aircraft's flaps retracted, after the warning system failed to alert the crew to their oversight.

The relay is suspected to have contributed to the absent warning, because it also connects to a ram-air temperature gauge which was showing spurious readings on the MD-82.

But the Spanish investigation authority CIAIAC says that disassembly of the component is "still pending, as is the examination of its internal elements".

"These tests are under the control of the court handling the case," adds the authority, in a progress update on the investigation released recently.

Just 18 of the 172 occupants of the aircraft survived after it stalled almost immediately after rotation. CIAIAC has been analyzing the performance of the aircraft during the accident sequence.

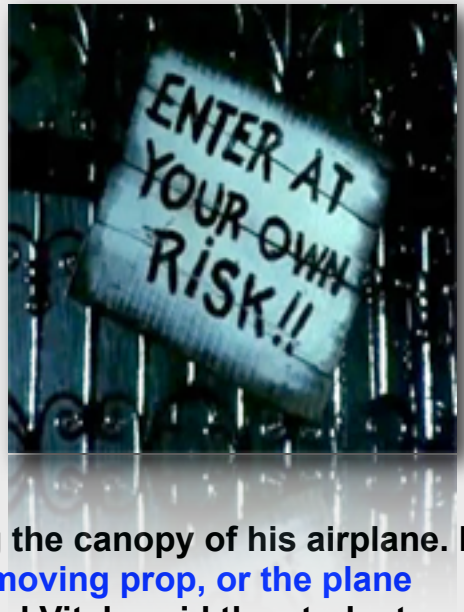
While there was no technical problem with the engines, the crew questioned whether there had been a powerplant failure just as the MD-82 became airborne. Flight-data recorder information showed that the throttles were briefly retarded, reducing the engine thrust.

CIAIAC says it is expanding its performance study - with the use of flight simulation - to reproduce maneuvers from the fatal flight and assess the behavior of the aircraft, including its reaction to the retardation of one throttle.

Flight simulations have also "yielded qualitative conclusions" regarding possible modification of the stall recovery procedures on take-off, it says, adding that Boeing has made changes to its MD-series flight crew operations manuals.

Flight Instructor Struck, Killed By Moving Prop

He Had Gotten Out Of His Airplane In The Run-Up Area



An experienced flight instructor was struck and killed by a moving propeller in the run-up area of runway 34 at Beverly Airport (KBVY) in Beverly, Massachusetts last last week. Witnesses said 30-year-old Michael Costales of Weymouth, MA was trying to help the pilot of a Piper Sport close the canopy on his airplane.

The accident occurred about 1215 EDT Thursday. Costales reportedly was waiting with a student in a Piper Warrior for departure clearance alongside a student and another instructor in a PiperSport, and the student pilot was having difficulty closing the canopy of his airplane. It is still not known if Costales walked into the moving prop, or the plane moved. Beverly Airport Commission Chair Paul Vitale said the student was in the left seat of the PiperSport, and he is being interviewed as part of the investigation. "Whether the plane jerked forward or whether he had the plane under control will be determined by the investigation," Vitale said.

The North Andover Eagle Tribune reports that both aircraft are owned by the Beverly Flight Center, and both were involved in flight training operations when the accident occurred. Costales reportedly had been flying since he was 20, and had become a flight instructor at 21. The names of the others in the airplanes at the time of the accident have not been released.

Bad Regulation—You Can Initiate Change

FAASafety.gov ----------

Maintenance Safety Tip
Notice Number: NOTC2494

FAASTeam Maintenance Safety Tip By Western-Pacific FAASTeam
August 2010

Bad Regulation—You Can Initiate Change

As a professional maintenance technician, you no doubt have been involved in conversations with a fellow mechanic when you discovered an FAA regulation that appeared outdated, did not make sense, should be changed, or maybe even removed? In many cases, those conversations end in frustration and the feeling that the regulation is just not connected to reality and you can not do anything about it. But it doesn't have to end that way because you do have a means to do something about it. Title 14 CFR, Part 11, Section 11.61 provides that you may ask the FAA to adopt, amend, repeal a regulation, or grant relief from the requirements of a current regulation.

Using a petition for rulemaking, you may ask the FAA to add a new regulation or amend or repeal a current regulation. Additionally, using a petition for exemption, you may ask the FAA to grant you relief from a current regulation. Consequently, if you are ever involved in a conversation like that again, write down your thoughts and send them to the FAA in accordance with CFR 11. You may be surprised that you can have an affect in changing FAA regulations and improve safety._____The FAA Safety Team (FAASTeam) is committed to helping you achieve the highest level of safety by providing "tools" and resources to enhance your knowledge and proficiency.

Send your suggestions for improving maintenance safety to Mailto:AMT@FAAsafety.gov

Lessons of Manchester runway fire

Fifty-five people died when the Boeing 737 caught fire at Manchester Airport in 1985It was a "defining moment in the history of civil aviation history."

When a British Airtours flight to Corfu burst into flames on the runway at Manchester Airport 25 years ago, 55 people died.

Following a major campaign to learn the lessons of the disaster, sweeping changes have been made to improve passenger safety.

An aviation expert said he believed that "the likelihood of it happening again is quite remote."

Lessons

At 0612 hrs on 22 August 1985, a flight carrying 131 passengers and 6 crew on a charter flight to Corfu was beginning its take-off from Manchester when an engine suddenly failed.

Part of the engine punctured a wing fuel tank and the leaking fuel quickly ignited, creating a large plume of fire.

As the pilot taxied off the runway, the prevailing wind carried the flames onto the fuselage where the passengers were sitting.

As a result, 53 passengers and two crew members died, almost all from breathing in smoke.

According to aviation analyst Chris Yates, lessons learned from that day changed the airline industry forever.

"This was very much a defining moment in the history of civil aviation safety," he said.

"Specifically, the investigation found that a lot of materials inside the passenger cabin produced highly toxic fumes and required airlines to look again and re-invent the wheel, so to speak."

Adding: "One of the other factors was the direction of the wind and how it was fanning the flames from the engine over the fuselage, which was one of the prime reasons why the passenger cabin caught fire so quickly."

'Time and space'

So have the lessons from the Manchester runway disaster been learned and have they saved lives?

In the years that followed, the Civil Aviation Authority adopted many of the Air Accidents Investigation (AAIB) recommendations which were supported by SCISAFE, a campaign group set up by relatives of some of the victims.

William Beckett from Sheffield started the group after his 18-year-old daughter Sarah died in the disaster.

He said the key "time and space" recommendations of the investigation were made in response to dangerous flaws in aircraft design.

"There was insufficient space for people to exit the aircraft," he said.

"And there was insufficient time - because of the chronic toxic fumes - to make their way to those exits."

Smoke hoods

SCISAFE also campaigned in vain for the introduction of smoke hoods - to allow passengers to breathe in the event of a fire.

Safety has got an awful lot better in the last 25 years. So the likelihood of this type of incident happening again is quite remote.

Chris Yates, aviation analyst , "I think it's far more important that people can get off the aircraft and that's where we concentrated out energies for the 15 years that we campaigned for it," he explained.

"Now it's the case that aircraft [which experience a fire during take-off] must pull up on the runway as quickly as possible and that the direction of the wind is crucial.

"If the pilot had pulled up in a straight line on the runway then the vast majority, if not all, would have got off."

Adding: "At least it means that, in the future, we are going to be safer."

Chris Yates admitted that "it would make eminent sense to supply smoke hoods," but said they were ruled out for two reasons.

"One is the element of panic, the other is element of cost. And when we're talking about aviation safety, cost does come into that equation.

"But, you know, safety has got an awful lot better in the last 25 years," he said.

"So the likelihood of this type of incident happening again is quite remote."

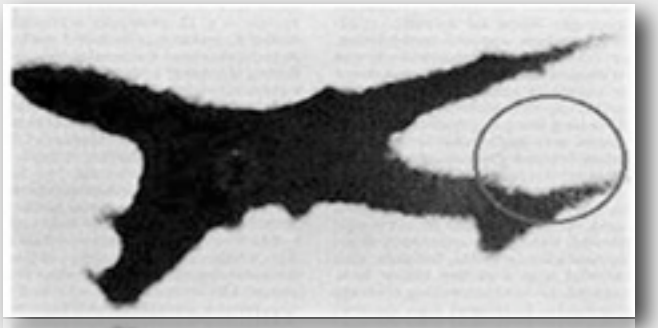
IMPROVEMENTS TO PASSENGER SAFETY SINCE 1985

- positioning an aircraft on fire downwind of the fuselage
- more windsocks on the airfield to indicate wind direction
- providing the flight crew with an external view of the aircraft
- unobstructed access to emergency exits
- strengthening of external fuel tank access panels
- aircraft cabin materials to be fire retardant

How did a minor fire on the runway at Manchester Airport turn into a major disaster in which 55 people died? Investigate the 1985 catastrophe.

Next Showing:
Saturday 11 September at 9:00PM - National Geographic Channel
Repeats:
Sunday 19 September at 4:00PM - National Geographic Channel
Thursday 30 September at 4:00PM - National Geographic Channel

Never let memories of tragic JAL crash fade



August marked the 25th anniversary of the Japan Airlines plane crash on Osutaka Ridge in Uenomura, Gunma Prefecture, that claimed the lives of 520 passengers and crew members.The jumbo jet, bound for Osaka after leaving Haneda Airport at dusk, carried businessmen returning home, holiday makers and people heading to their hometowns for the Bon Festival. In an instant, all these lives were lost.

Bereaved families and JAL officials climb to the crash site on the ridge every year on Aug. 12 to pray for the souls of the dead. However, there have been frequent reports of vandalism around the monument for the victims. Such actions are outrageous.

Many people working in aviation, including JAL employees, started working in the industry after the crash. They should be constantly reminded of the seriousness of the tragedy so that memories of the disaster do not fade.

JAL has repeatedly said: "Osutaka is the starting point for our aviation safety." Safe operations are fundamental to the aviation industry as a whole.

The JAL crash is the world's worst single-aircraft accident in terms of the number of victims. Since then, not one major Japanese carrier has experienced a fatal accident involving passengers, either at home or abroad.

Human error

However, it is true problems have frequently occurred that could have triggered a major accident, making passengers uneasy.

In 2001, JAL jetliners were nearly involved in a midair collision over Yaizu, Shizuoka Prefecture. This was caused by air traffic controllers issuing the wrong instructions.

There also have been a number of human errors committed by cockpit crew, such as starting a takeoff run without permission.

Following the Osutaka Ridge accident, investigative authorities and the government's investigation commission concluded that it was caused by a fracture in the plane's rear pressure bulkhead, due to improper repairs carried out by Boeing Co. of the United States.

If there are problems with the aircraft, due to improper repairs, poor maintenance or design flaws, the captain and other cockpit crew members will be unable to avert accidents no matter what they do.

Increase in passenger traffic

The number of passengers flying on domestic routes has increased from 44 million to 95 million over the past 25 years. Maintaining air traffic safety has become even more important.

Every sector of the aviation industry, including flight operations, aircraft maintenance, air traffic control and aircraft manufacture, should thoroughly ensure safety so as to build a completely safe system and avoid a recurrence of such a tragedy that befell the JAL plane.

JAL, which once boasted it had become the world's No. 1 airline in terms of international traffic volume, has watched its business performance deteriorate since the Osutaka Ridge crash. The airline's management is now rebuilding itself under the Corporate Rehabilitation Law.

The airline is implementing various corporate restructuring measures, including wage and workforce cuts. But we hope the company will remember to place safety at the top of its priority list.

FAA: Ore. company flew recklessly, improperly maintained helicopters

Hillsboro Aviation, of Hillsboro, Ore., should pay a $580,000 fine for performing improper repairs, deliberately falsifying maintenance records and operating a helicopter in a reckless manner, the Federal Aviation Administration said Monday. According to the FAA, Hillsboro:

Flew a Bell 206 Jet Ranger helicopter with passengers under the Interstate 5 and 205 highway bridges over the Columbia River in Portland, Ore., on July 8, 2008, endangering lives and property because the aircraft was within 500 feet of a structure and at a low altitude where a safe emergency landing might not have been possible;

Used incorrect parts and had an unqualified individual repair another Jet Ranger helicopter;

Made no record in the aircraft maintenance logs of work performed;

Deliberately falsified maintenance documents claiming an airworthiness directive had been completed when the work had not been done;

Operated the helicopter on at least 103 flights, including at least four revenue flights, between June 29 and Sept. 9, 2008, when it was not in compliance with federal regulations;

Failed to do required inspections on another Jet Ranger helicopter after it returned to service following maintenance;

Operated that aircraft on at least 430 flights, including at least 349 revenue flights, between Jan. 13 and Sept. 7, 2008, when it did not have the required inspections.

Hillsboro Aviation has 30 days to respond to the proposed fine. Responding to the FAA's news release Monday, Hillsboro said: "We acknowledge that there were some isolated events which occurred in 2008 as the FAA alleges. What the FAA press release did not mention was that once the president and owner of Hillsboro Aviation became aware of these events, he immediately called the FAA to notify them of the situation."

The company said it voluntarily suspended flight operations until it reviewed the records of all 78 of its aircraft; fired the employees responsible for the events; added regulatory and compliance policies and procedures, with company-wide retraining; and implemented a new state-of-the-art Safety Management System.

"As a company that has been operating for over 30 years and approaching 900,000 total flight hours, we take safety and regulatory compliance matters seriously. This is why I made the proactive decision to voluntarily suspend all flight operations in September 2008, even though Hillsboro Aviation was not asked or pressured to do so by the FAA," President and Owner Max Lyons said in the statement. "The FAA told us the actions we took to address these events went above and beyond its expectations."

http://blog.seattlepi.com/aerospace/archives/218246.asp