Aviation Human Factors Industry News

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From the sands of Kitty Hawk, the tradition lives on.

Hello all' From the sands of Kitty Hawk, the tradition lives on.

To subscribe send an email to: <u>rhughes@humanfactorsedu.com</u> In this weeks edition of Aviation Human Factors Industry News you will read the following stories:

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NATA Asks FAA To Hold Off On Mx Human-factors Guidance

NATA is asking the FAA to set aside a revised draft Advisory Circular (AC) on maintenance human factors training, saying the proposed changes are inconsistent and could be contradictory with existing policies. Draft AC120-72A, "Maintenance Human Factors Training," is designed to provide guidance for certificate holders to develop and implement aircraft maintenance human factors training programs.The draft,



NATA noted, is based on AC 120-72, which was issued in 2002 and provides guidance for maintenance resource management training programs. The AC sought to establish a maintenance resource management process that corresponded to the cockpit resource management philosophy at the time, NATA said, adding this was intended to help organizations provide training for improved communication, effectiveness and safety in maintenance organizations. However, NATA stressed that applying a maintenance resource management model to fit human factors "results in a document that does not fit the proper audience." NATA also pointed out that the AC references a regulatory requirement for human factors training, but said that such training is not required by FAA regulations. "It is a requirement of the European Aviation Safety Agency (EASA)," the association said. "The FAA has taken advantage of the EASA requirement under the bilateral [agreement] to ensure that at least the repair stations with EASA certification have human factors training." The FAA needs to remove the reference to required human factors training to further analyze the application of such training for regulatory consistency, NATA added.

https://www.faa.gov/documentLibrary/media/Advisory_Circular/AC_120-72.pdf

NATA Launches Free, Industry-Wide Misfueling Prevention Awareness Training

National Air Transportation Association (NATA) released the Safety 1_{st} General Aviation Misfueling Prevention Program – a free, online-based awareness program for pilots, line service professionals, FBO general managers and customer service representatives.





An awareness program for Pilots, Line Service Professionals, General Managers and Customer Service Representatives. Misfueling is preventable if we all work together!

Download Misfueling OBPs

Misfueling Reference Materials

http://plst.nata.aero/storyline/story.html

http://nata.aero/data/files/safety%201st%20documents/misfueling%20obp%2035a-c.doc

http://nata.aero/Misfueling-Prevention-Program/Misfueling-References.aspx

DUTCH PILOTS ASSOC. WORRIED ABOUT AVIATION SAFETY IN BUDGET CULTURE

Dutch pilots association VNV is worried that aviation safety falls below budgeting interests on the priority lists of especially low-cost airlines, a spokesperson said to NRC. The association calls for measures to improve safety in air traffic.

According to the VNV, budget airlines in particular do not have a proper safety culture - their pilots don't get enough rest



and are often tired when they have to work. It is often the case at budget airlines that pilots work on a zero-hour contract or as freelancer. These pilots are afraid of losing their job if they complain about safety, and therefore rather keep quiet about their concerns. "These companies have to make safety a priority rather than cost", a VNV spokesperson said to the newspaper. They call on budget airlines to give their pilots permanent contracts. "Then the pilots gain a sense of control. For large companies like KLM it is already so."

This call is in response to a study published by the London School of Economics last week, according to NRC. The study found that 58 percent of European pilots are sometimes tired when they fly. Of the over 7 thousand surveyed pilots, only a third were confident in their employer's safety policy. The study also found that particularly pilots working for freight- or budget airlines suffer from fatigue.

NTSB To Examine Flight Recorder From Eastern Airlines Flight 980

Airliner Went Down In Bolivian Mountains In 1985

The NTSB is working to take possession of a data recorder thought to be from Eastern Airlines Flight 980 that was discovered by a pair of climbers from Mount Illimani in Bolivia.

Dan Futrell and Isaac Stoner, both from Boston, climbed the mountain in May of this year. During their climb, they found what appears to be one of the data recorders from the Boeing 727-200 which impacted the mountain on January 1, 1985. There were no survivors from the accident, and international efforts to recover the data recorders were abandoned because of the ruggedness of the accident site, according to ABC News.



The two friends brought the device with them back to Boston.

Because international regulations require the civil aviation authority of the country in which the accident occurred to take the lead in any investigation, the NTSB could not examine the device without the permission of the Bolivian government. That permission was difficult to obtain. Butrell and Stoner reportedly attempted to contact the Bolivian Embassy in Washington, but their phone calls, emails and certified mail all went unanswered.

The breakthrough came on December 1. ABC News was told by Capt. Edgar Chavez, the operations inspector at the General Directorate of Civil Aviation of Bolivia that the government would allow inspection of the device by the NTSB.

Now, it's a matter of making sure all the proper paperwork is filed. Until then, the evidence that may offer clues to what some say is one of the biggest aviation mysteries of the 20th century remains in an apartment in suburban Boston.

Aircraft wire routing is so critical. Lives depend upon it!

The FAA has issued a Special Airworthiness Information Bulletin for some Piper PA-31Ts and similar models, warning of a potential fire hazard in their floor-mounted circuit breaker panels. The SAIB, published earlier this month, is recommending that operators of PA-31T, PA-31T1, PA-31T2, PA-31T3, and PA-31P-350 aircraft inspect wiring conditions in the area for chafing or other damage.

In addition, the bulletin, available here (PDF) recommends that reworking wiring be done to ensure wires and hydraulic lines are properly separated and electrical connections checked in the area using inspection and repair guidance from Advisory Circular 43.13B. Owners who find any issues during the inspections are asked to send details and photographs to the FAA. The agency cited the July 29 crash of a Piper Cheyenne in California that killed all four on board after reports of smoke in the cockpit. The NTSB found signs of thermal damage in the fuselage of the aircraft, which was on a medical transport flight. The SAIB states that "reviews are ongoing" but so far the issue hasn't resulted in an unsafe condition that warrants and Airworthiness Directive. Inspections of several PA-31T aircraft



showed chafing between wires and hydraulic lines in the circuit breaker panel areas, which can lead to arcing and ignition of the flammable liquids, the FAA said.

http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgSAIB.nsf/ dc7bd4f27e5f107486257221005f069d/ ac6119302542bec38625808b0070c555/%24FILE/CE-17-05.pdf

http://www.avweb.com/avwebflash/news/Four-Killed-In-California-Med-evac-Crash-226726-1.html

Why Are We Blowing Out The Same Candle?

CAPT Chris "SanDog" Saindon, USN — Director;

I have numerous examples of repeat mishaps, but I'll share one of my favorite ones to illustrate the point.

When I was in my Department Head (DH) tour in a VP squadron, our Avionics shop was doing some unscheduled maintenance on an aft radar on the ramp at night. During the course of this maintenance evolution, the ATs managed to slide the radome off the tracks and it fell to the deck, destroying the Magnetic Anomaly Detector (MAD) boom and the electronics inside. It was an instant Class C aviation ground mishap. During the course of the investigation, we discovered a few key (holes in the Swiss) that lined up and allowed



this event to happen. First, the maintainers did not refer to the publications during the evolution. They had the pubs checked out, but they were not open and they were not followed. Secondly, the senior maintainer present (supervisor) had never actually done this evolution. Although he was qualified, he was not experienced enough for the job. Third, the maintenance control brief did not specifically cover the risk, even though the MC Chief knew exactly what happened when the mishap was reported by the maintainers...he knew they had skipped a critical step required when sliding the aft radome....to install the track safety pins!

Now let's fast forward about 4 years to my XO tour. During a normally scheduled safety standdown, I was assigned to lead a small group discussion with the Avionics Branch. I immediately thought about my DH tour and the mishap we had in the sister squadron and decided that would be perfect material for the discussion. Well to make a long story short, I was extremely surprised to find that not a single AT in the squadron had ever heard about that mishap, a mishaps that happened on the very same ramp just 4 years prior. In-fact, very few even knew about the aft radome track pin and their critical purpose! Now I fast forward another 5 years when I am working as the Director of Aviation Safety Programs at the Naval Safety Center. As I am perusing the latest edition of the RAAF Safety magazine Spotlight, I find and article about the same exact mishap that happened on an Aussie P-3 in 2013! So why do we keep repeating the same events over and over again? Could this have been prevented by a simple HAZREP brief? I believe it could have. How about some more formal risk controls? Required training for all ATs? A read and initial board? Maybe spot Checks (Safety Assurance) to see if guys are actually using the pubs while doing maintenance?

I truly believe we can do a great deal toward preventing mishaps by ensuring we are investing our efforts in a balanced manner across the SMS pillars. And if you really think about it, simply reviewing Mishap and Hazard reports for you particular airframe, and making sure that you are not at-risk of repeating the same event in your own squadron goes a long way toward not only the SRM pillar, but also the Safety Assurance and Safety Promotions pillars as well. — CAPT Chris "SanDog" Saindon, USN — Director;

Amazon Patents Airship Warehouses

Amazon, which recently began basic package deliveries via drone, is taking the airborne logistics idea further with the concept of a mobile floating distribution center. The online retailer has received a patent for a system that includes an "aerial fulfillment center" in the form of an airship and unmanned aerial vehicles to carry items to and from it. As CNN reported on Thursday, it's unclear whether Amazon is actively developing the floating warehouse, which patent papers show as a high-blimp with smaller airships it calls "shuttles" flying back and forth to transfer goods, personnel, delivery drones and other equipment. One potential use would be large sporting events, where a floating warehouse could park overhead as small delivery drones deliver food and other items to the crowds below. according to the report.



Amazon also envisions different shapes and sizes for the airships, which "may be hundreds of feet long and capable of carrying several hundreds of tons." The company has been <u>ambitiously pursuing its drone delivery concept</u>, working around airspace and other UAV limitations as it continues to test its delivery drones, which recently began dropping off small items to customers in a rural U.K. community. According to a CNBC report on the airship idea, Amazon has been obtaining patents for other drone-related concepts, such as inter-drone communications and recharging stations atop lampposts and other structures.

http://www.avweb.com/avwebflash/news/Amazon-Drone-Makes-Retail-Delivery-In-UK-228205-1.html

FAA's National Drone Registry Marks First Anniversary

The national drone registry the FAA created through an expedited rulemaking last year marked its one-year anniversary on December 21. As of that date, more than 616,000 people had registered via the agency's site to operate one or more small drones for recreation. The FAA convened an industry-government task

OWN A DRONE? Register your drone

registermyuas.faa.gov



force to develop the registration system in November 2015 and quickly enacted a regulation out of concern that hundreds of thousands of drones given as holiday gifts would flood the airspace system, with no way of identifying operators who fly irresponsibly.

The agency now requires that owners of drones weighing from 250 grams—or about half a pound—up to 55 pounds register online and affix an identification number to each aircraft they own. Registration costs \$5 and remains valid for three years. "As part of the process, applicants receive and must acknowledge some basic safety information. That means more than 600,000 drone operators now have the basic aviation knowledge to keep themselves and their friends and neighbors safe when they fly," the FAA stated in a first-anniversary release. "We wanted you to know you're part of something bigger, and to convey a sense of shared responsibility," Administrator Michael Huerta added in a video accompanying the release. Registration costs \$5 and remains valid for three years.

"As part of the process, applicants receive and must acknowledge some basic safety information. That means more than 600,000 drone operators now have the basic aviation knowledge to keep themselves and their friends and neighbors safe when they fly," the FAA stated in a first-anniversary release. "We wanted you to know you're part of something bigger, and to convey a sense of shared responsibility," Administrator Michael Huerta added in a video accompanying the release. Separately, the FAA as of early December had processed more than 22,000 applications for remote-pilot certificates to operate small drones commercially under its Part 107 regulation, which took effect on August 29. Applicants who are already trained as pilots must pass an online test to fly drones commercially; non-pilots must pay \$150 and pass a 60-question aeronautical knowledge test. Separately, the FAA as of early December had processed more than 22,000 applications for remote-pilot certificates to operate small drones commercially under its Part 107 regulation, which took effect on August 29. Applicants who are already trained as pilots must pass an online test to fly drones commercially; non-pilots must pay \$150 and pass a 60-question aeronautical knowledge test.

https://registermyuas.faa.gov/

FAA Warns of Accidental Control Knob Selections

The FAA is warning that pilots are inadvertently changing selections of concentrically centered knobs with some regularity. Citing reports from manufacturers and pilots, the FAA noted that these errors are occurring particularly when pilots dial in comm and nav frequencies. For instance, in one reported incident, rotating the navigation course selection knob resulted in an unintentional change to the barometric altitude setting.



A few examples of common causes of unintentional selections include mechanical interference between two concentrically centered knobs; pilots accidentally rotating two knobs at once as a result of finger positioning errors and/or finger slippage; and pilots inadvertently selecting the wrong knob and subsequently failing to make corrections because they did not detect the error.

To bring attention to this issue and make suggestions to prevent errors, the FAA has published an information for operators letter (InFo 16022) advising pilots, instructors and safety directors of the potential for inadvertently changing correct selections in avionics and other systems with concentrically centered control knobs. "They should collaborate to address that potential in operations and training of flight crews, stressing diligence in operating concentric controls, and in checking for unintentional changes to unrelated systems."

http://ea.ecn5.com/Clicks/ SWRJb2hSQXZPaThaaWRJVWY4bINpdWtFM3JIY0o3bWdvcW5JMU9id1dGTDFpWHd wcmVLdXMvd1VUcXdaREIJR3ZhbFU1V0ZGRmNrVXdQd1Z1a0q0V0E9PQ%3d%3d

United Airlines Agrees to Remove Hazards Faced by Baggage Handlers

For too long, a hard day's work for United Airlines' baggage handlers at Newark Liberty International Airport meant unnecessary pain and the risk of debilitating injuries caused by lifting customer baggage using awkward postures.



From 2011 to January 2015, the airline's baggage handlers reported at least 622 musculoskeletal injuries. The U.S. Department of Labor announced a precedentsetting agreement with United to protect its employees from future injuries by improving its baggage handling operation. The agreement settles a lawsuit filed by the department on behalf of its Occupational Safety and Health Administration to eliminate several hazardous conditions its inspectors identified in United's baggage handling operation at Newark.

"We are pleased that United Airlines has recognized that employers have a responsibility to protect workers from the many hazards that can cause musculoskeletal injuries," said Robert Kulick, OSHA regional administrator in New York. "With this agreement, United will take the steps necessary to prevent its employees from suffering unnecessary injuries due to its deficient baggage handling operation."

The agreement settles a citation that the OSHA Parsippany Area Office issued to United Airlines following an inspection at Newark Liberty. OSHA's inspection found five hazardous activities and conditions in United's baggage handling operations that contributed to the high rate of injuries. These activities and conditions included:

- Employees exposed to repeated bending, lifting and reaching hazards due to the presence of tubular bollards in front of conveyor belts.
- The use of dual-tier conveyor belts to transport baggage in the outbound baggage room that required employees to bend over or reach overhead to access and lift baggage.
- Manually loading and unloading gate-checked baggage at passenger jet bridges in the regional terminal.
- The use of hand-held scanners at the cargo bay entrance that exposed employees to the hazards of repeated twisting, pushing, pulling and lateral motions with the arm extended from the body.
- Prolonged loading and unloading of baggage in confined areas of the aircraft cargo bay.

In its settlement, United Airlines agrees to install mechanical conveyor belts on the passenger jet bridges located throughout its regional terminal. Mechanical conveyors will reduce employee exposure to known hazards by eliminating the need for the handlers to lift and lower passenger luggage to and from the jet bridges manually.

The company will also retain a qualified expert to perform an evaluation of potential repetitive stress or injury risks in baggage handling operations at Newark Liberty and to make recommendations to improve worker safety there. Additionally, the airline must adopt the expert's recommendations or similar measures to reduce the risk of repetitive stress injury, and form a dedicated safety committee comprised of the expert, as well as both management and employee representatives from the airline.

United Airlines has 90 days to complete the evaluation and must implement all recommendations within two years of the settlement agreement. The agreement gives OSHA authority to monitor the evaluation and abatement implementation process.

"This settlement will have long-term safety implications for the baggage handling industry," said Jeffrey S. Rogoff, the department's regional solicitor in New York. "As one of the world's leading airlines, United Airlines is setting a workplace safety standard that other airlines will be compelled to follow."

FAA Gets Ready to Roll out SMS

In 2016, the FAA published a Supplemental Notice of Proposed Rulemaking (SNPRM) proposing an SMS requirement of certain certificated airports. Under the proposal, these airports would develop and implement processes and procedures to proactively identify hazards and mitigate unacceptable risk. In addition to safety risk assessment and management, the proposal would require these airports to also deploy confidential hazard reporting systems, provide training and orientation programs, and offer enhanced safety communications. Together, these elements form the building blocks to support an organizational culture that values safe practices.



According to Marcia Adams, a spokesperson for the FAA, a Safety Management System (SMS) is the formal, top-down, organization-wide approach to managing safety risk and assuring the effectiveness of safety risk controls. It includes systematic procedures, practices, and policies for the management of safety risk.

"SMS is becoming a standard throughout the aviation industry worldwide," she said. "It is recognized by the International Civil Aviation Organization (ICAO), civil aviation authorities, airlines, airports, and air traffic service providers as the next step in the evolution of safety in aviation. SMS is also becoming a standard for the management of safety beyond aviation."

Ken Ibold, national SMS discipline Lead for RS&H and an airport planner said nearly 300 airports in the country may fall under this requirement.

"This is all about making safety a standard part of airport operations," said Ibold. "Airports are already highly regulated and are extremely safe environments.

But the goal of the FAA programs is to anticipate safety challenges before an accident happens rather than react to an accident by altering processes in order to not let them happen again."

He said Part 139 Airport Operators will be required to update their Airport Certification Manual to address the elements of Safety Policy, Safety Risk Assessment, Safety Assurance and Safety Promotion for operations within the movement and non-movement areas of the airport. Ibold likes the mandate because of its business-like approach to managing risk.

"An SMS plan is intended to not only reduce the probability of aircraft accidents/ incidents on the airfield, but also help protect workers, passengers and visitors by creating a culture that values safe practices," Ibold said. "It can be designed to integrate into the safety programs that airports may already have in place."

Ibold said that SMS practices have long been present among other industries and has helped companies identify safety hazards before they lead to injury or damage.

"The International Civil Aviation Organization, (ICAO) the international version of FAA has been working on SMS since 2004," he said. "Because the U.S. is a member state of ICAO, it has to follow their standards. Thus, the U.S. is compelled to implement SMS."

Although Ibold believes the FAA mandate is a worthy endeavor, he said the difficulty will be meeting the requirements of the new rule while not sacrificing efficiency at the airports.

"The rules only say what you have to achieve but not how," he said. "It will be up to the airport as to decide what processes and operations to put in place to meet the FAA rule. Every airport is different in terms of its operational environment. As a result there is so much variance it would be impossible to create a uniform template that addresses the safety concerns of every airport."

Ibold said the FAA is aware of that challenge and has chosen to prescribe a methodology to address airport safety issues rather than develop a "one size fits all" plan.

"That strategy will mean that SMS will be individualized by each airport to address its own unique needs," he said.

Some airports, such as Portland International, are already out in front of the SMS rules. According to Danny Garcia, senior manager, airside operations for Port of Portland, Portland International Airport, SMS has been on his radar for some time.

He said that PDX has worked diligently over the last five years on safety risk management and its operational impact in order to capture both air traffic organization and airport requirements of the FAA rule. "We are now having to document and demonstrate it administratively, but we have always done the work," Garcia said.

Still, he said that there are so many aspects to what the FAA is trying to regulate each airport will be a remarkably unique challenge.

"The difficulty will be making a rule that applies to each airport's individual environment," said Garcia. "The rule will have to be broad in nature so that each airport can have find out what works for them."

Garcia said that establishing a timeline will be virtually impossible as his airport and he could never fully implement an SMS in 36 months as it will require changes to the airport's management and organization structure.

"I appreciate that the FAA is shifting to a different format of a compliance structure that allows me to determine how to best comply rather than give us a straight rulesbased specific methodology," he said. "This gives me more latitude and at the same time more responsibility."

Garcia believes it is the logical evolution of airport operations to take on more responsibility for regulations.

"It is a good business practice to have the right equipment and the right staff in place for safety," he said. "I think the challenge will be demonstrating to the inspector that we have all these processes operating now." For Ibold and others in the industry, the question is how the FAA will implement the new rules. Ibold said a previous FAA initiative, FAA order 5200.11, which addressed airfield construction projects, was originally issued with an effective date then amended to phase in over four years with a schedule contingent on airport size.

"The greater uncertainly will be how the FAA phases in implementation and to what degree," he ask. "Will the schedule require larger airports to implement first followed by smaller ones?" According to Adams, that will all be worked out over the next 16 months.

"The FAA is implementing the principles of SMS both internally and externally," she said. "Externally we've supported numerous pilot studies to develop and implement SMS, participated in industry research including projects by the Transportation Research Board's Airports Cooperative Research Program, and developed the SNPRM. The SNPRM comment period closed on September 12, 2016.

The agency now has 16 months to adjudicate the comments and determine whether it will pursue a final rule."

David Fleet, director of consulting of Faith Group in St. Louis, believes the new regulations provide an opportunity for airports to derive more value from their operations.

"So often airports look to the do the minimum to be in compliance," he said. "SMS can serve as a proactive business management practice not only with the implementation of the new FAA rule, but also for the entire operation." Fleet believes the four components of SMS – safety policy, safety risk management, safety assurance, and safety promotion, are very much needed in the industry.

He said SMS is a proactive way to manage the airport because it creates the triggers that better enable you to use risk assessment. An example, he said, is an airport getting larger aircraft. Risk assessment provided by an SMS will help Operations understand what the impact will be on adjacent gates, vehicle service roads, aircraft taxi routes, as well as any impact it may have on the ARFF index.

"Overall, SMS allows you to better assess risk while encouraging the use of inspections because now you have the plans to make corrections," Fleet said. "Proactive decisions are based on leading/lagging indicators that point to better training and orientation on safety hazards."

"The FAA traditionally has been a reactionary agency," Fleet said, "making regulations to events that have occurred already. This allows them to get in front of the risk curve."

According to Fleet there were 31 airports that went through SMS pilot programs. He said that the FAA has done a good job of exploring the potential impact of the new regulations.

"The airports that were selected for the studies indicate that SMS will deliver favorable results to them," he said, adding he also thinks that it is advantageous that the Advisory Circular and proposed rule will leave it to the airports as to how they will develop their individual SMS.

Ibold believes many airports will want to seek outside guidance on the SMS implementation from selected experts because the new rules will not include the FAA's usual step-by-step requirements.

"There are not a lot of people who know how to do this and eventually the knowledge will catch up to the demand," Ibold said. "Consultants will need to examine the airport's current processes and figure out how those processes how do they already fulfill some of the requirement of SMS. Then they can turn their efforts to fill in the gaps."

Fleet adds that airports will need proper training, more open communication, integrated technology systems and incentive programs to make SMS work, contributions he sees coming from the consulting community as well.

Regardless of where airports are in the development of their native SMS, both Ibold and Fleet believe implementation of the new rule with its guidance tools and periodic evaluations to ensure continued will go a long way to making airports even safer.

"This will make safety an on-going priority."

Men appreciate working wives

Today's husbands don't feel emasculated when they're not the primary breadwinners. In fact, a new study shows, men are happier and healthier when wives share the burden of making money. Analyzing 15 years of government data on married couples between 18 and 32, sociologists at the University of Connecticut found that men's psychological and physical well being actually suffered as their share of the economic burden increased. But when wives took on some of that responsibility, it had a positive effect on their husbands, reports *TheAtlantic.com*.

The results suggest that traditional gender roles-in which women are supposed to take care of the kids and housework while men go out and make the money-may be ill-suited to a world in which two incomes can be necessary. "A lot of the gendered expectations in marriage are left over from a different era," says study author Christin Munsch. Today, she



notes, many men are paying the bills as a source of great pressure and stress, while an increasing number of women view working outside the home for a salary as an opportunity for personal growth and independence.

Warning to parents as scalding revealed as biggest in-flight danger

Children are more likely to scald themselves by spilling soup or hot drinks than suffer any other injury on board flights, according to new research.

Toddlers sitting on their parent's lap may be at greater risk of injury on a commercial airline flight than older children traveling in their own seats or using in-flight restraints.

In the first study of its kind, researchers analyzed in-flight medical events (IFMEs) on flights



worldwide between January 2009 and January 2014 and found 35 per cent involved children aged under two. The statistics also showed that the most common mechanism of injury was scalding from hot drinks or soup spilled on a child, followed by falls from the seat involving children sat on an adult's lap.

The analysis of 114,222 IFMEs revealed more than 10 per cent involved children up to the age of 18, and more than three per cent involved in-flight injuries.

Passengers who sustained in-flight injuries were younger than those involved in other medical events.

The study was conducted by researchers at University Hospitals Rainbow Babies & Children's Hospital (UH Rainbow) in the United States and international SOS company MedAire.

Study senior investigator Professor Alexandre Rotta, of UH Rainbow, said: "Paediatric medical events on commercial airlines are relatively infrequent given the amount of passenger traffic, however unrestrained children, especially lap infants, are more likely to sustain an in-flight injury particularly during meal service or turbulence."

Prof Rotta said many pediatric in-flight injuries could potentially be prevented by using in-flight child restraints, avoiding aisle seats, and by having lap infants travel in their own designated seat.

He added: "Our data originated from a pool of approximately 80 major airlines worldwide over a four year period - it provides a very significant sample."

More than 83 per cent of in-flight injuries occurred on international flights covering distances of more than 3,500 miles and lasting longer than six hours.

The most common types of in-flight injuries involved burns (39.3 per cent), contusions (29.5 per cent), lacerations (20.5 per cent) and closed head injuries (eight per cent).

Prof Rotta added: "It is my hope the information we discovered will promote the development of preventative strategies and travel policies to protect the health of all pediatric airplane passengers, especially these most vulnerable infants."

The findings were due to be presented during the 2016 American Academy of Pediatrics (AAP) National Conference.



Jeff Izer

May 27, 1976 – October 10, 1993

On October 10, 1993, four teenagers were on their way to a haunted hayride in Lisbon, Maine, when their car overheated. After pulling onto the shoulder lane of the highway to cool the car down, they were struck by a Wal-Mart truck driver who had fallen asleep at the wheel. Later, the Wal-Mart driver admitted to being sleepdeprived and to having falsified his logbook in order to keep driving. The crash killed Jeff Izer and three of the four other teenagers with him that day. Another teen was seriously injured.



A chance encounter brings a new purpose in life

Correspondent Steve Hartman shows us how an 82year-old widower in Georgia was touched by an innocent question from a little girl in the canned food aisle of a grocery store - and how it changed his life when he needed it most.



http://www.cbsnews.com/videos/a-chance-encounter-brings-a-new-purpose-in-life/