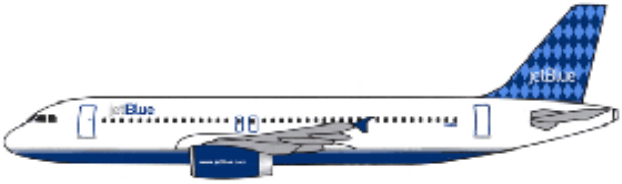

Aviation Human Factors Industry News

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Man hospitalized after airport fire

East Texas Regional Airport fire personnel and Gregg County deputies respond to a flash fire Wednesday at Aerosmith Aviation's hangar.

One person was transported to a Dallas hospital after suffering severe burns when an airplane caught fire Wednesday at the East Texas Regional Airport.

Gregg County Sheriff's Office spokesman Lt. Mike Claxton said Aerosmith Aviation was performing a maintenance test on a Lear 45 aircraft at about 1 p.m. when the right wheel well area ignited, creating a flash fire. The cause of the fire has not been determined, he said.

Claxton said the fire was self-extinguished. The airplane was inside the company's hangar, but it was removed before it could damage the building.

An employee of a Dallas-based aviation company was transported to a hospital with second- and third-degree burns on about 25 percent of his body. Claxton said the Dallas company might have owned the airplane, but investigators could not provide the name of the company on Wednesday. No other injuries were reported.

Airport Manager Virginia Hall said the airport had to close a small portion of a taxiway because of the incident. The closure did not affect airport operations, and Hall described it as "a mild inconvenience." She said she was not aware of any similar incident at the airport.

Hall said airport maintenance personnel and members of the Elderville Volunteer Fire Department cleaned fuel that leaked.

Aerosmith Aviation, an East Texas company based at the airport, specializes in painting airplane exteriors and refurbishing airplane interiors, according to the company Web site. The company moved to the airport in 1995 from Upshur County.

Claxton said the airport division of the sheriff's office is investigating the incident.

Pilot error not to blame for Madrid air crash, say investigators

The preliminary report by investigators into the Madrid air crash appears to absolve the pilots of any blame for the accident which killed 154 people. The crash on August 20 is blamed on a fault which prevented the wing flaps from opening on the Spanair MD-82.

Initial findings by the Civil Aviation authority show the pilots followed recommended protocol in the moments leading up to the crash of flight JK5022, which was bound for Las Palmas in the Canary Islands.

Evidence from the black box data recorder indicated that the pilots made the appropriate checks on take-off but that an alert system in the cockpit failed to warn them that the wing flaps had not deployed correctly.

Two other alarms, warning of nearby ground and imminent stall, did work as the pilots struggled to gain control when the plane left the runway at Barajas airport.

The twin engine jet rose about 40 feet before it veered to the right and slammed into the ground tail first. The back of the aircraft broke apart and the fuselage bounced three times before crashing into a shallow ravine and bursting into flames.

Only 18 people survived Spain's worst air disaster for 25 years.

The report is expected to be made public later this week but investigators warned that it could be another year before the exact causes for the failures are known.

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Report: Leaking Hydraulic Line Sparked Osprey Fire

Crew Was Able to Land Tilt-Rotor Safely; Problem Has Appeared Before.

Investigators have determined an in-flight fire that broke out onboard a Bell-Boeing Marine Corps MV-22B Osprey during a training flight last year was caused by hydraulic fluid leaking onto an exhaust cooling component in the aircraft's left engine nacelle.

According to the Judge Advocate General Manual Investigation report -- obtained by Military.com through a Freedom of Information Act request -- a leaking hydraulic line spilled fluid onto the engine's infrared suppressor section, sparking a blaze that nearly consumed the aircraft in the November 6, 2007 incident.

The fire occurred about halfway through a scheduled five-hour training mission at Camp Lejeune, NC. Fortunately, the Osprey's crew was able to land the stricken aircraft, and escape before flames spread.

In a revelation that will do nothing to downplay intense criticism of the tilt-rotor aircraft, the JAG report also notes a similar fire broke out in the same section on another Osprey earlier that year. In that case, a fire broke out just before takeoff.

The Marines described that incident as a "minor nacelle fire," and noted modifications were underway to alleviate the problem, which stems from spikes in hydraulic pressure that may fracture the lines.

"Engineering investigations have shown that EAPS blower failures can cause pressure spikes of 7,000 [to] 8,000 psi ... into the EAPS hydraulic system," the report said. "Combining these pressure oscillations with any existing preload in the hydraulic tube routing can cause a catastrophic failure of the pressure tube."

Those modifications -- essentially, thicker lines in the problem areas -- have since been retrofitted to all new "Block B" Ospreys, including aircraft sent to Iraq. The Corps is also looking at a more effective fluid dumping system, to drain more fluid quickly in the event of another rupture.

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"All Ospreys in flight operation have the modifications, including those that are deployed," wrote Marine Corps spokesman Maj. Eric Dent. "The modifications have also been fully incorporated into the V-22 production line so that new aircraft will not require further modification after leaving the factory... Since this incident, 100 percent of the V-22 fleet has had the mods installed and there have been no additional occurrences of incidents of this type."

In its report on the November 2007 fire, the JAG found fault with the Training Squadron's maintenance division, saying technicians should not have allowed the MV-22 to fly such a long training mission before undergoing a 4.5-hour inspection of the hydraulic lines in the engine air particle separator, where both failures occurred. The report cited errors in tracking flight hours on the accident aircraft.

The Osprey features a unique, lightweight hydraulic system... designed to power the aircraft's landing gear, rear cargo door and air inlet control. Military.com notes that system also contributed to a fatal 2000 training crash, in which a wire bundle chafed against the thin-walled titanium lines. Four Marines died in the New River, NC crash.

Lastly, the JAG report also notes the Osprey's fire suppression system failed to deploy in the November 2007 accident, despite having been triggered by the MV-22's pilot as he bailed out of the aircraft. Officials say they're looking into that problem, as well.

TSB finds eight factors in crash

The Transportation Safety Board has identified eight contributing factors to the tragic hot air balloon fire and crash in Hazelmere that killed two people and injured 11 others in August 2007.

Ten passengers and the pilot leapt from the basket of the balloon after it burst into flame, but Shannon Knackstedt, 49, and her daughter Gemma, 21, did not and perished.

An aviation investigation report released Tuesday concerning the August 24, 2007 tragedy noted that the balloon, operated by SRP Adventure Tours, had been modified to include a fourth propane cylinder, when it was manufactured with only three, and the pilot used a portable cylinder to help fill the balloon with hot air. This cylinder was not installed, but would be placed in the basket during the inflation and then removed. The investigation found the balloon was about 1,000 pounds overweight, requiring more fuel to be burned to provide the hot air needed for the extra lift to get the contraption off the ground.

The board reviewed the Aerostar S77A balloon's aircraft journey log and found it had flown 1,272 hours since it was manufactured 14 years ago, but found no documentation of maintenance work done on it during that time.

Investigators determined that somehow the fuel line connecting the fourth cylinder to a burner became disconnected "probably due to a combination of age, wear, handling," allowing the expulsion of pressurized propane.

The report notes that because there was no emergency fuel shut-off and the fourth cylinder's tank valve was open, propane continued to feed the fire. The modification of the balloon to accommodate the fourth cylinder and auxiliary cylinder "contributed to the likelihood of hose/valve discontinuity because of extra wear and handling."

Moreover, a synthetic strap connecting the balloon to a trailer failed in the heat and released the balloon with the mother and daughter still inside. When the fire started, the balloon began to rise because the emergency deflation system wasn't activated and some people leapt from a considerable height, hitting the trailer and sustaining serious injuries.

The Transportation Safety Board also found that the safety briefing given to the passengers prior to take-off "did not adequately explain" how to exit the basket in the event of an emergency.

Technical findings aside, the situation was horrific. After the fire broke out, the pilot told everyone to jump from the basket then jumped himself. Some didn't get out until the basket was about 30 feet high, rising to the limit of its tether strap and partially lifting the trailer off the ground. Finally, the strap gave way in the fire and the balloon floated upward, with the mom and daughter still in the basket. Eventually the burning wreckage drifted downward into a residential trailer park, destroying three mobile homes and two vehicles.

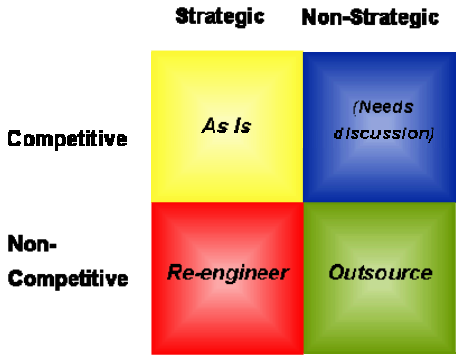
Thirteen days before this tragedy, there was a balloon crash near Winnipeg that was also investigated and the TSB subsequently recommended that the Department of Transportation ensures that commercial balloon operators carrying passengers provide a level of safety "equivalent to that established for other aircraft of equal passenger-carrying capacity."

It also recommended that the department ensures that balloons carrying fare-paying passengers have an emergency fuel shut-off.

FAA faulted over airline maintenance outsourcing: report

The nine major US airlines are increasingly using outside contractors to perform maintenance work, making the Federal Aviation Authority's (FAA) oversight duties more difficult, a government report said this week.

The trend has seen airlines more than double the amount of repairs it outsources over four years, increasing the major work they outsource to 71 percent of all maintenance work in 2007, up from 34 percent in 2003.



The report from the Transportation Department's inspector general also found that safety oversight of the airlines' maintenance work needs improvement.

While steps have been taken to improve oversight, the FAA "still faces challenges in determining where the most critical maintenance occurs and ensuring sufficient oversight," said investigators.

The FAA relies heavily on the airlines' own oversight, but investigators reported that the airlines' audit programs were inefficient.

In some cases "maintenance problems either went undetected or reoccurred," the report said.

In one example, investigators found that FAA inspectors for an airline carrier only visited four of the carrier's 15 outside contractors.

In another example, an airline's foreign repair facility was not visited by inspectors for five years after it was initially approved by the FAA. By this time, the facility had worked on 39 of the 53 engines the airline sent for maintenance, investigators found.

The report also noted that in numerous repair stations "problems existed," such as "untrained mechanics, lack of required tools, and unsafe storage of aircraft parts."

Investigators said the majority of problems were "not immediate safety-of-flight issues," but that they could "affect aircraft safety over time if left uncorrected."

Some airlines, for example American Airlines, perform all maintenance in-house or within the United States, but the report noted air carriers have increased the amount of work outsourced to foreign contractors based largely in Central America and Asia.

Twenty-seven percent of heavy airframe maintenance were sent abroad in 2007, up from 21 percent in 2003, the report said.

Airlines' Approach to Safety Rules Behind Frequency of Air Crashes in Russia - Agency

The Federal Air Transport Agency (Rosaviatsia) has blamed air carriers' perfunctory approach to safety requirements for the frequency and recurrence of air crashes in Russia.

"In spite of measures taken by Rosaviatsia and Rostransnadzor to ensure flight safety, airlines continue to treat the requirements set in governing documents and flight safety requirements perfunctorily," Rosaviatsia said in a statement.

"The frequency and recurrence of recent air accidents indicates the unsatisfactory nature of the preventive work conducted by the management of aviation enterprises to ensure flight safety," the agency said.

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The intensification of air traffic has had a negative impact on flight personnel's training and work-rest ratio, it said.

"The chief reasons that influence flight safety continue to include crewmembers' tendency to overrate their abilities, violations of technological guidelines, violations of flight regulation documents, and a tendency of aviation enterprises' heads and pilots to overrate the professional capabilities of crewmembers," Rosaviatsia said.

Crews are also allowed to operate airplanes without taking account of their ability and readiness to function in actual flying conditions, it said.

"Incorrect and inappropriate measures taken by crewmembers during unusual flight situations" could also cause an air crash, the agency said.

Rosaviatsia has forwarded letters to all Russian air carriers following a recent series of events, including an accident involving an airplane belonging to Kaliningrad's KD Avia airline.

In these letters, the agency's head Yevgeny Bashurin asks the heads of air carriers to assess the quality of crewmembers' training and their ability to operate during unusual flight situations.

During such assessments, all information from planes' flight data recorders must be deciphered and added to assessment reports.

Additional recommendations and measures will be offered following an inspection of the KD Avia company, which was launched by Rosaviatsia and Rostransnadzor (the Federal Transport Supervision Agency) on October 2.

The KD Avia company's Boeing 737 on a Barcelona-Kaliningrad flight managed to land after its landing gear failed to engage early on October 1. The 138 passengers and six crewmembers on the plane were not injured.

Quarry Blast Sends Rocks Into The Air, And Onto Parked Planes

Mishap Near BTV Results In Significant Damage

Somebody screwed up big time near Burlington International Airport (BTV) in Vermont... and as a result, at least five planes were damaged from hundreds of rocks accidentally blasted in the airport's direction from a nearby rock quarry Wednesday morning.

The Burlington Free Press reports Maine Drilling and Blasting, a subcontractor for S.D. Ireland Companies, set off the explosive blast at around 11 am. The blast was supposed to be aimed away from nearby populated areas...

but instead, chunks of rock -- some reportedly as big as microwaves ovens -- were sent into the sky over the airport, and a nearby technical college.

"It's a big deal. There's a lot of damage," said South Burlington Police Sgt. Dan Brunelle. Officials estimate damage from the rock fallout will amount to several hundreds of thousands of dollars. In addition to the **flattened aircraft,** the rocks also damaged property, and a number of vehicles.

Jacob Kilpeck told the paper he was outside the Burlington Technical Center for an Aviation Technology program class when the blast went off... and he and others had to run into a nearby building to escape the falling debris. When things settled and Kilpeck once more ventured outside, he found a large rock had impacted the hood of his sport-utility vehicle.

Brunelle told the Free Press the companies handling the quarry blast voluntarily shut it down after the mishap... albeit a little late. Officials with the airport, as well as the local gas and power company, spent the rest of the afternoon assessing the damage.

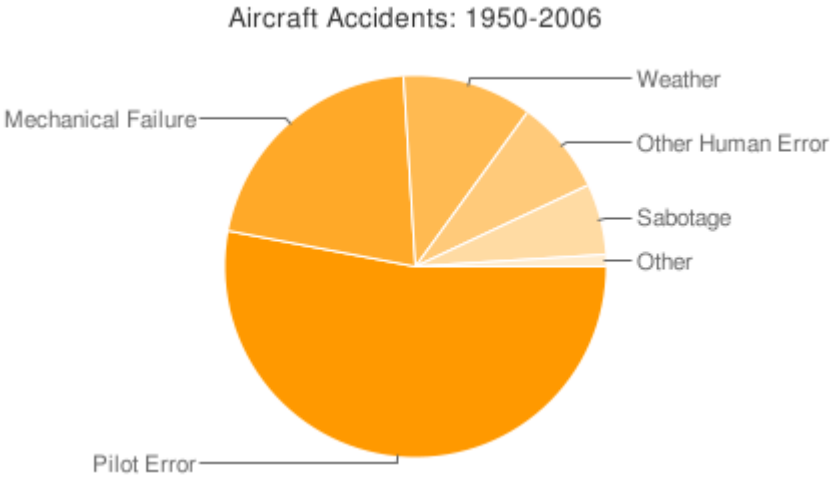
Dr. J will see you now: On pilot error and personal responsibility

Contributor: "Dr. J"

A Florida surgeon and fitness freak with a black belt in karate, he runs 50 miles a week and flies a Cherokee Arrow 200.

Pilot error is the most common cause of airplane crashes. Although that may seem like bad news, I like to view it as good news, because, one, it's something I, as pilot, have some control over, and two, it's nice to know as long as I maintain it carefully, I can depend on the machine!

Unlike my alter ego in this satirical safety video, I never go looking for danger in the plane! The normal thrill of flying is just fine, thank you!



An accident survey of 1,843 aircraft accidents from 1950 through 2006 determined the causes of accidents to be:

- **53 percent: Pilot error**
- **21 percent: Mechanical failure**
- **11 percent: Weather**
- **8 percent: Other human error (air traffic controller error, improper loading of aircraft, improper maintenance, fuel contamination, language miscommunication etc.)**
- **6 percent: Sabotage (bombs, hijackings, shoot-downs)**
- **1 percent: Other causes**

In prior columns I have addressed the serious problems, due to pilot (human) error, that can be caused by ignoring the factors of weight and balance. Just like an overweight body does not function optimally, neither does an overweight airplane!

Although I believe I have a fair amount of empathy with the problems of obesity, when it comes to flying on airplanes, because of personal experience and a thorough understanding of the dangers, I must be more of a concerned realist when it involves the airlines and their rational for the necessary treatment of obese passengers.

If you do what you've always done, you'll get what you've always had

Have you heard the saying, "Fool me once, shame on you, fool me twice, shame on me?" I recently read about an aviation accident that brought this saying to mind. It seems a seaplane involved in a fatal crash shortly after taking off last August might have been overweight, according to a report released by the National Transportation Safety Board. The load was quite likely close to the plane's maximum takeoff capacity of 2,350 pounds, according to the report.

As well as being overweight, the airspeed indicator in the plane may have been inoperative! Two people died in the crash, the pilot and passenger.

What I read next was the "shame on me" part, and it was quite telling! One year earlier, the same two individuals were involved in another accident when their plane collided with trees shortly after takeoff. The NTSB report said that the plane was about 65 pounds overweight at the time of the crash. The two men only sustained minor injuries in this mishap!

Aviation is not tolerant of foolishness, and these two unfortunate men paid the ultimate price for it!

Human error causes disease, too

Do you know the most common cause of serious human disease? Maybe you guessed it! It's human error, as in behaviors that make us vulnerable to self-acquired diseases! Good news, the same principles as in aviation apply! One, it's something you can have some control over, and two, it's nice to know if you maintain and take care of it, you can depend on your machine.

Our bodies being the wonderful machines that they are will usually give us warnings before total catastrophic failure occurs. Aside from the obvious consequences of smoking, symptoms such as high blood pressure, diabetes, poorer joint function, shortness of breath with minor exertion and so forth, are all often due to the results of our behaviors that have led to our being overweight or obese.

These are warnings to be respected, and heeded! I've seen too many examples of individuals who somehow feel that it won't happen to them, or do little to improve their physical situation, and have suffered terribly for that foolish thinking.

We all have significant, influential control over our human errors leading to our self-acquired diseases. Please respect the importance of this in your life, before it is too late!

In the most recent evaluation of pilot error, I am proud to say we are improving our performance, are you?

CALLBACK ASRS

From NASA's Aviation Safety Reporting System

"Lack of Awareness and Teamwork"

The tail jack screw assembly of a commercial jet, part of the horizontal stabilizer system, is very important to safe flight. In an incident reported to ASRS, several "dirty dozen" factors contributed to misplacement of a jack screw lockout tool:

Lack of Awareness: Losing track of tools
Lack of Teamwork: Lack of mutual support
Lack of Communication: Failure to discuss job completion

- Finalization of all paperwork and work was complete. Close to shift's end, I was called to the supervisor's office. A tool (horizontal stabilizer lockout) I checked out had not been turned in. I asked my partner [who] worked on the project with me if he'd seen the tool. He asked me if I had looked on the shelf behind the jack screw for the tool. I had not. I quickly went to the line to search for the tool, but the aircraft was already gone. We reported the situation to a supervisor who called where the aircraft was headed and left specific instructions. Upon arrival the tool was found.
    1) My partner and I failed to do a tool list check-off. I turned in some tools and he turned in some. 2) The tool room discovered that the tool had not been turned in at shift's end and saw that the others were in. 3) We both had different duties and did not come together at the end to discuss finalization. 4) Upon cleaning the work area…I had no idea that the tool was placed on the shelf behind the jackscrew.

The hero in this incident was the alert tool room mechanic who noticed that a tool had not been returned prior to shift end, and quickly notified a supervisor. Fortunately, the lockout tool was not installed. If the lockout tool had been engaged with the horizontal jack screw, and the flight crew did not do an adequate preflight check of the stabilizer trim, the outcome could have been serious.

Officials of Metrolink operator comment on deadly crash

Veolia Transportation executives say the company is 'stricken with grief' over the collision that killed 25. They decline comment on specifics, citing the continuing investigation.

Top officials with the firm that contracts to run Metrolink trains made their first public comments last Sunday night about last month's deadly head-on collision of a passenger train with a Union Pacific freight train in Chatsworth.

"Words cannot express how saddened we are over the loss of life and injuries suffered in this terrible accident," said Veolia Transportation Chief Executive Mark Joseph in a written statement given to the Times. "Our hearts are broken and our entire company is stricken with grief."

"Whether the result of human error, system failure, or other causes, we will share in the broad responsibility of finding solutions to lessen the risks inherent in passenger rail service," Joseph added. "Public transportation is an essential service for everyday life in this country, and this tragedy underscores more than ever before the need of improving our public transportation systems."
In an interview in San Diego, where Veolia officials are attending a mass transit convention this week, Joseph emphasized the firm's safety record and said Veolia is participating in the investigation of the crash by the National Transportation Safety Board.

Veolia officials said that the NTSB has asked them not to discuss the crash while the probe continues, and they declined comment on all questions relating to potential causes of the crash, which killed 25 people. They also declined to discuss the personnel record of Robert Sanchez, the engineer of the Metrolink train who was an employee of Veolia and who was killed in the crash.

The NTSB has said the Metrolink train ran a red signal intended to stop the train before entering a stretch of single track in use by an eastbound Union Pacific freight train.

In addition, the NTSB has said preliminary data indicates that 57 text messages were sent from or received by Sanchez's cellphone while he was on duty on the day of the crash, including one sent 22 seconds before the collision.

The agency, however, cautioned that the precise timing of the messages needed to be verified.

"I think up to this accident, we had the strongest [cellphone] policy in the business given the ones I'd seen," said Ronald J. Hartman, an executive vice president for rail for Veolia.

Hartman said Veolia's policy prohibits cellphone use by engineers and requires that devices be turned off and out of reach while engineers are in the cab of a locomotive. He said Veolia engineers encounter supervisors on a daily basis and that supervisors check for cellphone usage.

He added that Veolia supervisors sometimes call engineers' cellphones -- when the numbers for those phones are available -- to see if engineers are using phones while operating trains.

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REM Matters

A new study shows that fatigue rates are high among U.S. aviation maintenance technicians

The U.S. Federal Aviation Administrations regulates duty day length for aviation industry employees in safety sensitive roles: air traffic controllers, flight attendants, pilots, etc. These limitations include not only time in the air but they also factor one's total waking hours-taking sleep, commute time and other factors into consideration. FAA also sets rules for aviation maintenance technicians' (AMT) work limitations. For major airline AMT's FAA Title 14 CFR Part 121.377 spells out: "Each certification holder shall be relieved from duty for a period of at least 24 consecutive hours during any seven consecutive days, or the equivalent thereof within any calendar month."

This means that a technician could work up to seven consecutive days in a calendar month with no daily hour duty time limitations, take 24 hours off and be in compliance with the rule's provisions, explained Joe Hawkins, and A&P technician with Inspection Authorization, 30 years of industry experience and now a professor at Middle Tennessee State University. Hawkins is conducting a series of studies on fatigue in aviation maintenance operations and he hopes to bring attention to human factors issue such as tiredness.

The first study, an overview of fatigue in the industry, came out in the spring 2008 issue of the ATEC Journal. A publication distributed by the Aviation Technical Education Council.

About half of the 457 responses to the survey came from Part 121 mechanics, with the rest employed by Part 145 or private maintenance operations. It queried technicians on issues such as sleep patterns, work schedules, work environment and employer attitudes toward human factors issues. The survey produced some interesting results. Around 59% of those surveyed reported feeling fatigued or lacking in sleep "often" or "occasionally" while at work. A majority of participants (61%) said their employer does not have a fatigue or rest period policy. More than 70 % reported feeling pressured to work while fatigued, and 80% said they think fatigue is common occurrence in maintenance operations.

Hawkins seems to have hit the nail on the head by looking into fatigue management and human factors training. Still he said a common critique of this initial survey was its broadness, so a second survey will focus exclusively on Part 121 operations.

"Part 121 has the biggest impact, I think on the safety of the system, just by total volume," he said. "I am talking about not only the size of the airplanes, but the complexity of the airplanes and passenger load. The greatest impact of safety there is from complicated systems, complicated airplanes and the pressure to produce…to meet the flight schedules – and the overall safety of the system.

Another reason for focusing on Part 121 operations is that other operations that do not have federally mandated standards may write theirs base on 121.377. By advocating duty day regulations for Part 121 AMT's, one might promote safer and healthier standards across the industry. Hawkins said. The safety benefits of exploring human factors regulations could reflect in the opposite direction, too.

Part 145 repair stations, which will be the subject of a future study, may in some instances, when working on air carrier aircraft or components, have to include more stringent rest standards and fatigue management programs in their FAA-approved repair station manuals, he said; since these requirements are included and the manuals approved at the local FSDO level, they are enforceable only at the particular repair station. "It's kind of crazy," noted Hawkins, that a second or third level maintenance organization (MRO) could very well have more intense human factors oversight than an airline is required to adhere to in its own comprehensive maintenance operation."

One thing is consistent across the industry: the current state of the U.S. economy is not making anyone's job easier. Air carriers must operate on tight budgets to cope with higher-than-ever fuel cost, so maintenance may find itself between a rock and a hard place-charged with upholding the most stringent levels of safety in operations and product turnout, with little money, fewer wrench-turners and tighter schedules. Under these conditions, the fatigue problem certainly is not going to solve itself.

Qualified technicians can participate in Hawkins' study here:
http://www.surveymonkey.com/s.aspx?sm=dBezTIMQ8Lpup5gRcFO36g_3d_3d

Food That Could Help You Sleep

We all know the myth behind turkey and sleepiness. Certain foods such as turkey contain an amino acid called tryptophan that causes sleepiness, potentially resulting in post-Thanksgiving dinner naps everywhere. There is some doubt over whether that is true. Some believe turkey doesn't contain enough tryptophan to be effective. But were you aware that other foods, like popcorn, may have a similar effect?

The Internet-based wellness company Real Age's Food Bites blog has listed several foods that potentially increase sleepiness, such as a small slice of angel food cake topped with berries or half a cup of pasta topped with marinara sauce. The trick is to increase your carbohydrate intake. Carbs make tryptophan more available to the brain, which is why carbohydrate-heavy meals can make you drowsy. Proteins from the food we eat are the building blocks of tryptophan, which is why the best bedtime snack is one that contains both a carbohydrate and protein.

10 Foods That Help You Fall Asleep

If it takes you more than 15 minutes to fall asleep at night or during the day, quicken your trip to dreamland by changing what you eat in the evening or after the midnight shift. It can make the difference between staring at the ceiling and sleeping like a baby.

For years, the top food on the snooze list was turkey, because it contains sleep-inducing tryptophan (credited with all those Thanksgiving naps). But researchers have done an about-face and nixed this connection. Why? Turkey, like most foods, just doesn't contain enough tryptophan to put you to sleep, explains Elizabeth Somer, RD, author of *The Food & Mood Cookbook: Recipes for Eating Well and Feeling Your Best* .

Instead, think light but high-carbohydrate snacks. Carbs boost levels of the brain's sleep chemical serotonin without overloading your digestive system. If you like, wash them down with something warm and soothing, such as a cup of herbal tea (chamomile, lemon balm, or valerian) or warm milk.

10 Top Sleep Boosters

Nibble on one of these 10 high-carb calmers an hour before bedtime -- you'll be yawning in no time.

1. Half of a whole-wheat English muffin or raisin bagel drizzled with honey

2. Two cups of air-popped popcorn

3. A small slice of angel food cake topped with berries

4. A frozen whole-wheat waffle, toasted, with maple syrup

5. Half a cup of pretzels

6. Fresh strawberries dunked in a little fat-free chocolate syrup

7. Half a cup of pasta topped with marinara sauce

8. A 4-ounce baked potato topped with salsa

9. A handful of oyster crackers and a piece of fruit

10. Canned mandarin oranges sprinkled with crystallized ginger

The benefits of sleep go well beyond good moods and lots of energy. Getting 6 to 8 hours of sleep a night can make your RealAge as much as 3 years younger.

Having trouble starting your engine in the morning? Get a quick kick start with these breakfast ideas.

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Aviation Educators Invited To Gather In D.C.

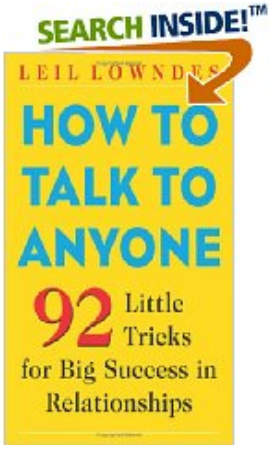
Everyone in aviation knows the future depends on keeping the next generation interested in things that fly, and the National Coalition for Aviation Education works to do exactly that. On October 16-18, the group will host its annual meeting in Washington, D.C., gathering educators from around the country to share ideas, get inspired, network, and learn all the latest about aviation and space.

Former astronaut Bonnie Dunbar, now president of The Museum of Flight, in Seattle, will address the meeting.

Many other aviation notables will speak, including Gregory Condon, manager of the NASA Smart Skies Education Project; Barrington Irving Jr., the first black pilot and youngest person ever to fly solo around the globe; NASA astronaut Janice Voss; and more. Industry reps will exhibit the latest materials and programs they offer to the educational community. The meeting will take place at the Crystal Gateway Marriott in Arlington, Va.

The meeting agenda will feature several tracks, including science of aviation and space, teaching and learning methodologies and technologies using aerospace education as the theme, outreach in aviation education, and educating youth for aerospace careers.

How to talk to anyone



If you're finding it difficult to meet new people while working a non – traditional schedule, it might be worth while taking a look at this book: *How to Talk to Anyone: 92 Little Tricks for Big Success in Relationships*.

In How to Talk to Anyone, Leil Lowndes provides insights on how to communicate more effectively in all the different types of situation that life throws at you. Weather you've going to a party where you don't know anyone or going on a first date, the book will show you techniques for starting conversations and coming across as confident, credible and charismatic. Altogether the book's tips will help make you more comfortable with approaching new people and starting a conversation.

Rescue Tool targets firefighters, EMTs, and police officers.

Weighing just over 1 lb, No. 88 Rescue Tool is made of drop-forged, 1080 high-carbon steel and combines 6 uses into one device. Tool has beveled plier head with cross-hatched teeth that twist and pull. Tapered pry wedge opens doors and windows, while spanner wrench tightens and loosens hose couplings, and hardened tool steel punch shatters safety glass. Additional features include gas shut-off valve slot and laser heat-treated cutting edges for cutting wires and cables.

The Rescue Tool is available for purchase through Rollins & Sons, Ltd. The company can be reached at 01279 401570, via e-mail at sales@rollins.co.uk , or through the Web site at www.rollins.co.uk . Learn more about the #88 Rescue Tool online at www.therescuetool.com .

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Use of nitrogen in tires gaining ground

Performance Tire technician John Chronister fills a tire with nitrogen; the gas helps maintain the correct tire pressure and can prolong the life of the tire. While most people are trying to think of ways to improve gasoline mileage, a small thing like keeping your tires inflated to the right pressure can make a difference

Richard Brown let the air out of the tires on his two cars two weeks ago.

The tires were refilled with dry nitrogen. Brown hopes the nitrogen will make winter more tolerable.

"I always had to grab the old hand pump and pump the things back up when it got cold," Brown, of Lawrence, said. "With nitrogen I don't have to do that now."

That's because nitrogen maintains tire pressure better than air and reduces chances of tire failure, tire vendors say.

Brown made the switch from compressed air to nitrogen after seeing a sign advertising nitrogen at Performance Tire & Wheel, 1828 Mass.

Nitrogen has been available at the business for a little more than two months since it was purchased by new owners, manager Steve Montgomery said. Topeka's two Performance Tire businesses have offered nitrogen for years, he said.

"It's to try to get the tires to last as long as they can and have less maintenance for the customer to have to deal with," said Doug Bahnmaier, owner of Doug's Auto.

Tire and mechanical trade publications touted nitrogen a few years ago, and that led Bryan Harris, owner of Harris Auto, to try it. Customers who fill up with nitrogen have had no complaints, he said.

Nitrogen also helps cars improve their gas mileage, however slightly, Montgomery said. Because the tires stay properly inflated there is less friction between tires and the roadway.

"We're not talking about saving 10 miles per gallon, but it does cut down on resistance," Montgomery said. "In this day and age if there is a cheap way to save gas you should do it."

Brown recently checked gas mileage after some driving and found that he improved by about 2 miles per gallon, he said.

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The garages charge for the first fill-up with nitrogen, then refills are free. Prices range from $3 to $5 per tire.

Nitrogen use in tires is nothing new, although interest appears to be increasing, especially in this area, mechanics said. Nitrogen in tires on airliners and other big planes has been common for years. The military also uses nitrogen for tires.

Planes use nitrogen because it doesn't have moisture and thus doesn't freeze at high altitudes, said Lloyd Hetrick, president of Hetrick Aviation at Lawrence Municipal Airport.

Professional racers also use nitrogen in tires.

In a bulletin issued in 2006, the Rubber Manufacturer's Association stated that nitrogen may contribute to minor reductions in inflation pressure loss. RMA also noted that tire inflation should be checked at least once a month whether air or nitrogen is being used.

FORKLIFT SAFETY INVOLVES EVERYONE!

Not everyone at your workplace operates loading equipment. But non-operators still don't get a free pass when it comes to paying attention to forklift safety. It could be you who gets hurt when the forklift skids on that patch of oil. Your workmate may be the person who gets backed over because he or she isn't watching where the machine is going.

Let your workers know that you take forklift safety seriously, and that they should too, with this safety talk.

- **Read the talk in English from Safety|Smart! Online**

AUDIO SAFETY TALKS!

Operating a Forklift Requires Training

If you've been tugging a pallet jack around the warehouse, a forklift looks like the solution to all your troubles. But in fact you can get into a whole heap of trouble if you operate machinery without training. Remind your workers that if they're not trained, they know neither the machine's limits nor their own, and that's not a safe situation. Pass this information on to your workers with this audio safety talk.

- **To listen to the talk, click this link**

PICTURE THIS!

When it comes to forklifts, if you're a fast learner, you quickly learn not to be a fast turner. At least not with the forks raised. Traveling with the forks lifted high raises your center of gravity and makes the vehicle more vulnerable to tipping, as this example shows. The original account, attached to the photo by the Minnesota OSHA inspector who took it, does not mention whether anyone was in the basket when the machine tipped.