# Aviation Human Factors Industry News

Volume XI. Issue 14, July 12, 2015



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

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

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In this weeks edition of Aviation Human Factors Industry News you will read the following stories:

**★FAA Aviation MX HF Issue; June** 2015, Vol. 3, Issue 2

**★Safety Standdown Puts Focus on**Distraction in Aviation

★Military explains cause of 2014 SoCal jet crash

★Airman catches safety hazard before takeoff

★Illegal butchers back near airport, add to threat of bird strikes

**★FAA Posts Second Video in New Safety Information Video Series** 

**★FAA Proposes Fine Against**Cargo Company Operating Bagram
747 Crash Caught On Video

★Taiwan pilot in February
TransAsia crash described as
hasty

**★Taiwan pilot in February TransAsia crash described as hasty** 

#### FAA Aviation MX HF Issue: June 2015, Vol. 3, Issue 2



#### INSIDE THIS

Human Factors Training for FAA Ainworthiness 1-5 Inspectors

Exposures in the Workplace: LMEC for the 6-8 Aging Workers

Spotlight: CAMI Human Factors MX Team

#### Summary

FAA Aviation Safety Inspectors (ASIs) have a variety of primary responsibilities that are related to oversight. However, they also are safety advisors. This article describes the current training that helps prepare Airworthiness ASIs to have the knowledge and attitude to be able to add value to new and evolving maintenance human factors programs. Johnson writes this article having just participated in a class for ASIs.

#### Introduction

When friends and colleagues ask me about some of my favorite activities as the Chief Scientific and Technical Advisor, I always comment that it is my interaction with Airworthiness Aviation Safety

Inspectors. In my opinion the ASI workforce are the primary FAA safety ambassadors to the industry maintenance management and workforce. They may be a bit like the "Beat Cop" who rides a bike or squad car through the neighborhoods. The good guys like to see them around while the bad guys are not as comfortable. Most ASIs worked a lot of their career, in industry or military, doing the very same jobs that they now oversee as FAA Inspectors. They know the technical content and can relate to the work challenges. This is particularly true with respect to knowledge and attitude about maintenance human factors. I like to teach the ASIs because they are very enthusiastic about addressing

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#### http://www.faa.gov/about/initiatives/maintenance\_hf/fatigue/publications/

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### Safety Standdown Puts Focus on Distraction in Aviation

Bombardier Business Aircraft today announced that the 19<sup>th</sup> annual Safety Standdown U.S.A. will take place October 6-8, at the Hyatt Regency hotel in Wichita, KS.

The Safety Standdown program will continue to tackle the risk posed to aviation safety by everyday distractions. This year's focus will be



on the practical applications of attention control techniques, building on the theoretical human factors training provided at Safety Standdown seminars in 2014."Distraction is considered to be one of the most serious threats to aviation safety by the National Transportation Safety Board (NTSB)," said Safety Standdown expert, Captain Al Gorthy, United States Navy (Ret.). "This year, Safety Standdown will show aviation professionals how to recognize sources of distraction and ways of disconnecting from them to avoid negative impacts on safe operations," he added.

"Bombardier's commitment to aviation safety and the Safety Standdown program is unwavering," said Andy Nurredin, Vice President & General Manager, Customer Services. "As an experienced airman, I know first-hand the value of the human factors training provided at Safety Standdown."

During this year's seminar, we will pay special tribute to decorated United States Naval Aviator and former NASA Astronaut Captain Eugene A. Cernan, USN (Ret.), who has for more than a decade served on the Safety Standdown Advisory Council and as the program's ambassador. Although Captain Cernan remains personally committed to the elimination of human errors that do emanate from the cockpit, the time has come for him to move on from his long tenure in support of Bombardier Aviation Safety Standdown and pursue other means of reminding all pilots that "good is never good enough in our world of aviation."

Captain Cernan's presence at seminars around the world, where he has shared his experience and knowledge, has inspired participants to remain committed to the prevention of human errors in aviation.

"I have enjoyed working with my colleagues on the Advisory Council and have benefitted enormously from an association with my peers who have attended Safety Standdown over the years. They are all dedicated professionals in their own right."

#### Military explains cause of 2014 SoCal jet crash

The investigation results were obtained by 10News Tuesday after a Freedom of Information Act request was made this past April.

According to the probe, Marine investigators determined the Harrier AV-8B plane crashed into an Imperial, California, neighborhood on June 4, 2014, due to the following:



"The mishap was caused by a crack in an oil drain tank that caused oil to leak at an accelerated rate. This resulted in an engine fire, engine failure, and the loss of control that required the pilot to eject. The aircraft was destroyed. Three civilian homes were damaged, and emergency or extraordinary expense funds were used to pay the affected families for their lodging and clothing expenses."

No one was killed or injured as a result of the crash, investigators said. The pilot, who ejected from the jet, suffered minor injuries.

The jet had taken off from Marine Corps Air Station in Yuma, Arizona, and was on its way to Naval Air Facility El Centro when the incident occurred.

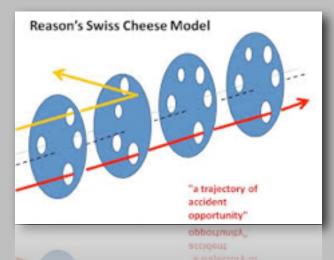
#### Airman catches safety hazard before takeoff

Psychologist James Reason's "Swiss Cheese" model increases understanding of how most accidents can be traced to human error. In every safety investigation,

we investigate unsafe acts, as well as latent conditions or failures that lead to mishaps.

Like layers of Swiss cheese slices, each layer is an opportunity to stop an error.

This month, we want to highlight how one airman's professional actions "stopped the error" and prevented a mid-air emergency that, in all probability, would have resulted



in catastrophe. The Air Force Reserve Command Aviation Safety Well Done Award was presented to the 908th's own Staff Sergeant Ricky Davis, in recognition of his exceptional airmanship when faced with a serious aircraft malfunction.

On Aug. 5, 2014, Davis was the loadmaster on a C-130H2 that was conducting a Reserve Airlift mission, transporting 27 chaplains from Hurlburt Field, in the Florida Panhandle, to Patrick Air Force Base, located on the Atlantic coast, a distance of 300 nautical miles, or approximately an hour's flight time.

As the aircraft was cleared for takeoff and began to take the runway, Davis noticed a flap connecting link hanging below the right wing and brought it to the attention of the crew. The takeoff clearance was immediately canceled, thus avoiding a potential catastrophic accident.

A subsequent safety investigation revealed that the coupling chain connecting the flap motor gearbox to the outboard jackscrew on the right inboard flap had come undone prior to takeoff. This screw failed to operate and therefore the flap connecting link tube assembly failed to move.

The inboard jackscrew continued to operate normally, which caused the right inboard and outboard flaps to jam together. This one, small "bicycle chain" is the critical link between the flap motor and the jackscrew that drives the flap.

The crew was unaware of this potentially catastrophic condition, as the flap gauge indicated 50 percent. Under these circumstances, if the crew had continued the takeoff and increased airspeed, the airplane would have continued a bank and roll to the right — possibly beyond the flight control limitation of the aircraft.

At that point, the only way the crew would have been able to save the aircraft would have been to quickly (within seconds) and accurately guess a stuck flap condition and raise all of the flaps.

The investigation also discovered four other coupling chains were installed incorrectly on another airplane in the 908th Airlift Wing.

Davis' superb action saved 34 lives and a \$30 million aircraft that day, and prevented another future mishap on another aircraft. The professionalism displayed by Davis reflects great credit upon himself and the Air Force Reserve Command.

### Illegal butchers back near airport, add to threat of bird strikes

A DGCA audit has found that illegal butchers' shops have resumed operations along the periphery of the city airport a few months after the BMC removed them on the High Court's directions. Offal from the shops, dumped at several locations near the airport, attract birds in large numbers, heightening the threat of collisions with incoming aircraft, the aviation authority has said.

The Directorate General of Civil Aviation survey carried out on July 2 and 3 found areas such as Vakola River, D'Mello Compound, Madraswadi, Sanjay Gandhi Nagar, Dr Bhabhasaheb Ambedkar Nagar, Samrat Ashok Nagar, Talao Pakdi, Chakala, Bamanwada and Cigarette Factory as major contributors to littering, which increases the likelihood of bird strikes. Airport sources said 12 such locations have been identified.



"We are in the process of compiling our report. It will be shared with the stakeholders. As for enforcement, it is the civic body which has to carry out the clean-up and ensure compliance," said Sanjay Brahmane, an official at the DGCA's air safety division.

BMC officials told Mumbai Mirror they have attended to the DGCA's concerns as soon as they have been raised. "If there are any specific locations that they have found we will take action against the illegal butchers and garbage collection points," said an official responsible for solid-waste management from K-West ward, in which precinct the butchers' shops are located.

Datta Mane, the advocate who filed a Public Interest Litigation asking for suitable measures to be taken to prevent bird hits, and the cancellation of licenses to abattoirs in the area, in 2010, told Mirror, "The petition is still pending before court. If the latest survey finds no change, then it is a matter of concern that I would wish to put before the court."

Aviation safety expert Captain Mohan Ranganathan said he agreed with Mane's suggested course of action. "If there has been an increase in the number of bird hits, it clearly indicates that the civic authorities have allowed things to happen against the aviation law," he said.

The DGCA has not granted permission for butchers' shops near the airport. "Rule 91 of the Aircraft Act prohibits animal slaughter and disposal of rubbish in the airport vicinity, without a go-ahead from the DGCA. Since we haven't issued permissions those in operation are illegal," an official said.

## FAA Posts Second Video in New Safety Information Video Series

The Federal Aviation Administration (FAA) has posted the second video designed to further enhance airport safety. Entitled "The 2015 Wildlife Hazard Management and Strike Reporting Update," the video outlines the benefits of wildlife hazard strike reporting and how airport operators use the information to reduce wildlife strikes at airports.



The video also discusses the FAA's collaborative partnerships with other federal agencies and organizations to reduce wildlife strikes, including the U.S.

Department of Agriculture, the Smithsonian Institution's Feather Identification Lab, and Bird Strike Committee-USA.

The FAA launched the safety information video series last year to provide the airport community with information to help them continue to operate the nation's airports safely and efficiently.

To view the video, go to: <a href="http://www.faa.gov/airports/safety-video-series/">http://www.faa.gov/airports/safety-video-series/</a>.

### FAA Proposes Fine Against Cargo Company Operating Bagram 747 Crash Caught On Video

by John Goglia

Millions watched the dramatic dash-cam video of the final moments of a Boeing

747 cargo aircraft as it made a steep

take off from Bagram Airfield in Afghanistan on April 29, 2013, stalled and rolled to the right, crashing in a tremendous ball of fire. The seven crewmembers aboard the aircraft were killed. Many accident investigators, myself included, speculated at the time that the crash might have been precipitated by a sudden shift in the aircraft's cargo load. Today the FAA announced that it is proposing



a \$77,000 civil penalty against the 747 operator, National Air Cargo Group of Orlando, Florida, for "allegedly failing to comply with requirements for loading and securing heavy cargo" on two of its 747 aircraft, including the one that crashed in April 2013.

The FAA alleges that the aircraft that crashed was loaded with five Mine Resistant Ambush Protected Vehicles (MRAPs), each weighing "between 23,001 pounds and 37,884 pounds" that were not secured in accordance with the Federal Aviation Regulations. It also alleges that this aircraft and one other 747 operated by National were flown on seven flights during March and April 2013 with improperly secured MRAPS.

Improperly secured cargo can shift, causing the aircraft to be out of balance and usually tail heavy. On take off this can result in an aerodynamic stall and crash, as may have happened here. The NTSB has not yet ruled on a probable cause for the accident.

Today's announcement by the FAA is a proposal to fine National Air Cargo and not a finding of any wrongdoing by the company. National has the opportunity to respond and contest the FAA's allegations. The FAA in its press release stated that the company had requested the opportunity to meet with the FAA to discuss these allegations.

https://www.youtube.com/watch?v=lksDISvCmNI

### <u>Taiwan pilot in February TransAsia crash described as hasty</u>

A pilot described by colleagues as nervous and hasty mistakenly throttled down a still-running engine following a glitch with the other engine in an airline crash that killed 43 people in Taiwan in February, flight safety officials said Thursday.

A preliminary investigation into the Feb. 4 crash of TransAsia flight GE235 already had indicated that the pilot shut off the remaining engine after one of them went idle. But the account Thursday by Taiwan's Aviation Safety Council — while not assigning blame — added additional details about the crash and the background of the pilot, including that he had failed a flight simulator test as recently as May 2014.



Both the pilot and co-pilot died. Minutes after takeoff in Taipei, a ribbon-like sensor connector in the automated flight system failed and put one engine into a mode that effectively cut its power to the aircraft, Taiwan's Aviation Safety Council Executive Director Thomas Wang told a news conference.

The engine's condition, useful in other cases to reduce torque, generated a flame-out warning in the cockpit 37 seconds after takeoff, according to a report by the council. However, it says the engine itself was technically still capable of providing power to the ATR-72 aircraft. The aircraft was also designed to fly on one engine.

"The sensor connector, in layman's terms, you would say was in a situation where it didn't connect normally," Wang said.

Seconds later, the pilot said he would pull back on the throttle to the plane's other engine, which showed no mechanical trouble, the council's report indicates. Normally, a pilot would throttle back to cut the flamed-out engine to avoid further problems and rely on the still-running engine for power.

"If engine two has flamed out, you would shut off engine two, that's normal logic," Wang said.

Eight seconds before the crash, the council's report states, the pilot said in Chinese: "Wow, pulled back on the wrong side throttle."

The pilot in command had failed a flight simulator test in May 2014 and passed it the following month with further training, the council's report says.

He had been described in post-crash interviews with colleagues as "a little nervous during line operations," and a person who "had a tendency of rushing to perform the procedures without coordination with the (co-pilot)," according to the report.

An automatic system to control power upon takeoff had not been armed while the plane was on the ground in Taipei but kicked in seconds later, the agency's report said. The pilot knew about this outage but authorized takeoff, the report shows. It was not clear if that glitch had any connection with the engine going idle.

The automatic takeoff power control system maker in the United States has joined Taiwan's investigation, Wang said.

The flight had left Taipei's Songshan airport for the outlying Taiwan-controlled islands of Kinmen.

Video captured on dashboard cameras showed the plane flying on its side over an elevated road, clipping a fence, light pole and passing taxi shortly before plunging into the Keelung River in a heavily populated part of Taipei.

The flight was carrying 53 passengers, three crew members and two flight attendants. Fifteen people escaped the aircraft alive.

TransAsia said Thursday it had improved pilot training and the company's organization since the February crash.

Jon Beatty, CEO of the U.S.-based non-profit Flight Safety Foundation, has been invited to sit on TransAsia's aviation committee and give guidance, and all 61 ATR aircraft pilots have passed an "appropriateness examination," the company said in a statement.

To improve organization, TransAsia said it has raised pay and "made active efforts" to develop talent. It has also formed an in-house safety inspection committee that meets every two weeks.

Another domestic TransAsia flight crashed on July 23 last year, killing 48 people aboard.

The Aviation Safety Council anticipates finishing a full investigation on the February crash by April 2016

### <u>Taiwan pilot in February TransAsia crash described as hasty</u>

An offshore helicopter had to return to St. John's International Airport Tuesday because of an oil pressure problem.

The Newfoundland and Labrador Offshore Petroleum Board said the CHC Helicopters Canada flight was on its way to the West Hercules rig, which is drilling for Statoil. It was about 20 kilometers out when the crew had an indication of low oil pressure in one of the two engines.



"This is the first occurrence of this nature for CHC Helicopters Canada and we are working with our client and the regulator to determine exactly what happened and to ensure it will not happen again," said a spokesperson for CHC Helicopters Canada.

The Sikorsky S-92A helicopter made it back to St. John's without a problem with its seven passengers and two crew members.

The board said Statoil believes the problem may have been caused by the installation of the wrong-sized O-ring during maintenance.

CHC said it is investigating the placement of an incorrect sized O-ring.

#### FAA proposes \$66,000 penalty against Centurion Air Cargo

The US Department of Transportation's Federal Aviation Administration (FAA) proposes a \$66,000 civil penalty against Centurion Air Cargo, Inc., of Miami, Fla., for allegedly operating an aircraft that was not in compliance with Federal Aviation Regulations.

The FAA alleges Centurion operated an MD-11 jet on at least 12 flights between June 5 and 11, 2013 while failing to comply with its minimum equipment list (MEL) procedures after receiving a fuel quantity fault indication during a June 5 flight. An MEL specifies what may be inoperable during a flight pending repair of that equipment.

A carrier is prohibited from flying an aircraft with inoperable equipment unless it complies with the MEL. The FAA alleges Centurion did not comply with the MEL for deferring this discrepancy by placarding the fuel quantity indicator as inoperable and verifying the tail and forward auxiliary tanks were empty after refueling.

Additionally, the FAA alleges that Centurion operated the aircraft on four of the flights after discovering that the door slide indicator did not light. Centurion did not follow MEL procedures for deferring this discrepancy by placarding the light as inoperative and verifying that the evacuation slide system was adequately charged each day the aircraft flew, the FAA alleges.

Centurion has been in communication with the FAA about the case.

### Al crew members injured as captain forgot to announce landing

Flight attendants on an Air India flight from Riyadh to Mumbai on Sunday suffered injuries on their head, back and limbs after the Boeing 777-300 suddenly hit turbulence close to the final approach and the commander allegedly forgot to alert the crew to take their seats before making touchdown, according to the airline's cabin crew union.



Although the 280 passengers traveling on board the flight (Al 922) escaped unhurt, the sudden drop in altitude and subsequent touchdown caught flight attendants unawares and injured five of them, said sources. The standard operating procedure states that pilots are supposed to make announcements when an aircraft is nearing turbulence and warn the crew to take their seats closer to touchdown. Neither procedure was allegedly followed on board the flight. "The cabin crew is supposed to inspect the entire cabin after the sign for fastening seat belts is switched on for passengers. As soon as the inspection is over, the pilot directs them to take their seats before preparing for touchdown. In this case, the mandatory procedures were not followed," said a senior Al official, requesting anonymity.

An AI spokesperson, however, said only one flight attendant was injured in the incident because the person was not seated despite all mandatory warnings being issued by the pilots. "One cabin crew suffered minor injuries because the plane hit a bump mid-air," said the spokesperson, adding that the incident was 'minor' and that the rest of the crew was not aware of it.

However, an injured flight attendant's medical report accessed by HT showed that three cabin staffers, including two witnesses and the cabin crew in-charge, had signed the personal injury report. The report added that the cabin crew members had suffered injuries on the back, left elbow, right knee, right hand and right ankle.

The airline spokesperson said the crew did not report the matter to the aviation safety regulator because it was a 'minor incident'. According to rules laid down by the Directorate General of Civil Aviation (DGCA), any incident of passengers or crew getting hurt should be reported to the safety regulator. "No airline can decide for themselves whether an incident is major or minor. The directives are clearly spelt out. It is mandatory to inform us," said a senior DGCA official, requesting anonymity.

#### **Aviation Paint: More Than a Pretty Face**

Aircraft paint is probably one of the most under appreciated technologies in aviation. Everyone oohs and aahs over today's jet



engines and the electronics that dominate modern flight decks. But paint? Passengers think of it as a pretty face, not realizing its implications for safety, fuel efficiency and aerodynamics. Paint protects the exterior surfaces of an airplane from the elements. An aircraft hurtling through the air at 500 miles per hour or more is exposed to high levels of ultraviolet (UV) exposure, rapid and extreme temperature cycling, expansions and contractions of the outer skin, high wind velocities, and the effects of air, rain, and manmade chemicals. Aircraft paint has to stand up to this environment, be, adhesive and durable, maintaining gloss and vibrancy for the five- to 10-year interval between refinishing. It must also be as eco-friendly as possible. And it has to look good. Typical fuselage paint must be able to withstand temperature swings of well over 100 °F, says Mark Cancilla, PPG Industries global platform director, aerospace coatings. In a matter of minutes the temperature around the aircraft's exterior falls from ground levels to perhaps minus 60 °F at altitude. Temperature requirements typically range from minus 60 °F to 160 °F, he says. There are also high air velocities and changes in humidity to deal with. "Of course, the effects of UV light are also much greater at 40,000 feet, and so the exterior topcoat must be able to survive this to maintain the integrity of the livery colors," he says.

They also must resist chemicals such as deicing fluids, hydraulic fluids and industrial-strength cleaners. Coatings for structural elements inside an airplane face a different set of challenges. These coatings must protect the aircraft from corrosion—in some cases for the duration—as some areas are difficult to reach for maintenance after the aircraft is assembled. Coatings for areas such as the insides of fuel tanks may need to last 25 or even 50 years, says Andreas Ossenkopf, director of aviation for Mankiewicz, a paint manufacturer headquartered in Germany. Structural components paints must resist chemicals such as hydraulic fluids and prevent the corrosion of aluminum from contact with water electrolytes as well as aggressive media, he adds. Interior cabin coatings also must meet strict standards for flammability, smoke and toxicity, Ossenkopf says. And cabin coatings must be functional, durable and pleasing to the eye. Mankiewicz has delivered exterior, cabin, and structural element coatings to the aviation industry for decades, the company says. AkzoNobel, a paint manufacturer based in Amsterdam, points out that aerospace is a qualificationdriven market. Coating systems must pass the stringent specification testing requirements set out by the aviation authorities and aircraft manufacturers before they can be used in the market. It often takes years for products to go from development through qualification to commercial application on aircraft, explains Maud.

#### Keep cool: 19 tips on how to sleep on hot nights

- 1. Sleep in lightweight cotton sheets - these are breathable and absorb sweat unlike other fabrics
- 2. If you can face remaking the bed stick your sheets in the fridge or freezer for a few minutes for a quick cool down. The effects will last



- 3. Keep your curtains closed in the day to stop the heat coming in.
- 4. Open windows that are in the shade in the day to keep the house cool.
- 5. Have a tepid shower or bath before bed to cool you down but not a hot one, which will only serve to wake you up.
- 6. Buy a fan!
- 7. Pointing a fan to the window apparently helps to push hot air out. If you have a ceiling fan advice suggests setting the blades to counter-clockwise to pull up hot air. Creating a cross breeze by doing this is also supposed to help cool things down.
- 8. Put a bowl of ice in front of the fan, or a towel filled with ice cubes, so the ice cold water gets shared around the room like a cut price air-conditioning machine.
- 9. Wear loose cotton short pajamas or a shirt to sleep in. Going au natural can sometimes make you hotter.
- 10. Make sure you're pretty chilled out before you head to bed. Sit out in the garden or wherever is coolest in the house. Also apply ice or cold water to your pulse points for a short time to cool yourself down.
- 11. Send your partner off to the spare room. Two people generate more heat than one...
- 12. Drink a glass of water before bed and keep one on the bedside table to ward off dehydration.
- 13. Turn off any electrical appliances that may generate heat, including lights, laptops and TVs.
- 14. Hang a wet sheet in front of an open window to help cool the air that is blown in.
- 15. Avoid drinking alcohol it can add to dehydration (even just a small amount) and can also affect the quality of your sleep making you more likely to wake up.
- 16. Sleep downstairs hot air rises so in many cases the living room could be a better option for a good night's sleep.

- 17. Don't exercise close to going to bed as this will increase your body temperature. Leave plenty of time to cool off.
- 18. Flip your pillow over to the cool side if you wake up.
- 19. Don't lie there worrying about the fact you can't sleep, read a book to help your mind relax then try to go to sleep again.

#### **5 Creative Ways To Prevent Employees Burning Out**

The secret to keeping employees from burning out is to fix their work/life imbalance. Here are some ideas for doing that.

We've all seen it—the employee who walks in the door at 8:17 a.m. and is out of the door before the clock strikes five. The employee who can't seem



to stay awake during team meetings and avoids the water cooler at all costs.In our always-on work culture, it's easy for employees to burn out. And burned-out employees don't just damage individual productivity, they damage company-wide performance and potential. As employees begin to show symptoms of burnout, they transfer their stress (and workload) to others—and the burnout spreads.

The problem: There is a work-life imbalance

A recent workplace flexibility study found that nearly 70% of HR professionals think that their employees have a balanced work-life, yet almost half (45%) of employees feel they don't have enough time in the week to take part in personal activities. There's an obvious disconnect between employers and their employees on what makes a balanced work-life.

Considering that employees are 20% more engaged when they have better work-life balance, according to Quantum Workplace's 2015 Workplace Well-Being Study, the key to keeping employees from burning out is to get them out of the office and into their personal activities.

Here are five ways some of today's leading companies are doing just that:

#### 1. Support Side Hustles

There's no better way to give employees a much-needed (and deserved) break from the monotony of the work day than to allow them to work on their side hustle, a sideline project based on their unique talents or interests. Not only do side projects improve individual creativity and satisfaction, they can also benefit the company.

For example, Dropbox encourages side hustles by holding a "hack week," during which employees can work on anything they want (work-related or not). What's more, there's the possibility that cool projects could get launched.

#### 2. Give Dads a Break, Too

In an episode of *The Office*, Jim Halpert takes several days off for "jury duty" to help his wife with their two young children. While his co-workers were initially peeved at having to pick up the slack while Jim was out of the office, when they see just what he had to deal with, they decide "that was no vacation." And neither is maternity leave.

In an effort to provide employees with a greater sense of work-life balance, more companies are opting to provide not just maternity leave, but paternity leave, as well. Outdoor clothing company Patagonia gives eight weeks of paid paternity leave *and* provides on-site child care. It doesn't get much more balanced than that.

#### 3. Consider a Vacation Embargo

They say you should leave your work at the office, but in an age where work lives on our mobile devices, it can be difficult not to bring work home with you. The temptation to answer phone calls and emails, check on assignments and projects, and play catch-up or get ahead is always there. The key to keeping employees from working after hours unnecessarily is to encourage them to unplug.

Bandwidth, a communications technology company (ironically enough), offers its employees guaranteed time to unplug. A strictly enforced vacation embargo policy prevents any and all contact with employees while they are off. As a father of six, it's no wonder co-founder and CEO David Morken values the work-life balance this communication restraint creates.

#### 4. Redefine the 9-to-5 Workday

As more companies begin to do business in the cloud and adopt BYOD (Bring Your Own Device) policies, more employees are beginning to work remotely and flexibly. And with 20% of job seekers willing to take a 10% pay cut for flexible work options, according to a 2014 FlexJobs survey, more companies will move away from the traditional 9-5.

Basecamp is one such company. While their main office is in Chicago, employees are free to live and work wherever they want—even remotely. They've also experimented with a four-day work week to help employees pursue outside interests and side hustles.

#### 5. Encourage Employees to Socialize

Whether it's for a short lunch break or an afternoon of team-building activities, employees need an occasional break. Make breaks mandatory across the company by celebrating birthdays, going out for team lunches, or take a page from design company Zurb's book and hold a company-wide challenge.

Zurb's Friday15, requires employees to come together to solve a brief creative challenge in 15 minutes, ranging from designing a new company logo to playing capture the flag to an afternoon of improv. These challenges are a great way to build camaraderie, get the creative juices flowing, and to take a much-needed break from work.

http://www.quantumworkplace.com/wp-content/uploads/2015/02/Resources-Whitepapers-Health-and-Well-Being.pdf

#### Men like to get to the airport earlier than women

Men are airport early birds

Airlines might be chronically late, but passengers - especially men - generally arrive two hours before departure.

That's the finding of a poll by ground transportation provider Go Airport Express, which offers shuttle service to and from O'Hare and Midway airports.



More than 71 percent of its travelers surveyed said they arrive at the airport two hours before their scheduled domestic flights.

Men, at 75 percent, said they arrive that early, compared with 69 percent of women.

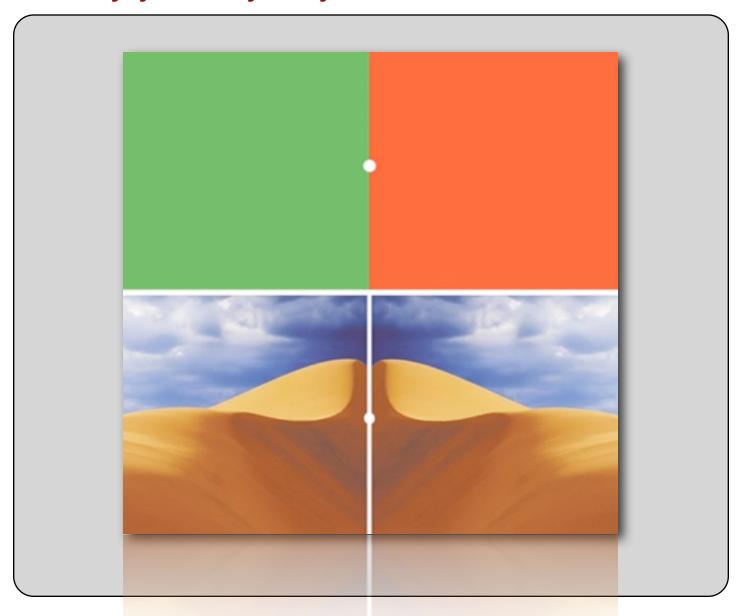
Far fewer, 31 percent of women and 24 percent of men, said they arrive just one hour before their flight times. Less than 1 percent of travelers said they like to arrive as late as possible, preferring to board the plane when they arrive at the gate.

"We can infer that travelers don't want to risk missing a flight due to unexpected delays such as traffic to the airport, long check-in and security lines," said John McCarthy, president of Go Airport Express.

However, passengers at Chicago airports often end up with even more time because of flight delays. In many months O'Hare and Midway have among the worst on-time departure rates in the country among large airports, although they haven't ranked at the bottom in recent months.

#### **TED: Ideas Worth Sharing**

#### Can yoy believe your eyes?



http://www.ted.com/playlists/71/can\_you\_believe\_your\_eyes