

Aviation Human Factors Industry News

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

Hello all,

To subscribe send an email to: rhughes@humanfactorsedu.com

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

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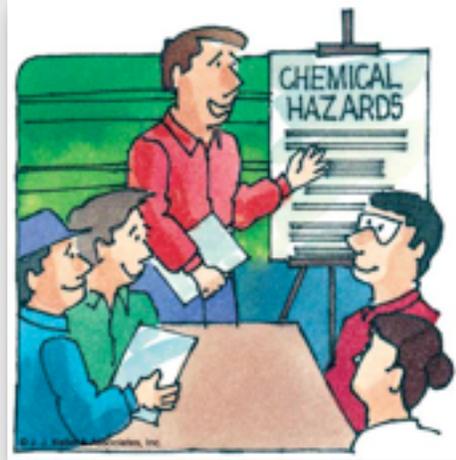
★Aviation Maintenance Resource Site Takes Flight

★Alaska Airlines Shows Off "Employee Powered" Livery

★And Much More

December 1st, A Deadline You Don't Want To Miss.

Everyone is familiar with Chicken Little upon whose' head an acorn did fall, thus announcing, "The world is coming to an end". December 1st will come and go and do so without so much as a whimper. However come December 2nd many aviation maintenance based organizations will find themselves **out of compliance** and at the mercy of the Federal Government. December 1st 2013 is the deadline for your employees to have accomplished the **newly revised Hazard Communication training** (aka . . . "The Right to Know Law", 29 CFR 1910.1200.) The most sweeping and significant change to OSHA law came into effect on May 25h of 2012. This change to the Hazard Communication law is an attempt to align Hazard Communication globally. This rewrite and retrain is a global strategy to get everyone on the same page when it comes **to communication about hazards in the workplace**. Many large aviation maintenance organizations here in the U.S. are simply unaware of the significance of this change. I believe between sequestration of the FAA workforce and the government shutdown this OSHA deadline has been lost in the shuffle. Your next OSHA audit may become your worst nightmare. **Start today by taking steps towards compliance.**



1. Train your workforce – the course is Globally Harmonized System – Hazard Communications Training.
2. Ensure you maintain adequate records on this training. It MUST be Completed by December 1st 2013.
3. Ensure all chemicals are documented and identified properly (per the new rules).
4. Ensure your Hazard Communication written program is in place and in force.

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Airline pilot secrets

A US magazine has unearthed 13 secrets that your pilots don't want you to know.

Reader's Digest, the US publication, recently launched a new series entitled "13 Things Experts Won't Tell You". [This month's feature saw airline pilots reveal all.](#)

The magazine's research suggested that some pilots [feel under pressure](#) to fly with less fuel than crew are

"comfortable" with; that you're unlikely to receive much warning if something goes

awry in the sky; and that airlines may overestimate flight times to improve punctuality. Some of the trickiest US airports to land at were also revealed.

Here's what the pilots had to tell the Reader's Digest reporters: "I'm constantly under pressure to carry less fuel than I'm comfortable with. Airlines are always looking at the bottom line, and you burn fuel carrying fuel. Sometimes if you carry just enough fuel and you hit thunderstorms or delays, then suddenly you're running out of gas and you have to go to an alternate airport." - Captain at a major airline

"We tell passengers what they need to know. We don't tell them things that are going to scare the pants off them. So you'll never hear me say, 'Ladies and gentlemen, [we just had an engine failure,](#)' even if that's true." - Jim Tilmon, retired American Airlines pilot, Phoenix

"No, it's not your imagination: Airlines really have adjusted their flight arrival times so they can have a better record of on-time arrivals. So they might say a flight takes two hours when it really takes an hour and 45 minutes." - AirTran Airways captain, Atlanta

"You may go to an airline website and buy a ticket, pull up to its desk at the curb, and get onto an airplane that has a similar name painted on it, but half the time, you're really on a regional airline. The regionals aren't held to the same safety standards as the majors: Their pilots aren't required to have as much training and experience, and the public doesn't know that." -Captain at a major airline

"At some airports with really short runways, you're not going to have a smooth landing no matter how good we are: John Wayne Airport; Jackson Hole, Wyoming; Chicago Midway; and Reagan National." -Joe D'Eon, a pilot at a major airline who produces a podcast at flywithjoe.com



“The two worst airports for us: Reagan National in Washington, D.C., and John Wayne in Orange County, Calif. You’re flying by the seat of your pants trying to get in and out of those airports. John Wayne is especially bad because the rich folks who live near the airport don’t like jet noise, so they have this noise abatement procedure where you basically have to turn the plane into a ballistic missile as soon as you’re airborne.” - Pilot, South Carolina

“Most of the time, how you land is a good indicator of a pilot’s skill. So if you want to say something nice to a pilot as you’re getting off the plane, say ‘Nice landing.’ We do appreciate that.” -Joe D’Eon

“Some Federal Aviation Administration (FAA) rules don’t make sense to us either. Like the fact that when we’re at 39,000 feet going 400 miles an hour, in a plane that could hit turbulence at any minute, [flight attendants] can walk around and serve hot coffee and Chateaubriand. But when we’re on the ground on a flat piece of asphalt going five to ten miles an hour, they’ve got to be buckled in like they’re at NASCAR.” -Jack Stephan, US Airways captain based in Annapolis, Md., who has been flying since 1984

“Sometimes the airline won’t give us lunch breaks or even time to eat. We have to delay flights just so we can get food.” -First officer on a regional carrier

“The Department of Transportation has put such an emphasis on on-time performance that we pretty much aren’t allowed to delay a flight anymore, even if there are 20 people on a connecting flight that’s coming in just a little late.” - Commercial pilot, Charlotte, N.C.

“The truth is, we’re exhausted. Our work rules allow us to be on duty 16 hours without a break. That’s many more hours than a truck driver. And unlike a truck driver, who can pull over at the next rest stop, we can’t pull over at the next cloud.” -Captain at a major airline

“I may be in uniform, but that doesn’t mean I’m the best person to ask for directions in the airport. We’re in so many airports that we usually have no idea.” -Pilot for a regional carrier, Charlotte, N.C.

“This happens all the time: We’ll be in Pittsburgh going to Philly, and there will be a weather delay. The weather in Pittsburgh is beautiful. Then I’ll hear passengers saying, ‘You know, I just called my friend in Philly, and it’s beautiful there too,’ like there’s some kind of conspiracy or something. But in the airspace between Pittsburgh and Philly there’s a huge thunderstorm.”

<http://www.rd.com/slideshows/13-things-your-pilot-wont-tell-you/>

Pilots forgot to shut down engines before jet-blast incident

French investigators have cautioned against ground-handling procedures which **assume** that an arriving aircraft is safe to approach after the anti-collision beacon is switched off.



It follows an incident at Chambéry in which a ramp agent was injured after being hurled by jet blast after the crew forgot to shut down the engines of a British Airways CityFlyer Embraer 190. Shutdown is supposed to **take place before** the beacon is switched off. The ramp agent was wearing anti-noise headphones and could not tell the engines were still running when the beacon was extinguished.

The flight, arriving from London City on 21 January last year, had executed a go-around on approach after encountering windshear, during which the aircraft reached overspeed at full flap.

As the 190 reached its parking position the **crew was discussing** the go-around and maintenance issues arising from the overspeed.

This **discussion interrupted** the shutdown procedure. While the pilots switched off the beacon, French investigation authority BEA says they “forgot to stop the engines”.

Only after the cabin crew opened the aircraft doors were the pilots alerted to the oversight, it says, by which time the ramp agent had been “**violently**” thrown by the jet blast while passing behind the engine.

BEA notes that the third-party handler has since amended its procedures to include a confirmation of engine shutdown, but says there are “many” companies which enable ground staff to approach aircraft **under the “false” assumption** that an extinguished beacon means the engines are off.

747 airprox crews' mix-up baffles UK probe

Investigators have been unable to explain why the crews of two Boeing 747s each apparently followed instructions meant for the other aircraft, resulting in an airprox event over Scotland.

While the 23 June incident was assessed by the UK Airprox Board as bearing no collision risk, its analysis has been unable to

[determine the reason for the joint error](#). The crews of both aircraft – a British Airways 747-400 and a Lufthansa 747-8, according to archived automatic dependent surveillance data – had been preparing for the transition to oceanic airspace for transatlantic crossings but were on converging flightpaths at 34,000ft.

Following activation of a short-term conflict alert, a controller at the Prestwick air traffic centre attempted to redirect the jets onto diverging tracks, by instructing the BA aircraft to turn left and the Lufthansa aircraft right.

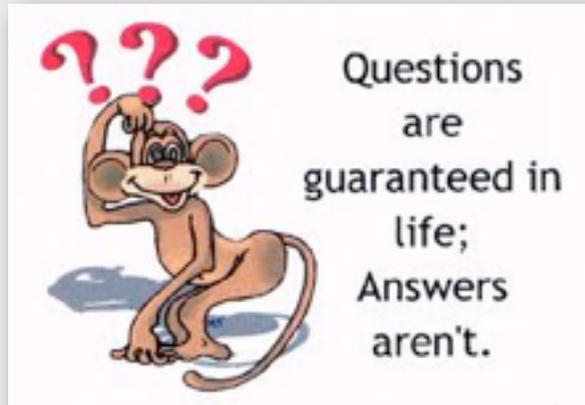
Simulations showed that, had the aircraft followed these instructions, they would have remained separated by at least 7.2nm during the event.

[But the aircraft continued to converge](#), closing to 3.9nm with 100ft altitude difference in the vicinity of Loch Rannoch. The conflict [was resolved](#) with the assistance of collision-avoidance resolutions.

During the event the 747-400 turned slightly right, eventually crossing 1.6nm behind, and about 1,100ft below, the 747-8. [Written submissions showed the crews had each wrongly interpreted the controller's directions](#).

[“It was apparent that both crews had taken each other’s instructions,”](#) says the Airprox Board, adding that it “found it hard to determine why this had occurred”.

Even though at least one crew had read back the avoidance instruction correctly, it says, all four pilots had “misheard or misinterpreted” the directions.



Electrical wire is covered with an insulated coating for many reasons, one of which is protection. As an engineering control, people rely on its integrity and assume it will not fail (at least in the time they are working with it).

For years, while working with human performance and safety, I have been fascinated by people's [near-miss situations and the lessons learned](#) after their experience. A common statement I hear in these stories is, "[I should have known better.](#)" To me, this statement reflects a sense that the person's awareness was present but not accessible at the time of the incident. I call this cognitive insulation. It seems that something insulated them from immediately accessing the knowledge that would have protected them. Sometimes the information we need to be safe is directly in front of us. Yet, for some reason, the safety-connection is not made. If it was, then the near-miss would have been less likely to occur.

Many have seen the selective attention video [of the gorilla and basketball](#). Viewers who were asked to look at a group of people passing around a basketball miss the eight second walk-through of a man in a gorilla suit. When the tape is replayed, viewers cannot believe that they missed what was clearly in plain sight. The term situational awareness (being acutely aware of your surroundings) is often used to explain conditions where people do not mentally process key information. Why do we miss "obvious" information? Why do our minds prioritize and process certain pieces of information, yet minimize the importance of other key data? It may be due to cognitive insulation.

Cognitive insulation- failure to assign meaningful linkage

Being aware of our surroundings ([situational awareness](#)) is helpful when processing information. However, if what we are doing and thinking is not mentally assigned a meaningful link, the connection of key information with the specific action needed, at the moment will be lost. This is true whether it is spotting a man in a gorilla suit or initiating safety practices. We reinforce cognitive insulation when we [fail to acknowledge](#) the near-miss conditions (or near-miss potential) and [fail to assign](#) a meaningful link to it.

Creating meaningful links strip away cognitive insulation, increasing our ability to protect ourselves.

A good example of a near-miss is hitting a patch of black ice in the winter. A vehicle spin-out without a resulting accident is enough to get the heart pumping and makes for a good story. If you acknowledge conditions (to yourself or others) regarding the near-miss situation, you begin to create a meaningful link that will add layers of protection in the future. For instance, let's say that the black ice near-miss was on a roadway at an overpass and the temperature was twenty-eight degrees. These two additional pieces of information, (a specific place and temperature) help the driver to create meaning of the incident. In other words, the driver will now associate both low temperatures and this precise part of the road with the near-miss incident. Let's say the driver leaves from work later that week and an outside temperature indicator shows it is thirty-four degrees at sea level. However, the driver knows that the black ice road at the overpass is at a higher elevation. The driver is now able to prepare for the risk ahead of time, and is more prone to situational changes while driving. (The link created a deeper level of thought about a routine driving situation.) For weeks, another black ice situation may not occur. However, over time, the link has created a mental checklist of conditions in which the outside temperature in wintery weather is checked each time before reaching the underpass. Establishing the meaningful link reinforces a [deeper level of awareness to initiate safety practice](#). In this case, each of the mental steps in creating the link acts to strip away the insulation associated with a routine driving situation. Thus, cognitive insulation is minimized when a meaningful linkage is associated with the near-miss condition(s). Now a routine driving task takes on different meaning. Belief systems about routine driving, at least in this particular location in winter, are reshaped.

FAA warns of runway incursions when taxiing on intersecting or active runways

In an effort to reduce the risk of runway incursions, the FAA issued [SAFO 13007](#) warning pilots to exercise extra caution when taxiing on intersecting or active runways.

For various reasons related to airport geometry, construction, or taxiway restrictions, it is common for Air Traffic Control to issue ground instructions to flight crews that include taxiing on active runways. In order to conduct these operations safely, pilots and operators are urged to minimize distractions and heads-down time, maintain a higher level of situational awareness, and include realistic runway incursion prevention scenarios in training events.



[View SAFO 13007](#)

Airborne Screwdriver

It was a typical day in the fast-paced environment of an FA-18 maintenance department operating under a condensed work-up cycle. The Aviation Structural Mechanic Egress (AME) work center was heavily tasked and working extremely hard to get the squadron's aircraft ready for our scheduled TSTA detachment. I arrived on a brisk September morning and my day shift supervisor had already prepared the work center for the maintenance efforts of the day. The shift supervisor had generated the workload report, a personnel muster report was prepared, and an all tools accounted for (ATAF) was completed and logged in the work center's tool inventory log. I signed the tool log indicating that each tool box was properly inventoried with no evidence of worn, broken or missing tools.



What I did not know at the time was that I had just contributed to a chain of events that could have resulted in the loss of an aircraft or even worse, the loss of a squadron pilot. The first error in this chain was set in motion the night before when my work center was tasked with the removal and replacement of a secondary bleed air valve located in the right engine bay.

After an uneventful low power turn to check for leaks and the proper operation of the valve, two of my hard charging technicians proceeded to complete the assignment by installing the protective thermal installation boot and the panel housing the secondary bleed air valve. In the process of installing the protective boot, the technician [used a flat tip 1/4" x 4" screwdriver](#) to secure the required clamps around the protective boot. [Displaying poor tool control practice](#), the technicians placed the screwdriver on the ledge of the engine bay door instead of back into the tool during their checks for proper security of the protective boot and clamps.

Once the task was complete, the shift supervisor, who was also the collateral duty inspector (CDI) on the assigned job, ensured the correct installation of the valve, protective boot and clamps. He continued down the [path of maintenance malpractice](#) by failing to perform a proper sight inventory of the toolbox while at the aircraft. The flat tip 1/4" x 4" screwdriver used to secure the thermal installation boot around the secondary bleed air valve [was not visually inventoried](#). Both the power plants work center collateral duty inspector (CDI) and a quality assurance representative (QAR) performed their visual inspection of the engine bay doors and did not notice the screwdriver lodged in the outboard ledge of the forward engine bay door. After returning from the flight line, the technicians returned the toolbox to the work center [without it being inventoried](#) by the shift supervisor. Closing out the night shift maintenance effort, the shift supervisor again overlooked it and did not inventory the toolbox prior to securing for the evening. I became a part of this regrettable event the following morning when I delegated my responsibility for performing the "beginning of shift ATAF" to my day shift maintenance supervisor. As per the Naval Aviation Maintenance Program (NAMP) instruction, the "beginning" and "end of shift" ATAF shall be performed by the work center supervisor. [As a result of failing to perform my duty properly](#), the missing screwdriver went unnoticed once more and the aircraft was placed on the flight schedule. It flew three missions without incident.

The toolbox was not utilized during the day shift maintenance efforts. At shift change I provided a verbal pass down to my night shift supervisor while watching over his shoulders as he performed his beginning of shift ATAF. To this point, [five ATAF inspections](#) encompassing two shifts were signed for on the toolbox without detecting the missing screwdriver. After receiving their assigned priorities from maintenance control and passing those onto the work center's technicians, the night shift supervisor began to inventory the toolbox selected for the first assignment. It was during this inventory of the toolbox that the flat tip screwdriver was discovered missing. Maintenance Control was immediately notified and with the assistance of two QARs, a thorough search was conducted within the work center and the hangar bay spaces.

Using the tool checkout log to determine the last time the toolbox was utilized, maintenance department leadership decided to open the right side engine bay doors on the aircraft where we had replaced the secondary bleed air valve the previous evening. The aircraft in question had flown three uneventful flights since replacing the secondary bleed air valve. Immediately after opening the engine bay doors, the flat tip screwdriver was discovered lying on the outboard ledge of the engine bay door.

The command's quality assurance division immediately held an all-hands training on proper tool-control procedures and reinforced the NAMP instruction 4790.2B, paragraph 10.12.3.11(f), which states that the work center supervisor shall inventory all tool containers, special tools, and PPE (personal protective equipment) at the beginning and end of each shift and document change of shift inventories using a logbook or locally generated tool control log.

I'm thankful that this horrible experience did not end with the loss of a squadron asset or worse, the loss of a Naval Aviator.

Aviation Maintenance Resource Site Takes Flight

Addressing the need for a single hub of information about the aviation maintenance industry, today the Aeronautical Repair Station Association (ARSA) announced the launch of www.avmro.arsa.org (AVMRO).

AVMRO, which stands for aviation maintenance, repair, and overhaul, features a page on the industry explaining the efficiency of contract aviation maintenance, the global regulatory framework governing the sector's operations, and the importance of bilateral aviation safety agreements. The site also contains reports showing the industry's economic and employment footprint globally, within the United States, and for each individual state. "AVMRO is the go-to place for anyone looking for information about the aviation maintenance industry," ARSA Executive Vice President Christian Klein said. "Whether you're a lawmaker trying to understand the impact of your policy decisions, a journalist looking for background information and economic data, or a student researching career opportunities, AVMRO will be a useful tool."



The new website also includes a feed to the industry's Twitter hashtag [#AVMRO](#) and connects to an MRO jobs board, ARSA newsletters, a press kit, and [ARSABlog](#).

<http://avmro.arsa.org/>

Alaska Airlines Shows Off “Employee Powered” Livery

Earlier this month, an Alaska Airlines Boeing 737-800 (N568AS) showed up at Paine Field with a special livery. Although the photos showed that the airline was up to something, it wasn't obvious [how cool this special livery](#) was going to turn out.

It is more than just about looks – it's really about [celebrating those who work for the airline](#). Not only does the livery sport a very sparkling tail, but also the signatures of more than 8,500 employees. “Look closely and you will see the words [“Employee Powered”](#) by the L1 door,” said Ben Minicucci, executive vice president of operations and chief operating officer during the aircraft's debut. “This aircraft is dedicated [to you](#) as a thank you for all you have done for this airline.”

Alaska employees gave their signatures during a special training called “Flight Path,” that was created to help everyone gain a better understanding of how Alaska and Horizon operate, as well as sharing leadership's vision for the next five years.



An ETOPS-rated Boeing 737-800 was chosen to feature the new livery, since it is able to fly more of the airline's route system, which will allow more employees to enjoy it.

At first glance, the livery might look simple, but it took quite a bit of effort to complete. Typically, it takes about eight days for the standard Alaska livery to be painted on a plane – [this one took about 15](#). According to the airline, technicians began by spraying a coat of clear enamel over the entire aircraft fuselage. Then the signatures are applied using O3 Transfers, which Anthony Johnson, interior engineer and draftsman states are, "[like a tattoo in that the signatures are embedded in the paint.](#)" A final coat of clear enamel completed the process.

Not to be left out, Horizon will also get a special "Employee Powered" livery on a Bombardier Q400 early in 2014.

For Alaska employees, the biggest challenge might be tracking down their name. Have no worries, the airline thought ahead and is providing a tool which will allow workers to find the location of their name.

[Eyeglasses Designed to Improve Sleep](#)

Operating on the premise that protecting eyes from blue light, such as that emitted by computers, TVs, and electronic tablets, will promote restful sleep, Dr Jim Gallas has released "[Sleepy Time glasses](#)" to the public. Distributed through online retailer, these glasses start at under \$50. Gallas, inventor of Melatonin Production Factor (MPF) lens technology, says because blue light [suppresses the production of melatonin](#) during the evening, any filter that reduces blue light will reduce this suppression, thereby allowing healthier sleep. He adds that earlier blue light-blocking products had the negative side effect of distorting colors, but says Sleepy Time glasses actually enhance colors.



<http://www.debspecs.com/Sleepy-Time-WAYFARER-P4171.aspx>

The Perfect Nap: Sleeping Is a Mix of Art and Science

Why Some Snoozing Sessions Leave You Groggy While Others Help

There's an art to napping.

Studies have found different benefits—and detriments—to a nap's timing, duration and even effect on different people, depending on one's age and possibly genetics.

"Naps are actually more complicated than we realize,"

said David Dinges, a sleep scientist at the University of Pennsylvania's Perelman School of Medicine. "You have to be deliberative about when you're going to nap, how long you're going to nap and if you're trying to use the nap relative to work or what you have coming up. A snooze on the couch on a Sunday afternoon may seem like the perfect way for a responsible adult to unplug. But at a time when

roughly one-third of people report not getting enough sleep, more naps, albeit short ones, might make for a more functional workforce, researchers say. Sleep experts break sleep down into several stages, which the brain cycles through roughly every 90 to 120 minutes. These stages are broadly characterized into non-rapid eye movement (NREM) sleep and rapid eye movement (REM) sleep. NREM is further broken down into stage one and two, which are considered light and intermediate sleep, followed by slow-wave sleep. Awakening from slow-wave sleep, the deepest kind, results in what doctors call sleep inertia or sleep drunkenness: that groggy feeling that can take awhile to shake off. Finally, there's REM sleep, often associated with dreaming.

Sara Mednick, an assistant psychology professor at the University of California, Riverside, said the most useful nap depends on what the napper needs.

For a quick boost of alertness, experts say a 10-to-20-minute power nap is adequate for getting back to work in a pinch.



For cognitive memory processing, however, a 60-minute nap may do more good, Dr. Mednick said. Including slow-wave sleep helps with remembering facts, places and faces. The downside: some grogginess upon waking.

Finally, the 90-minute nap will likely involve a full cycle of sleep, which aids creativity and emotional and procedural memory, such as learning how to ride a bike. Waking up after REM sleep usually means a minimal amount of sleep inertia, Dr. Mednick said.

Experts say the [ideal time to nap is generally between the hours of 1 p.m. and 4 p.m.](#) Napping later in the day could interfere with nighttime sleep.

The body's circadian rhythms help people to expect to be awake in the morning and early in the night. "So if you take naps when your brain doesn't expect to be sleeping, you feel kind of thrown off," contributing to the sleep inertia effect, said Rafael Pelayo, a clinical professor at Stanford University School of Medicine's Sleep Medicine Center.

A telltale sign of being very sleep-deprived, he said, [is dreaming during a short nap.](#) "Definitely in a 20-minute nap you should not be dreaming," he said.

Ilene Rosen, an associate professor of clinical medicine at Penn's Perelman School of Medicine, said the ideal duration of a nap is still being debated, but generally speaking the ["10-to-20-minute nap is really the optimal time in terms of bang for your buck."](#)

Leon Lack, a psychology professor at Flinders University in Australia, found in a 2006 study in the journal *Sleep* that among shorter breaks, 10-minute naps packed the most punch.

The study compared naps ranging from 30 seconds to 30 minutes, testing 24 participants at each of several intervals. After each nap the individuals were tested on a variety of mental-processing tasks. The sharpness of the 10-minute nappers became apparent "right away," Dr. Lack said, and remained apparent for about two to 2 1/2 hours.

Those who took 20- and 30-minute naps [tended to feel groggy](#) immediately after the nap for up to about 30 minutes. From there, they showed mental sharpness similar to what researchers saw from the 10-minute nappers, with that sharpness lasting a bit longer.

Jonathan Brandl is a Newton, Mass.-based consultant who works from home. Up at 5 a.m. to hit the gym, he finds himself fading around 2 p.m. His solution is a fast snooze in a comfy chair in his den. His trick for waking up: He holds a pen or pencil in his hand, which usually falls about 10 to 15 minutes into his nap, waking him up.

"After the nap, I feel totally refreshed and then power through the rest of the day," the 56-year-old Mr. Brandl said.

Though napping at work often remains taboo, experts say growing scientific evidence of its benefits has led select workplaces to accept it.

Christopher Lindholst, chief executive and co-founder of New York-based MetroNaps, has installed specially designed sleeping pods for Google, Huffington Post, an Iowa construction company and the Arizona Diamondbacks baseball team. The chairs retail for \$8,995 to \$12,985.

The 60-minute nap may not be kosher in most workplaces, but it also has its pluses.

In a 2012 study in the journal *Neurobiology of Learning and Memory*, researchers split 36 college-aged students into three groups. Each group learned a memory task, pairing words on a screen with a sound. Afterward, one group had 60 minutes to nap, another 10 minutes. The final group didn't sleep.

Upon retesting, the napping groups fared better, as expected, said Sara Alger, lead author of the study and a postdoctoral research associate at the University of Notre Dame.

More interesting, she noted, was that on further testing, including a week later, the 60-minute group performed far better than the 10-minute group, which now performed as poorly as the non-napping group. The researchers concluded that slow-wave sleep—only experienced by the 60-minute nappers—is necessary for memory consolidation.

Researchers continue to explore why some individuals don't seem to benefit from naps. Dr. Mednick said ongoing studies are [looking at potential genetic differences](#) between habitual and nonhabitual nappers.

Kimberly Cote, a professor of psychology and neuroscience at Brock University in St. Catharines, Ontario, said individuals who don't normally nap tend to slip into the deep stages of sleep more quickly than those who do. Studies have found through monitoring brain waves that regular nappers are good at maintaining a light sleep when they nap and show better performance improvements than their non-napping counterparts.

"We're not sure what those individual differences are," she said, "if that's something that they've learned to do over time or if there's something biologically different that allows them to nap like that."

[Another trick to waking up perky after a short nap](#) is to drink a cup of coffee before sleeping. Caffeine won't hurt such a short break and should lessen the effect of sleep inertia.

Dr. Dinges recommends sleeping partially upright to make it easier to wake up. Studies, he said, have found that not lying totally flat results in avoiding falling into a deeper sleep.

"A lot of people say, 'I only need four hours of sleep a night.' [There's a few of them around but not very many,](#)" he said.

eCigarettes to Be Banned from Workplaces?

Cigarettes, pipes, and all smoking devices have been banned from workplaces by a number of states in recent years. According to Workforce.com, smoking in the workplace has been banned by 29 states and the District of Columbia. With the advent of the eCigarette, however,



comes a new debate: [Do they fall under the category of "smoking"?](#) eCigarettes are a new form of a cigarette that uses heat to vaporize a liquid solution containing nicotine. The electronic devices don't emit smoke, but rather vapor, and are intended to help smokers quit. Others use them because they are thought to be healthier than traditional smoking.

Workforce.com reports the debate over whether or not eCigarettes should be allowed in the workplace has begun. Some believe the devices should be banned because they have detectable levels of chemicals and carcinogens, which could possibly annoy or bother customers and coworkers. Others believe the devices show no outside health risks and could improve employee productivity, as employees will not have to take a smoke break.

As of now, there are no laws regarding eCigarettes in the workplace, so it is up to the individual employer whether or not it wants to ban the devices in its workplaces.

<http://www.workforce.com/blogs/3-the-practical-employer/post/19996-smoking-out-the-law-on-e-cigarettes-in-the-workplace>

10 Steps Management Can Take to Improve Safety Culture and Prevent Accidents

In a strong safety culture, **everyone feels responsible for safety** and pursues it on a daily basis. Employees go beyond "the call of duty" to identify unsafe conditions and behaviors, and intervene to correct them.

For instance, in a strong safety culture any worker would feel comfortable walking up to the plant manager or CEO and reminding him or her to wear safety glasses. This type of behavior would not be viewed as forward or over-zealous but would be valued by the organization and rewarded. Likewise co-workers routinely look out for one another and point out unsafe behaviors to each other.

Companies with strong safety cultures typically experiences **few at-risk behaviors**, consequently they also experience low accident rates, low turnover, low absenteeism, and high productivity. They are usually companies who are extremely successful and excel in all aspects of their business.

Here are 10 steps you and your management can take to build a strong safety culture, thereby improving safety performance and preventing accidents:

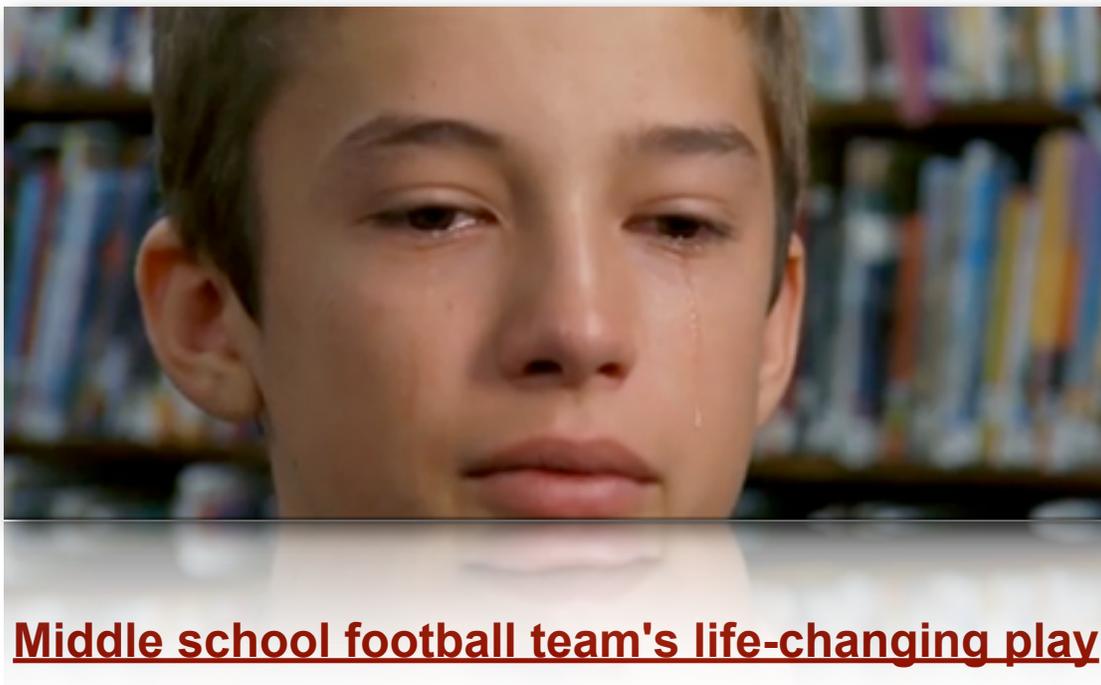
1. **Define safety responsibilities** for all levels of the organization (e.g., safety is a line management function).
2. **Develop upstream measures** (e.g., number of reports of hazards/suggestions, number of committee projects/successes, etc.).
3. **Align management and supervisors** through establishing a shared vision of safety and health goals and objectives vs. production.
4. **Implement a process** that holds managers and supervisors accountable for visibly being involved, setting the proper example, and leading a positive change for safety and health.
5. **Evaluate and rebuild** any incentives and disciplinary systems for safety and health as necessary.
6. **Ensure the safety committee** is functioning appropriately (e.g., membership, responsibilities/functions, authority, meeting management skills, etc.).
7. **Provide multiple paths** for employees to bring suggestions, concerns, or problems forward. One mechanism should use the chain of command and ensure no repercussions. Hold supervisors and middle managers accountable for being responsive.



8. **Develop a system that tracks** and ensures the timeliness in hazard correction. Many sites have been successful in building this in with an already existing work order system.
9. **Ensure reporting of injuries, first aids, and near misses.** Educate employees on the accident pyramid and importance of reporting minor incidents. Prepare management for initial increase in incidents and rise in rates. This will occur if under-reporting exists in the organization. It will level off, then decline as the system changes take hold.
10. **Evaluate and rebuild** the incident investigation system as necessary to ensure that it is timely, complete, and effective. It should get to the root causes and avoid blaming workers.

Inspiration

What would it take to make someone's day?



Middle school football team's life-changing play

Meet the Olivet Eagles, a middle-school football team from Olivet, Mich., who with the help of a learning disabled teammate, executed what may be one of the most successful plays of all time. CBS Sunday Morning Steve Hartman reports.

<http://www.cbsnews.com/video/watch/?id=50157962n>