

# 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](mailto:rhughes@humanfactorsedu.com)

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## **IMPORTANT NEWS ON FATAL HIGH ALTITUDE STALLS**

Effective May 31 the FAA has announced a new rule, FAR 60, requiring airline to [upgrade simulators](#) to correctly train pilots on approach to high altitude stall and stall recovery.

In view of three high altitude airliner stalls taking the lives of 506 people in the South Pacific, Asia and Mal over the past seven years, some airlines are making these critical simulator improvements in advance of the 2019 FAA deadline.

Two outstanding aviation accident investigators will focus on this timely subject that impacts every airline pilot following special screenings of the timely feature film Pilot Error.



[Dallas, May 14 Frontiers of Flight Museum 7 p.m. \(VIP reception at 5:30 p.m.\)](#) with Argus International's John Darbo, former head of the American Airlines Accident Investigation "GO" team and an FSI principal with Pilot Error Producer and Screenwriter Roger Rapoport. The Museum is at Love Field.

[Los Angeles Area- Pasadena Main Library 2 p.m.](#) with MD-11 Captain Shem Malmquist, veteran aviation accident investigator and Pilot Error star Kate Thomsen, and costars Richard Riehle, Robert Cicchini and Larry Herron.

You can order [Pilot Error on DVD here](#) or [stream the film on Vimeo](#). For more information or to schedule an event in your community call 231 (720-0930) or email [rogerdrapoport@me.com](mailto:rogerdrapoport@me.com)

## The Horrific Story of FedEx Flight 705

On April 7, 1994, **Federal Express Flight 705**, a McDonnell Douglas DC-10-30 cargo jet carrying electronics equipment across the United States from Memphis, Tennessee to San Jose, California, was nearly hijacked by Auburn Calloway who was attempting to commit suicide. Calloway, a Federal Express employee, was facing possible dismissal for lying about his flight hours. He boarded the flight **as a deadhead passenger** carrying a guitar case concealing several hammers and a speargun. He intended to disable the aircraft's cockpit voice recorder before take-off and, once airborne, kill the crew with hammers so their injuries would appear consistent with an accident rather than a hijacking.



[Click here: FS2004 - Fight For Your Life \(Federal Express Flight 705\) - YouTube](#)

## Safety Culture

Submitted by Gordon Dupont  
With permission from *D.O.M. Director of Maintenance* magazine

*Every company will tell you they have a **Safety Culture**, but do they and how do you know?*

*I would like to start by wishing each and every one of you a sincere Safe, healthy and happy 2016.*



With a new year come new opportunities to raise the Safety bar just a little bit higher. A Safety culture is much more than the "Safety First" sign hanging up over the door.

That sign means nothing and is pure unadulterated "Bull Pucky". If it were true, all aircraft would sit on the ground and no one would touch them. Only then could they be considered 100% Safe.

A company needs to make a profit in order to survive. Thus, profit and survival come first and one can hope that Safety comes a close second. Without profit there is soon no need for Safety, as the company will cease to exist.

The "Safety First" sign comes with some very small print, like you see on some "too good to be true" deals. I've seen on TV recently, ads for high speed cable internet for only \$5.00 per month. In that very small print you will find that price is for 6 months after which you will pay \$49.99 per month on a two year contract when bundled with a \$79.99 TV service and a \$24.99 phone service. The small print on the "Safety First" sign says, "...unless it costs money." The more expensive a proposed Safety fix is going to be, the less likely it will happen, because it interferes with the real "first" - Profit. So all those signs you see should really say "Safety; a very close second to profit", if they were honest.

[A Safety Culture is hard to measure](#), but you'll soon know it after you've worked in it for a while. The odds of being killed in an aircraft accident vary from 1 in 260,000 flights (parts of Africa) to 1 in 11,000,000 flights. (North America and other Western countries). What makes this huge difference? Simple: The Safety Culture.

[What is this Safety Culture?](#) Here is one person's interpretation of a Safety Culture: *"The product of individual and group values, attitudes, perceptions, competencies, and patterns of behavior that determine the commitment to, and the style and proficiency of, an organization's health and Safety management."*

Here is what I think a Safety Culture is.

A true Safety Culture is where:

- √ Safety is treated seriously by the management
- √ all believe that Safety does not have to come at the cost of productivity
- √ Safety is an integral part of the way the company operates

- √ all company employees are trained and encouraged to think and work Safely at all times
- √ Safety goals are set and all work toward their achievement

### Do You Work in a Safety Culture?

The following questions have been adapted from my good friend Professor James Reason and are intended to help determine if your organization has a Safety oriented culture.

Where does your Company fit in? Answer these questions and find out. If you don't know the answer, give it a 0.

Give each question a rating by circling 0, 5 or 10 according to the following scoring:

<b>0</b>	<b>5</b>	<b>10</b>
<b><i>No, not my Company</i></b>	<b><i>Sometimes my Company</i></b>	<b><i>Yes, This is my Company</i></b>

**1. MINDFUL OF DANGER:** I believe our Company's management is very mindful of the human and organizational factors that can endanger our operations.

<b>0</b>	<b>5</b>	<b>10</b>
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**2. MISSION STATEMENT:** Our Company illustrates its commitment to Safety in its mission statement that includes the call to operate Safely.

<b>0</b>	<b>5</b>	<b>10</b>
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**3. SAFETY POLICY:** Our Company has a Safety Policy that is readily visible to all and spells out everyone's responsibilities toward Safety.

<b>0</b>	<b>5</b>	<b>10</b>
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**4. ACCEPTS SETBACKS:** I believe our Company's management understands and accepts occasional setbacks and nasty surprises as inevitable. They realize that staff will make errors and trains them to avoid, or detect and recover from them.

0

5

10

**5. COMMITTED:** I believe our Company's management are genuinely committed to aviation Safety and provide adequate resources to serve this end.

0

5

10

**6. HF TRAINING:** In our Company, all employees, including management are trained in human factors in order to learn how to avoid the error they never intend to make.

0

5

10

**7. EVENTS REVIEWED:** In our Company past events are thoroughly reviewed at top level meetings and the lessons learned are implemented as Company-wide reforms, not local repairs.

0

5

10

**8. IMPROVED DEFENSE:** After an incident in our Company, the primary aim of management is to identify the failed system defenses and improve them, rather than to seek to divert responsibility to the incident individuals.

0

5

10

**9. DATA:** I believe our management recognizes that effective management of Safety, just like any other management process, depends critically on the collection, analysis and dissemination of relevant information.

0

5

10

**10. HEALTH CHECKS:** In our Company, management adopts a proactive stance towards Safety. That is, it does some or all of the following:

- a) takes steps to identify recurrent error traps and removes them;
- b) strives to eliminate the workplace and organizational factors likely to provoke error:

- c) brainstorms new scenarios of failure; and/or
- d) conducts regular “health checks” on the organizational process known to contribute to incidents.

**0**

**5**

**10**

**11. STAFF ATTENDS SAFETY MEETINGS:** In our Company, staff attends meetings relating to Safety from a wide variety of departments and levels.

**0**

**5**

**10**

**12. INFORMATION:** Our Company provides feedback to all employees when an error is made and furnishes ways to avoid repeating the error. It keeps us informed of areas we can improve on as well as our successes.

**0**

**5**

**10**

**13. MONEY VS. SAFETY:** I believe our Company recognizes that commercial goals and Safety issues can come into conflict and have placed measures to recognize and resolve such conflicts in an effective and transparent manner.

**0**

**5**

**10**

**14. REPORTING ENCOURAGED:** I believe our Company has policies in place that encourage everyone to report Safety-related issues (one of the defining characteristics of a pathological culture is that Safety messengers are “shot” and whistleblowers dismissed or discredited).

**0**

**5**

**10**

**15. REPORTING TRUST:** My fellow employees and I trust our management and have reported human errors over the past 12 months.

**0**

**5**

**10**

**16. ADMINISTRATIVE POLICY:** Our Company has an Administrative Policy that makes clear the Company’s stance regarding qualified indemnity against sanctions, confidentiality, and the organizational separation of the data-collecting department from those involved in disciplinary proceedings.

**0**

**5**

**10**

**17. BLAME:** I believe my Company's Administrative Policy is based on an agreed (i.e. negotiated) distinction between acceptable and unacceptable behavior. It is recognized by all staff that a small proportion of unsafe acts are indeed reckless and warrant sanctions, but that the large majority of such acts should not attract punishment. The key determinant of blameworthiness is not so much the act itself (error or violation) as the nature of the behavior in which it was embedded. Did the error involve deliberate, unwarranted risk-taking or a course of action likely to produce an avoidable error? If so, then the act would be culpable regardless of whether it was an error or a violation.

0

5

10

**18. NON-TECHNICAL SKILLS:** I believe our line management encourages their staff to acquire the mental (or non-technical) as well as the technical skills necessary to achieve Safe and effective performance. Mental skills include anticipating possible errors and rehearsing the appropriate salvageable recoveries. Such mental preparation at both individual and organizational levels is one of the hallmarks of high-reliability systems and goes beyond routine simulator checks.

0

5

10

**19. FEEDBACK:** Our Company has rapid, useful and intelligible feedback channels in place to communicate the lessons learned from both the reactive and proactive Safety information systems. Throughout, the emphasis is upon generalizing these lessons to the system at large.

0

5

10

**20. ACKNOWLEDGES ERROR:** I believe that our Company has the will and the resources to acknowledge its errors, to apologize for them and to reassure the victims (or their relatives) that the lessons learned from such accidents will help prevent their recurrence.

0

5

10

**Add up your score:** \_\_\_\_\_



So what does it mean? You'll have to tune in to the next issue to find out. As you might guess, the higher the score the better. Slip this issue onto the boss's desk if you think it might help and I'll hope that you still have a job for the next issue.

## **C-130J crash that killed 14 caused by forgotten night-vision goggle case**

An Air Force investigation has determined that **intentionally jammed controls** led to the loss of a C-130J and the deaths of 14 people in Afghanistan in October. The report says a pilot put the hard-shell case for a set of night vision goggles in front of the yoke to get the elevators up and out of the way to allow the crew to load some tall pieces of cargo. The crew **forgot to remove** the impromptu fix and the aircraft pitched up sharply on takeoff, stalled and crashed into a guard hut. The report says the pilots **"misidentified the ensuing flight control problem"** which resulted in "improper recovery techniques." The pilots apparently thought the trim was set incorrectly. The report says jamming the controls is a "non-standard procedure" so it didn't have any recommendations on how to address the resulting safety issue. However, it did note that the plastic case **was hard to see** on the night takeoff using night vision goggles. The crash was originally blamed on enemy fire from Afghan insurgents. The crash killed six aircraft crew members, five civilian contractors aboard the plane and three Afghan guards on the ground.



**[http://www.airforcemag.com/AircraftAccidentReports/Documents/2016/100215\\_C130J\\_JALALABAD.pdf](http://www.airforcemag.com/AircraftAccidentReports/Documents/2016/100215_C130J_JALALABAD.pdf)**

The report is available on the Air Force freedom of Information Act Reading Room website, <http://www.amc.af.mil/mediacenter.asp>. Please contact Air Mobility Command Public Affairs at (618) 229-7839 with requests for additional information.

## Airlines to share safety ideas with auto makers

U.S. aviation officials and senior executives from U.S. airlines such as Delta and United will discuss data sharing and other collaborative efforts between the aviation industry and government that have contributed to an [83 percent decline](#) in commercial airline fatalities from 1998 to 2008, according to the invitation, which was sent to representatives of auto makers. U.S. auto safety and aviation regulators have invited auto makers to a joint summit in the nation's capital on April 22 to examine whether airline industry safety practices can be adapted to help improve safety on the road.



The event, which will be closed to the public, will be co-hosted by Mark Rosekind, administrator of the National Highway Traffic Safety Administration (NHTSA), and Federal Aviation Administration (FAA) chief Michael Huerta, according to an invitation to the event obtained by Automotive News.

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"The FAA and aviation industry have been tremendously successful reducing commercial aviation fatalities," Mr. Rosekind said in a statement. "We are convening this cross-industry and cross-agency forum because we believe that the [best practices](#) will apply" to the auto industry.

The summit is an outgrowth of Mr. Rosekind's push to instill a more "[proactive culture of safety](#)" in the auto industry after a series of recent high-profile safety crises. In January, NHTSA and 18 auto makers agreed to adopt voluntary "proactive safety principles" aimed at rooting out safety problems before they erupt into crises and reducing traffic fatalities.

Among the steps outlined in the principles were wider sharing of safety data among industry players and exploring whether aviation industry safety practices could be adapted to the auto industry.

Mark Rosekind, administrator of the National Highway Traffic Safety Administration In a U.S. House oversight panel hearing on April 14, Mr. Rosekind cited next week's aviation meeting as an example of the proactive safety culture he has worked to establish. He also pointed to NHTSA's nonbinding pact with 20 auto makers to make automatic emergency braking standard by 2022 and a cybersecurity conference being hosted by Fiat Chrysler in May.

Some lawmakers expressed skepticism about NHTSA's use of voluntary agreements to advance safety. In the hearing, Rep. Frank Pallone, D-N.J., the ranking member of the House Energy and Commerce Committee, questioned whether the safety principles were a "PR stunt," saying they had "no substance" and were unenforceable. The remarks echoed concerns expressed by safety advocates.

Mr. Rosekind said the principles were not a regulation and were not intended to be enforceable.

"We're going to use all of the enforcement and regulatory authority we have," Mr. Rosekind said, adding that his concern is the more than 30,000 U.S. traffic deaths in 2014, and the 9-percent rise in fatalities through the first nine months of 2015. "We all know that if we keep doing the same thing, we cannot expect a different outcome."

## **Video - Aircraft accident: IATA criteria under the microscope**

With 136 victims and only four fatal aircraft accidents in 2015, figures from the International Air Transport Association (IATA) beat all established records in aviation safety. Yet, in these statistics, the heavy human toll of 374 victims, caused by the Germanwings and Metrojet crashes, is not taken into account - for the following reasons.

This annual report is an overview of aviation safety, but not of aviation security; and that makes all the difference.



IATA has defined three main criteria for an air accident in order for it to be considered as such, together with the numbers of victims directly concerned.

Firstly, IATA takes into consideration only "unintentional" accidents, which are not related to deliberate acts, such as those of suicidal pilots or terrorism. Collateral, or indirect victims of a plane crash – i.e. those present on the ground at the time of the accident - are not considered.

Secondly, it has to be a commercial passenger or freight flight. Test flights are excluded from these statistics, as are certain aircraft categories such as business jets, general aviation and military.

The third and final criterion requires that the plane has a maximum take-off weight of at least 12,540 lb (5.7 metric tonnes), which translate into a minimum seating capacity of around fifteen passengers.

Traveling by air is still the safest means of transportation in the world.

<http://www.aeronestv.com/en/transport/safety-security-aviation/3294-aircraft-accident-iata-criteria-under-the-microscope.html>

## **Alaska Airlines Team Seattle Wins 2016 William F. "Bill" O'Brien Award for Excellence in Aircraft Maintenance at Aerospace Maintenance Competition in Dallas**

Alaska Airlines' Seattle maintenance technicians were the big winners at the 2016 annual international Aerospace Maintenance Competition Presented by Snap-on.

Alaska Airlines' Team Seattle bested 50 other teams from around the globe to capture the prestigious Snap-on sponsored William F. "Bill" O'Brien Award for Excellence in Aircraft Maintenance, held during the Aerospace Maintenance Competition, April 5-6, at the MRO Americas Convention in Dallas. The competition is an opportunity for maintenance professionals to showcase their skills through a series of hands-on challenges.

“We spent four intense weeks preparing for this event, and we’re thrilled by the recognition,” said Alaska Airlines Team Seattle Captain Vishal Prasad minutes after he and his four teammates received the trophy.



Joining Prasad on Alaska Airlines Team Seattle were Mike Flowers, Brandon Statfield, Marvin Hitt and TJ Spring.

The William O'Brien Award for Excellence in Aircraft Maintenance Presented by Snap-on, is the grand prize for the team with the overall winning score from the Aerospace Maintenance Competition. The four foot tall O'Brien trophy will be on display at Alaska Airlines' maintenance facility for the next 12 months. The trophy, which features a bust of Charles E. Taylor, will return to the Aerospace Maintenance Competition next year at the MRO Americas Convention in Orlando and will again be up for grabs to the winning overall team.

“There are just no cutting corners when it comes to maintaining aircraft, and that great responsibility is placed upon aircraft technicians,” said Andy Ginger, president, Snap-on Industrial. “[The role AMTs play in keeping aircraft safely flying often goes unnoticed](#), but the Aerospace Maintenance Competition is the perfect venue to shine a spotlight on the critical work they perform every day. On behalf of the thousands of Snap-on professionals around the world, I'd like to congratulate the skilled technicians at Alaska Airlines Team Seattle, and all 50 other teams, for their accomplishments at this year's Aerospace Maintenance Competition.

“The dedication and professionalism displayed by Alaska Airlines Team Seattle embody the true spirit of what the William F. O'Brien Award for Excellence in Aircraft Maintenance is all about.”



The Aerospace Maintenance Competition is an event that gives teams of licensed AMTs, AMEs, international military personnel and qualified aviation maintenance students the chance to test their aviation maintenance skills against those of their peers. The competition included 24 challenges in areas such as avionics, safety wiring, fiber optics/flight control rigging, hydraulics, jet engine troubleshooting, workplace safety SMS and other tasks. Teams had 15 minutes to accurately complete each task; teams that finished their tasks in less than the allotted time received higher scores.

Snap-on is the official tool sponsor of the Aerospace Maintenance Competition; to support the event, Snap-on provided all the tools and equipment used by the participants during the competition.

## **Snoozing FedEx Employee Takes Unexpected Trip**

### Went To Sleep In Tennessee And Woke Up Headed To Texas

A FedEx Express worker [apparently not completely accustomed to the overnight shift](#) wound up taking an unexpected trip from Tennessee to Texas along with the packages he was supposed to be loading. The worker, who was not identified, was loading packages in Memphis when he apparently fell asleep at about 0400 local time Friday, according to a report from television station KJTV. He woke up about half way to Lubbock, and tried to get the attention of the crew.

But the pilot and copilot would not open the cockpit door for the worker, according to Lubbock International Airport Executive Director Kelly Campbell. The spoke to him over the internal telephone, and told him to sit in the jump seat until they landed, which they did at about 0530.



Where am I?



The worker was questioned by TSA, the FBI, local police, and airport authorities at the airport. In a statement, the city of Lubbock said the man "was not arrested after police determined there was no criminal intent. The employee was released to local FedEx officials. There was no impact to aircraft operations at Lubbock's airport."

FedEx spokesman Jim Masilak said that the company was "fully cooperating with investigating authorities," but that there was never any danger to employees or cargo aboard the aircraft.

## **JetBlue, N.J. university partner on degree completion program**

JetBlue Airways has partnered with Thomas Edison State University to offers its employees college degrees - [without the soaring costs](#).

The partnership with Thomas Edison, a fully accredited, largely online public institution in Trenton, will allow its employees to earn bachelor's degrees in business, information technology, liberal studies, aviation management and aviation technology.

"We rethought the employer's role in investing in education," said Bonny Simi, head of JetBlue Scholars, the new program that formally launched Monday. "Utilizing the alternative credit model to unbundle the higher education process, we're eliminating some of the complexity. [We hope to inspire](#) other employers to adopt this model which will help dramatically increase the percentage of Americans who have access to postsecondary degrees."

Marc Singer, vice provost of the university's Center for the Assessment of Learning, said the school has been in a leader in using massive open online courses, or MOOCs, to help its students earn credits toward a degree.

"We don't care where they learn as long as they demonstrate what they need to know to get a degree," he said.



JetBlue employees will be able to patch together their degree requirements from a mix of credits: other institutions, online and open courses, credit-by-exam programs, workplace or military training and Federal Aviation Administration certifications evaluated by the university.

"We know that if someone comes to us with an FAA license, they know x, y and z and we'll give them credit for that," Singer said.

**JetBlue is covering most of the costs.** More than 400 employees are currently working toward a bachelor's as part of the initial launch, but Singer said that hundreds more have expressed interest.

"This is not for everybody, but for somebody who is self-directed and on-the-go, this model that we've worked on with JetBlue makes a lot of sense," he said. "They can access these courses anywhere at anytime."

## **Video shows 24 hours of flight traffic in 1 minute**

At any given moment, some 5,000 airplanes are crisscrossing the skies over the United States, according to the National Air Traffic Controllers Association. Now, thanks to Flighttadar24, a flight-tracking service that offers real-time updates on air traffic worldwide, you can see what that looks like in an animation compressed down to one quick minute. On April 1, the company tracked **164,209** flights around the world, including tens of thousands that flew over the U.S.



The yellow, animated airplane symbols that represent each flight look like a swarm of bees buzzing around the North American continent. **Check out the video below:**

<https://www.youtube.com/watch?v=36Gm2AokZRO>

## Sleep Deprivation Hits Employers' in the Wallet

From the financial costs to the effect on health, a report from The Street examines the impact of sleep deprivation in the workplace.

Whether stress, daylight savings or technology is the culprit, America's zombie-like state due to lack of sleep is costing America's companies about **\$63 billion a year**, says Dr. Charles Czeisler, chief of the Division of Sleep and Circadian Disorders at Brigham and Women's Hospital.



Czeisler says the epidemic of “presenteeism,” otherwise known as coming to work even when sick or exhausted from lack of sleep, is prevalent throughout the workplaces across the country. Dr. Ron Kessler, Czeisler's colleague and a specialist in epidemiological studies, has had a long-term interest in how mental health and sleep deprivation issues impact productivity in the workplace. A number of years ago, a few pharmaceutical companies had him conduct a study on insomnia and the impact it has on workplace productivity. Kessler's analysis ultimately determined that presenteeism produced a loss of approximately 250 billion employee workdays within a given year. “Ranging from the security guard dozing off on the job to the office worker laying his or her head down on the desk--being exhausted and tired at work can directly reduce productivity,” Czeisler said.

Dr. Sujay Kansagra, director of the Pediatric Neurology Sleep Medicine Program at Duke University Medical Center, says some of the common symptoms of sleep deprivation are sleepiness, fatigue, poor attention span and a decrease in vigilance.

“That combination is the perfect storm when it comes to inefficiency in the workplace,” Kansagra says. “The true economic impact is hard to calculate, especially when you consider how common sleep deprivation and sleep disorders are among the general population. However, it has been estimated that sleep deprivation and sleep disorders cost \$150 billion each year in missed work, workplace accidents and decreased productivity.”

In fact, an Australian study reported that the cost for sleep disorders was nearly 1% of national GDP.”

### Why Are We So Tired?

Lauri Leadley, clinical sleep educator and president of the Valley Sleep Center in Phoenix, says a multitude of reasons contribute to why Americans aren’t getting enough sleep.

“What I see today is that people are not only busy, but they spend an inordinate amount of time on their smart phones checking Facebook or engaging in other online activities,” Leadley points out. [“People sleep with their phones right next to them, because they have FOMO, or the fear of missing out.”](#)

She says the problem is that notifications from your phone wake you up, disrupting your sleep and preventing or disturbing your REM sleep, which the body needs for rejuvenation. Healthy adults need between seven to nine hours uninterrupted sleep. Younger adults need more; older adults may need less. “Also the light emitted from your phone disrupts your [circadian rhythm](#) telling your body that it’s not time to sleep, when you actually should be sleeping,” Leadley adds. “In addition, many people work shift work, which prevents them from getting the sleep they need. This includes public safety officers, pilots and others in public transportation, those in the health care industry and more.”

Another issue is the bouncing back and forth from “spring forward” to “fall back” every season with daylight savings.

“Daylight savings creates a very interesting population-wide experiment on sleep loss,” Kansagra observes. “Even the one hour loss of sleep during spring daylight savings is associated with notable decrease in workplace productivity.”

Kansagra says studies show this one hour sleep loss leads to approximately \$450 million in lost productivity. “Combine this with data showing the increase in [motor vehicle accidents as well as heart attack risk](#) immediately after spring daylight savings, and you have plenty of reasons to abolish the practice of daylight savings altogether,” Kansagra says.

"Daylight savings was originally started in the U.S. in the early 1900s as a way of conserving energy, but research today does not convincingly show that it saves energy. And as energy creation and consumption becomes more efficient, the benefit of daylight savings, if any, becomes increasingly small."

Not every state participates in daylight savings time. Leadley points out that Arizona doesn't take part and Alaska, Idaho and California may be ending the sleep draining tradition.

### Is Finding Sleep Possible?

While some people believe they can function quite well on little to no sleep, Kansagra says [eventually the body starts to fight back](#).

"Sleep deprivation plays an interesting trick on the body," he says. "Over time, if you are chronically sleep deprived, you begin to subjectively feel as if you have become accustomed to less sleep."

"Yet when objective testing is performed on chronically sleep deprived individuals, cognitive abilities such as maintaining attention continue to decrease the longer you are sleep deprived," Kansagra continues. "And apart from attention, we know that sleep plays a critical role in memory and mood, both of which play a critical role in the workplace. Many are forced to use energy drinks to maintain focus, most of which simply have large amounts of caffeine . Unfortunately, even morning caffeine can affect nighttime sleep, often creating a vicious cycle of poor sleep, more caffeine, worse sleep."

Czeisler says getting back on track takes setting a sleep schedule and sticking to it. "Go to bed the same time every day and wake up around the same time every morning in order to regulate your sleep schedule," he says. "Being on a regular sleep schedule will set you up for getting into a regular sleep pattern but will have a direct impact on your performance at work or in school. Plus, you will also reduce the likelihood of getting sick."

What about napping to bank more sleep? Czeisler says that individuals looking to regulate their sleep and be more productive in the workplace should consider doing a [sleep makeover](#) rather than trying to grab a compensatory nap here and there. "If you can capture 14 hours or even a weekend to make sleep a priority and take a sleep vacation, you can restore lost sleep," he says. "Needing a nap is a sign of sleep deficiency and that you aren't getting the restorative sleep you truly need at night."

<http://www.journalsleep.org/Articles/290305.pdf>



## CBS Sunday Morning

A true story of forgiveness and brotherhood!



<http://www.cbsnews.com/videos/crooked-cop-pairs-up-with-man-he-framed/>