

# Aviation Human Factors Industry News

*Volume XIII. Issue 09, APRIL 30, 2017*



*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)

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

## ★Distractions

★DCA must take immediate steps following recent A380 wake incident

## ★PILOT FATIGUE

★Workplace Accountability and Just Culture - Introducing Dave's Subs

★Irish Crash Probe Plumbs Why Island Wasn't in Terrain Database

★NTSB Report: Pilots, ATC Need To Improve Pirep System

★Watch the Paint Melt Right Off a Virgin Australia Airplane

★The Most Important Data Of All

★DOT IG Auditing FAA Drone Operation Waivers

★And Much More

# Distractions

Submitted by Gordon Dupont

With permission from D.O.M. Director of Maintenance magazine

Distractions are an everyday occurrence in our work and in our life. It can be an unusual noise, a coffee break, a striking person of the opposite sex walking past or hundreds of other things that draw your attention away from the task at hand.

It is thought that the factor of distraction is responsible for **about 15% of the known maintenance errors**. So why does it occur so often? When we are working on any task, our mind has a natural tendency to think ahead. This is normal and not a bad trait until we are distracted from the task at hand. If the distraction is sufficiently long and/or strong enough we will come back to the task thinking we are farther along than we actually are. If there are no visual clues as to the actual point of completion, and we don't have any precautions (**Safety nets**) to counteract the distraction, then there is a very good chance that an error will occur. The error could be a loose "B" nut or something not completed. After the error, the victim of this factor will likely, in all honesty, swear that he/she had completed the task correctly because in his mind he/she had.

## **The following is a case in point.**

The Bell 206 was in for a regular 100 hourly inspection and the task was almost complete. One of the snags that the pilot had complained about was an annoying N1 rpm fluctuation.



**Maintenance Dirty Dozen**

1. Lack of Communication
2. Complacency
3. Lack of Knowledge
4. Distraction
5. Lack of Teamwork
6. Fatigue
7. Lack of Resources
8. Pressure
9. Lack of Assertiveness
10. Stress
11. Lack of Awareness
12. Norms

Anything that takes your mind off the job at hand

**8 Fatal**

*"How! Your Mom on the phone!"*

A conscientious Licensed Aircraft Maintenance Engineer was distracted when asked to help another at the critical moment of tightening a fuel line and later thought he had completed the task

**Distraction Safety Nets**

- Be aware a distraction has occurred
- Always use a checklist
- Flag the incomplete work
- Double Inspect - Self or Others
- Lockwire or Safety mark where possible
- Go back 3 steps when restarting the work
- Always complete the job or unfasten the connection

Thus the AME/AMT decided to change the N1 tach generator to determine if it was the cause of the fluctuation. As he was in the process of fastening the cannon plug to the newly installed tach generator, [the phone rang](#). He rushed to answer it as he was the only person in the hangar and it could be a customer. It wasn't. It was his wife who was angry because he was supposed to be home getting ready for a long ago scheduled dinner date. After promising to be there shortly, he went back to the task, glanced to see everything was completed, signed the paperwork and hurried home.

The next day, while at 3,000 feet over water, with five persons on board, the pilot suddenly had the engine-out warning horn blaring in his ear and noticed his N1 indication dropping to zero. As trained, he quickly lowered the collective and made a perfect autorotation into the salt water. He experienced a difficult time in getting the rotor blades to stop before they all exited the sinking aircraft with their lifejackets. They and the upside down rapidly sinking helicopter were picked out of the water just in time by a heli-logging helicopter with a long line that conveniently connected to the sinking helicopter's belly cargo hook. All escaped injury by clinging to the helicopter as it was lifted to shore, but the helicopter, after it's soaking in the salt water, was almost a write off.

The cause was easy to find when the engine cowls were opened, for there on the deck lay the N1 cannon plug. The AME/AMT was absolutely sure he had tightened the plug on the tach generator but had no explanation for how it could have come loose. ([You can read the complete case study by going to our website at HYPERLINK "<http://www.system-safety.com>" \[www.system-safety.com\]\(http://www.system-safety.com\), click on Safety videos and click on iToo Many Cooks. If you read the case study you'll find that more than just distraction were working against him](#)) He had been caught with the biggest distraction creator known to man, the telephone. Use of the device while driving increases your odds of an accident by 25%. Throw in texting while driving and the odds at least double. There is a valid reason why it is illegal in many states and countries in the world. In 2014, over 2600 people died in the USA while their attention was drawn away from the task at hand by a phone.

An interesting study was conducted to illustrate the power of distraction!

1. A group of teenage students were each given a task to build something different using building blocks. (Teenagers are ideal as they still think that they know it all and have not yet entered the school of hard knocks)

2. They were each given a sheet with numbered step by step instructions on how to build the object. (Their curiosity would encourage them to wonder what it would be when completed)
  3. They were called away for a coffee break before any of them had completed their project. (The distraction)
  4. After coffee they were asked to write down what step they had stopped at before the coffee break. (The answers shouldn't be too much of a surprise)
- EVERYONE wrote they were [ONE to THREE steps further ahead](#) than they were. Always remember: The brain can work faster than the hands and does.

A simple distraction almost caused me to leave aviation a lot of years ago while working in New Guinea. At times it haunts me to this day. On my Distraction Dirty Dozen poster it says 8 fatal below and gives a one sentence explanation for the accident. A conscious licensed Aircraft Maintenance Engineer was distracted when asked to help another at the critical moment of tightening a fuel line and later thought that he had completed the task. The result was an engine fire in flight and a fiery crash that I responded to. A child was thrown out of the aircraft at impact and lay dead near the burning wreckage. That child was about the same age as my son and when I found out why the accident occurred I realized that it could have just as easily been me who made the error. [That was one of the defining points in my life and Safety took on a whole new meaning.](#) You can and I urge you to go to our website (Address below) and read the case study of the [Safety video The Price of a Mistake](#). The man who made the mistake is dead as I believe he never forgave himself for the deaths of his best friends. But read the case study carefully because he may have been responsible for the engine fire but the FAA and manufacturer bear the full responsibility for the deaths.

So what can we do to avoid becoming one of the 15%? You likely already have devised some personal Safety nets such as: NEVER start fastening a "B" nut or any other component without either completing the task or completely undoing it. Make it the [all the way on or all the way off](#) always. [Tag the task](#) with a bright ribbon at the last point of completion. A warning tag can be installed but they often take too long to fill out and consequently are seldom used.

Some companies have issued each person with a [roll of flagging tape](#) to tear off and tie to the part as a reminder of where you are. [Torqueseal](#), better known in World War II. as anti-sabotage paint, if used properly, will act as a last chance Safety net to catch the unexpected.

To be used correctly, the “B” nut must be torqued and have the Torqueseal applied before the wrench is removed. Many a “B” nut in a cluster has been accidentally tightened twice leaving one loose in its place.

[An independent inspection](#) is also an excellent last resort Safety net if done right. Do NOT, and I repeat Do Not, depend solely on a visual inspection as we often do as a loose fitting looks exactly like a tightened one and as we learned in the last issue under complacency it will look tight as that is what we expect to see. Put a wrench to it or at least your hands.

[A detailed check list](#) can also work wonders to jog the memory provided we read then sign each item one at a time. In the not so good ole days, it was common practice to just put your initials in the center of the check area and an up and down arrow from there to indicate you had completed everything on the sheet. THAT is putting a big hole in a Safety net and is illegal today. (At least in most parts of the world)

A personal Safety net which goes a long way to combating distraction is: whenever I’m distracted [I will always restart the task by going back three steps](#). By adhering to this philosophy and the others you can prevent yourself from ever becoming a victim of distraction.

<http://www.system-safety.com>

## **DCA must take immediate steps following recent A380 wake incident**

On Jan 7, over the air space of Oman, a Bombardier Challenger 604 private jet flew 1,000 feet beneath in the opposite direction of an Airbus A380 and was reportedly [rolled over ‘five times’](#), both engines flamed out and then it plummeted 10,000 feet as it was caught in the powerful turbulence of the A380.

Although passengers in the private jet sustained serious injuries and the plane was damaged beyond repair, the pilots miraculously recovered the flight in what was likened to the 2009 'Miracle on the Hudson' by aviation authorities.



Not an isolated event, air traffic control around the world have been alerted about the A380 incidents.

According to the *Aviation Herald*, an authority in aviation safety, this is not the first time such a incident occurred due to wake turbulence generated by an A380 as it crosses above other aircraft.

As such, it was reported that air traffic control all over the world have recently been instructed to exercise particular care with A380 crossing above other aircraft.

According to *Aviation Herald*, the European Aviation Safety Agency (EASA) will be issuing a safety alert on this issue, in particular, precaution about flying near 'Heavy' or 'Super Heavy' aircraft.

There are currently many A380s operating in and out of KLIA every day. And heavier airplanes such as the A380 will be more and more prominent.

The current minimum vertical separation distance in our airspace is 1,000 feet. This is the same distance which caused the private jet to roll over in Oman.

Most of the air traffic coming in and going out of KLIA fly below 10,000 feet. If the Oman incident happens, there will not be enough room to recover.

We urge the government, especially the Department of Civil Aviation, to take immediate measure on Heavy and Super Heavy aircraft wake turbulence. The public and the aviation industry should be made aware on such matters.

<http://avherald.com/h?article=4a5e80f3>

## **PILOT FATIGUE**

'Pilot Fatigue' is the story of the multi-billion dollar global aviation industry transporting people around the world 24 hours every day. There is a very real and growing problem of **pilot fatigue** along with the all too real consequences when something does go wrong.



'Pilot Fatigue' explores the lives and hidden pressures of today's commercial airline pilots and looks at the industry's conflicting responses to an issue which, if ignored, could ultimately lead to catastrophic consequences.

The continued growth of the aviation industry to meet the demands of 21st century air travel cannot afford to ignore when a pilot is too tired to fly, make decisions and land the plane. While pilots globally are speaking out and demanding change, many in the industry cannot see a problem.

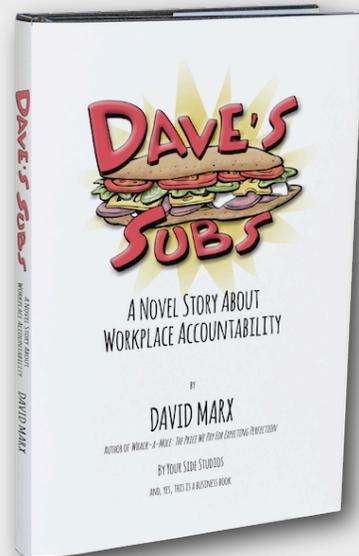
Made in conjunction with the Independent Pilots Association.

<https://vimeo.com/ondemand/pilotfatigue>

## **Workplace Accountability and Just Culture - Introducing Dave's Subs**

Across high consequence industries, **Just Culture** is becoming the de facto standard to drive workplace accountability. For healthcare providers in the U.S.,

The Joint Commission's recent Sentinel Event Alert on Safety Culture further embraces the notion of Just Culture. If you are new to Just Culture, [Dave's Subs](#) is the introduction you need. We've built a facilitator's guide and a member's guide to help teams understand the concepts of Just Culture in an enjoyable and accessible way. Ten managers around a table for an hour once a week – discussing what they saw in Dave's Subs, leading to conversations about the issues they face within their organization. Each participant has a guide to walk them through a structured process of reflection and learning. Four chapters a week, for 10 weeks.



With the facilitator and member guides, we've turned Dave's Subs into an [effective team learning activity](#). If you're looking for a way to explore Just Culture with your team or if you've been on the Just Culture journey, and you're looking to keep your team on the path, [there's no better tool](#) than the book club version of Dave's Subs.

Outcome Engenuity appreciates the opportunity to support your Just Culture journey.

Sincerely,

The Outcome Engenuity Team

[http://outcome-eng.us12.list-manage.com/track/click?  
u=42f6c1cab3d1866498fb3c25b&id=5655fe5b9c&e=6a7d82af83](http://outcome-eng.us12.list-manage.com/track/click?u=42f6c1cab3d1866498fb3c25b&id=5655fe5b9c&e=6a7d82af83)

[http://outcome-eng.us12.list-manage.com/track/click?  
u=42f6c1cab3d1866498fb3c25b&id=79be463d11&e=6a7d82af83](http://outcome-eng.us12.list-manage.com/track/click?u=42f6c1cab3d1866498fb3c25b&id=79be463d11&e=6a7d82af83)

You can find the materials on Amazon, or you can purchase a discounted package from our store at [www.outcome-eng.com](http://www.outcome-eng.com).

## Irish Crash Probe Plumbs Why Island Wasn't in Terrain Database

International investigators led by Ireland are assessing, among other factors, why a quarter-mile-long island **is not in the terrain-awareness database** of a S-92 that crashed on it in the first hour of March 14, killing all four crewmembers.



Ireland's Air Accident Investigation Unit said Honeywell, which made the Sikorsky aircraft's Mark 22 Enhanced Ground Proximity Warning System, told its investigators that Black Rock Island and a 49-foot-tall lighthouse that sits on it are not in the system's terrain database. This detail is contained in the preliminary report on the Irish Coast Guard fatal accident released by the investigation unit today. The report says Honeywell told investigators, "The lighthouse obstacle is not in the obstacle database and **the terrain of the island is not in our terrain database.**" The avionics maker offered the explanation, the report says, that it integrates validated terrain and obstacle data from government agencies, other authoritative sources and "non-authoritative" public and private sources. The report cites the company as saying, "**Honeywell's selected terrain and obstacle source data do not include Black Rock.**"

The report says the helicopter, operated by CHC for the Irish Coast Guard, was in stable, level flight at 200 feet radio altitude, flying at 75 kt indicated on an approximate heading of 120 deg magnetic when the cockpit voice recorder captured a crewmember in the rear cabin reporting "an island just in, directly ahead of us now, guys. You want to come right."

The aircraft commander asked to confirm that, according to the CVR, and the crewmember replied, "Twenty degrees right, yeah."

About five seconds later, the CVR captures the crewmember saying, “Come right now come right COME RIGHT,” the report says.

In the final seconds, the report notes, the helicopter “pitched up rapidly, impacted with terrain at the western end of Black Rock and departed from controlled flight.”

The CHC aircraft commander, co-pilot, winch operator and winchman all died as result of the crash. The investigation is ongoing.

## **NTSB Report: Pilots, ATC Need To Improve Pirep System**

The NTSB has released a special report based on its investigation last year into the [effectiveness of pilot weather reports](#). The report concludes that pilots need better training and procedures, and air traffic controllers need to do more to be sure the pilot weather reporting system enhances aviation safety. One key to a safer system is better handling of the reports when they are received by ATC, says NTSB Acting Chairman Robert Sumwalt. “Even with the many advances that have been made in weather modeling and forecasting in recent years, [there’s still nothing that can replicate the value of pilots’ reports of the weather conditions they encounter](#),” Sumwalt said. “As a longtime general aviation and air carrier pilot, I can’t overemphasize the importance of Pireps. They provide pilots of all types of aircraft with critical real-time information that can enhance safety for everyone in the skies.” To create the special report, NTSB staffers investigated several recent incidents and accidents and engaged in discussions with members of various Pirep user groups. This research [revealed deficiencies in the handling of Pirep information](#) that resulted in delays, errors and data losses.



The report details numerous factors that make it hard for air traffic controllers to solicit, collect and disseminate Pireps, [including a lack of](#) consistent best practices, insufficient automation capabilities and a lack of scenario-based training. Some of the positive actions that could improve the system, the NTSB concludes, would be to emphasize the importance of Pireps during pilot training and create standard criteria for reporting weather conditions. Also, the FAA needs to address pilots' concerns that they could be targeted for enforcement action if they report about encountering adverse weather conditions beyond what they or their aircraft are rated for.

The 68-page report is posted [online](#).

<http://www.avweb.com/avwebflash/news/NTSB-Reminds-Pilots-To-Report-Weather-226484-1.html>

## [Watch the Paint Melt Right Off a Virgin Australia Airplane](#)

This is all part of the process it takes to repaint an airplane.

If there's one thing we don't think about very often, it's the paint that covers an airplane. [How did it get there?](#) Very carefully. How do they get it off? That's another process (one that's pretty mesmerizing to watch).



This video above from Virgin Australia is relatively dated, but watching the paint literally melt off an airplane is a truly timeless activity. When you think about it, repainting an airplane is no simple task.

While you'd be quick to notice an unsightly cabin smell or a dusty armrest, you'll likely never see a spot of paint out of place on the shell of a plane - and keeping those windows paint-free can't be an easy task.

The biggest part of repainting an airplane is [applying massive amounts of paint thinner and leaving it to set](#). But set up a camera to catch all of the things you can't get close enough to see (because: fumes), and you're in for a treat.

Check it out along with a lot of other scenes digging into the work that goes into giving an airplane a makeover.

<https://www.youtube.com/watch?v=rBcjhqWigK8>

## The Most Important Data Of All

FAA is working to add safety-centric maintenance data.

Too often, it seems, the push to report within a day of ["becoming aware of an event"](#) caveat is understood to mean "when the event happened."

Capturing and distilling maintenance data is all the rage these days, and it's not just about improving reliability or predictability. Operators are collecting more data than ever as part of safety programs. Some are required, but most are voluntary.



If FAA has its way, the next version of its popular (and voluntary) [Aviation Safety Action Program \(ASAP\)](#) will increase the flow of data tied to maintenance-related events. The agency is working on an update to its ASAP advisory circular (AC), which was last changed in 2002.

ASAP programs are voluntary reporting of safety-related issues, such as a technician making a mistake during a repair procedure. [The goal is to uncover trends that](#) highlight problems--unclear work instructions, deficient company policies, etc.--before they lead to serious incidents or accidents. As of April 1, ASAP counted about 190 participants, with 85% reporting participation by their maintenance staff.

While the figure is impressive at first glance, many ASAP participants report that getting regular participation from maintenance personnel [is a challenge](#). Part of the reason is the program's emphasis on capturing reports quickly—usually within 24 hours of becoming aware of an event.

While this works well for flight operations, when errors such as a missed clearance are immediately apparent and often acknowledged, many maintenance issues [are not discovered for days or even weeks](#). And when they are uncovered, it is often by someone besides the person responsible.

Speaking at a recent safety conference, FAA Flight Standards Service Director John Duncan said the program's evolution--helped along by the new AC—should include “somewhat loosened” constraints designed to emphasize the importance of getting more data, period. FAA hopes this [will lead to greater participation from maintenance providers in not just ASAP](#), but also the broader Aviation Safety Information Analysis and Sharing (ASIAS) program that combines datasets, such as ASAP, from participating organizations and other sources. As of March 1, ASIAS boasted about 50 air carrier participants and 40 general aviation operators, but only two dedicated MRO providers—AAR and Haeco Americas.

Maintenance providers have myriad ways they collect and use data as part of internal safety and quality programs, so an apparent lack of enthusiasm for broader industry efforts should not be seen as a deficiency. That said, increased participation in these large efforts would be [a positive step](#) on the data-driven path to making aviation even safer.

## **DOT IG Auditing FAA Drone Operation Waivers**

The Office of the U.S. DOT Inspector General has initiated another audit into the FAA's approval and oversight processes for unmanned aircraft systems (UAS). This audit focuses on the waivers that permit UAS uses to go beyond some of the basic limitations, such as operating beyond line of sight or at night. "Our audit objectives will be to assess the FAA's processes for granting waivers, and its [risk-based oversight](#) of UAS operators with waivers," the DOT IG said.



Since December 2015, the FAA has processed nearly 800,000 UAS registrations. To date, the agency has received more than 1,000 applications from UAS operators requesting exemptions to the basic requirements and has granted more than 300 of them. But, as the number of UAS operations increases, the IG noted, the number of drone sightings by pilots has also "increased significantly, [thus presenting safety risks to manned aircraft.](#)"

In December, a DOT IG audit concluded that the FAA "[lacks a risk-based oversight process for UAS.](#)" As it launches this new audit, the IG said, "It is still unclear what type of oversight the FAA will provide for this new technology, as we found that FAA lacks a robust data reporting and tracking system for UAS activity, and aviation safety inspectors [received limited training and guidance](#) on UAS oversight."

<http://ea.ecn5.com/Clicks/dzk5b29LbHNHN2dkUm56YXhLbmpvTDZWTGRyZ2FY3NDa21DQIF3RWxtdWxrNGhZWVVIY0ISQVRVVUdFNuHSSA%3d%3d>

## **FAA: Turbulence injuries jolt twice as many flights in 2016**

A gashed face while descending into Denver. A fractured spine while heading to the Cayman Islands. Second-degree burns from scalding water while heading to Barbados.



These were among the most serious injuries from turbulence aboard airliners last year, when the Federal Aviation Administration said the number of injuries **doubled from a year earlier**. The 44 injuries in 2016 compared to 21 in 2015, the FAA announced Wednesday. During the last 15 years, the lowest total was 12 in 2006 and the highest was 107 in 2009, according to FAA.

Passengers tend to get injured more than crew members, and three-quarters of the injuries last year were for passengers. But **crew members often suffer serious injuries** because they frequently are standing or walking around the cabin when so-called “clear air” turbulence strikes unexpectedly.

The FAA urges passengers to listen to flight attendants and use an approved child-safety seat for children under 2 years old. The FAA also urges airlines to include turbulence in weather briefings, and to have **pilots and dispatchers relay reports about turbulence**.

Flight attendants said the incidents serve [as a reminder of the risks](#) of their profession – and the need for passengers to remain seated with their seat belts fastened during flights.

"The airplane cabin can be a dangerous work environment for flight attendants," said Bob Ross, president of the Association of Professional Flight Attendants, the union representing crews at American Airlines. "Clear-air turbulence is particularly problematic and a leading cause of flight attendant injuries. By its nature, it is difficult or impossible to predict. That is why we stress that passengers keep their seat belts on whenever they are seated and pay particular attention to crewmember instructions during all phases of flight."

The National Transportation Safety Board investigated airline turbulence incidents during 2016 including:

--[On Dec. 13](#), a United Airlines flight from San Francisco to Denver hit mountain-wave turbulence and a "big jolt" at 20,000 feet. A flight attendant securing the galley in the Boeing 737-800 was thrown to the ceiling and then struck her face on a counter that gashed her cheek and fractured a facial bone.

--[On Aug. 11](#), a JetBlue Airways flight from Boston to Sacramento encountered stormy weather above South Dakota. Three flight attendants and 24 passengers suffered minor injuries in the turbulence, and the Airbus A320 made an emergency landing in Rapid City.

--[On Aug. 3](#), an American Airlines flight descending to the Cayman Islands bumped into 6 to 8 seconds of severe clear-air turbulence with no warning, despite using weather radar aboard the Airbus A319. The seat-belt sign had been on for 10 minutes, but five passengers and three crew members were injured. One passenger was taken to the hospital with a fractured vertebra.

--[On July 28](#), a JetBlue flight from JFK to Barbados ran into clear-air turbulence with no warning from weather radar aboard the Airbus A321. A flight attendant carrying a pot of hot water swung the pot away from another crew member after one bump, but a sudden drop sent the pot into the air and scalded her left shoulder and side with second-degree burns.

--On July 26, a United flight hit a few seconds of turbulence at about 16,500 feet while the Embraer 170 descended into Cleveland. A flight attendant fell in the galley and broke her left tibia, and a doctor aboard the flight assisted her.

--On Jan. 15, pilots on a Southwest Airlines flight from Providence to Fort Lauderdale were warned about a weather front to the west of their path, but encountered 3 seconds turbulence over Titusville while beginning to descend. The seat-belt sign was illuminated aboard the Boeing 737-700, but a flight attendant securing the galley fell and broke her ankle.

"Airplanes have seat belts for a reason. Turbulence is a **serious threat** in the air and it cannot always be predicted," said Sara Nelson, president of the Association of Flight Attendants-CWA. "It is one of the highest causes of serious on the job injury to flight attendants. The forces created in sudden clear air turbulence can throw bodies and unsecured items forcefully through the cabin much like the impact of a high speed collision. If you are not strapped in and secure, it could be deadly."

<http://usat.ly/2hnpAie>

## **National Sleep Foundation Kicks Off Sleep Awareness Week 2017: Sleep Better. Feel Better.**

The National Sleep Foundation (NSF) today announces **Sleep Awareness Week 2017**, its annual event celebrating sleep health running through April 29. Advancing the theme, "**Sleep Better, Feel Better.**" this year's Sleep Awareness Week encourages the public to prioritize sleep to improve their overall health and well-being.



According to the most recent findings from NSF's Sleep Health Index (SHI), while three-quarters of Americans are satisfied with their sleep over the past week, more than four in ten Americans reported that their daily activities were **significantly impacted by** poor or insufficient sleep at least once during the past seven days.

"Research consistently shows that adequate, quality sleep directly positively affects mental, physical and emotional well-being," says National Sleep Foundation chairman Max Hirshkowitz, PhD, in a release. "NSF's Sleep Better, Feel Better. campaign shines a light on the importance of sleep health toward improved productivity, mood, and overall health."

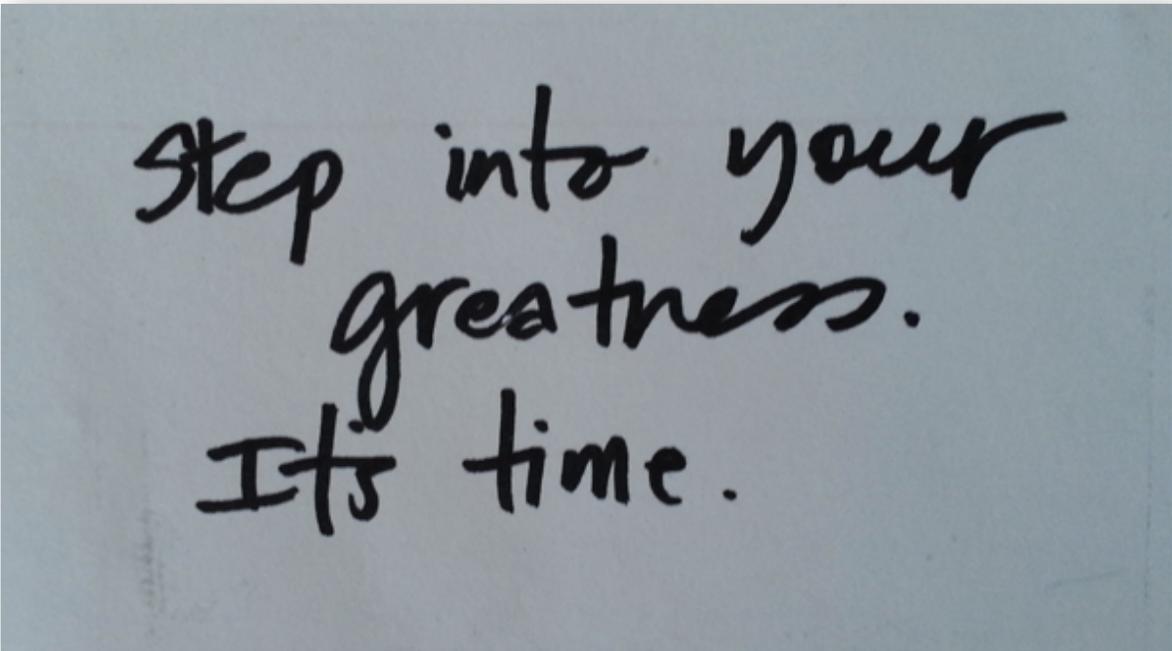
SHI also shows that Americans have begun tracking their sleep, **as 7% are using trackers to get insights into their sleep patterns**. "Whether using a sleep device or simply monitoring patterns, Sleep Awareness Week presents a great opportunity for the public to take note of their current sleep behaviors and adjust their routines to make sleep a priority," Hirshkowitz says. The full SHI quarterly results will be available online on [www.sleepfoundation.org/how-america-sleeps](http://www.sleepfoundation.org/how-america-sleeps) on April 28.

To learn more about Sleep Awareness Week, visit [www.sleepfoundation.org/saw](http://www.sleepfoundation.org/saw). Follow the #SleepBetterFeelBetter campaign on Facebook, Twitter, and Instagram for daily updates.

## **5 POWERFUL WAYS TO ANSWER SELF-DOUBT AND STEP INTO YOUR GREATNESS**

The Little Engine kept saying, "I think I can," until he climbed the steep hill. But the story is wrong.

Thinking you can is helpful, but never enough to step into your greatness.



Step into your  
greatness.  
It's time.

#### Self-Doubt:

Doubters are protectors and preventers. You don't have to face big challenges if you've already concluded you're incapable.

Self-doubt prevents imagined failure. When self-doubt rules, a dissatisfying present is better than the imagined pain of failure.

Self-doubt justifies a dissatisfying present.

5 powerful ways to answer self-doubt and step into your greatness:

#### **#1. Be transparent with self-doubt.**

"Being real is the first step to being great." Lolly Daskal, *The Leadership Gap*.

Lolly writes, "Most of the people you work with doubt themselves."

Tell someone you trust that you doubt yourself. You don't have to tell everyone. You must tell a friend, colleague, adviser, or coach.

Confidence never results from lying to yourself.

## **#2. See advantages in self-doubt.**

You're out of touch with yourself and reality if you don't have some self-doubt. Self-doubt – in small doses – is an advantage that:

1. Invites self-reflection.
2. Encourages vigilance.
3. Increases urgency.
4. Elevates energy.
5. Fuels drive.
6. Inspires creativity.
7. Intensifies openness.

## **#3. Know and leverage your competence.**

“Confidence doesn't come from saying the things you *can do* – it comes from *doing* the things *you know you can do.*” Lolly Daskal

## **#4. Make a list of your accomplishments.\***

Bad is stronger than good. You need to intentionally turn to your accomplishments from time to time.

Don't make beating yourself up the national pastime.

## **#5. Find a 'competent other' when stretching your own competence.**

Self-doubt prevents you from trying big things. Answer self-doubt with a 'competent other' – a go to person who has competencies and experience you aspire to develop.

[A safety net](#) emboldens people to reach for something that's just out of reach.

## How might leaders answer self-doubt in themselves and others?

\*This post is inspired by Lolly Daskal's new book, [The Leadership Gap](#).

### Baseball hall-of-famer's heart transplant beats with inspiration



<http://www.cbsnews.com/news/baseball-hall-of-famers-heart-transplant-beats-with-inspiration/>