

# Aviation Human Factors Industry News

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

Hello all,

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## **Behavioral Drift Threatens Safety**

“Behavioral drift” poses the **single greatest risk** to aviation professionalism and safety, according to Bill Grimes, CitationAir vice president for safety. During an NBAA podcast, Grimes said that while solid adherence to company and industry procedures is a core element of professionalism, **outside influences** can cause pilots to drift. “As the **norms** of an organization are eroded, they’re replaced by **work-arounds** that eventually set new standards,” he said. “People start cutting corners.”



<http://www.nbaa.org/news/flight-plan/nbaa-flight-plan-20130909.mp3>

## **Did I perform the task to the best of my ability?**

Aviation is all about dotting I's and crossing T's, so take a few minutes to reflect on the task you just performed. Was your mind on the job? If you were **distracted**, pulled away or not feeling quite up to speed there's a possibility that something could have slipped by unnoticed.

Double check all Required Inspection Items (RII) and QC buy backs for completeness, proper sequence and conformance with the approved data you used. **Ask a colleague to have a quick look at your work.**



Another set of eyes can spot details for correction and help gain new ideas for the next time you perform this task. Make sure to sign for the work you performed. Undocumented maintenance leads to confusion and misstep.

No one can be 100% every day so make sure to use manuals, checklists and other resources available to maintain the level of quality needed to confirm your work is safe and compliant. Keep being the best version of yourself!

## **Worker Dies Just One Hour After a Near Miss**

Most accidents are preceded by one or more near misses. Near misses predict accidents. Don't ignore them or let your workers ignore them.

A cargo handler at Newark Liberty International Airport in New Jersey was towing a metal airplane tail stand—a metal frame used to support the tail of an aircraft when it is being loaded and unloaded—when the tail stand's central stabilizer, or support, caught on the raised lip of a manhole cover, destabilizing it. The stabilizer had been left down by mistake; when a tail stand is being moved, the stabilizer should be raised. The tail stand was damaged by the error, and the worker took it out of service. Neither he nor the other two cargo handlers working with him that night thought anything more of the incident.



Just an hour later, another cargo handler, 40-year-old Timothy Gallagher, was towing a different tail stand up the same ramp and encountered the same problem—the tail stand's central stabilizer had been left dragging the ground and caught on the same five-eighths of an inch raised manhole cover. This time, though, the impact tipped the tail stand forward. The 1,750-pound tail stand landed on Gallagher's head and shoulders, pinning him to the cargo tug he was driving and causing fatal injuries.

It should also be noted that the tight schedule that employees were working under contributed to this incident. Allowing employees sufficient time to do their jobs is a critical safety practice that is often overlooked.

## Simple Steps to Safety

NIOSH investigated this incident as part of its Fatality Assessment and Control Evaluation (FACE) program and determined that the worker's death [was preventable](#). According to NIOSH's findings, the worker's life could have been saved by:

- [Commonly available safety equipment](#). The cargo tug that Gallagher was driving was not equipped with a protective safety cage. If it had been, the falling tail stand would have been deflected, likely saving Gallagher's life. Because airline cargo handlers commonly face falling object hazards, cargo tugs equipped with safety cages are readily available. In fact, another cargo handling company at the same airport used tugs equipped with safety cages.
- [Training](#). As NIOSH noted, federal OSHA found in a separate investigation that the employer's safety training "was not comprehensive or cohesive, and employee awareness of safety was limited." In addition, employees [were permitted to handle and use equipment that they were unfamiliar with](#). In this case, the manufacturer's instructions clearly indicated that the central stabilizer must be raised before moving the stand to prevent it from catching on uneven or protruding surfaces, and that its upper support must be fully lowered before moving the tail stand to reduce tipping hazards. Lacking appropriate training, employees did not realize that catching the tail stand's central stabilizer on the ground did more than cause minor damage to the tail stand—it also created a [potentially deadly hazard](#).
- Safety interlock devices. Another simple engineering solution to this hazard would be to equip the tail stand with a safety interlock device that would prevent it from being moved while the central support stabilizer and the upper support were in extended positions. This device would have forced the cargo handlers to render the tail stand safe to move, preventing the types of [carelessness and shortcuts](#) that led to this accident.

## Improving Hazard Recognition

Simple engineering controls or training could have saved Gallagher's life, so why weren't such controls in place or training conducted?

Apparently the underlying problem was [that no one recognized how serious the hazard was](#). Tail stand tipovers are a recognized hazard—the manufacturer's instructions discussed the risk and how to control it—but none of the cargo handlers at the airport [had actually witnessed a tail stand tip-over](#), and the workers and their employer didn't recognize the conditions that could lead to a tipover.



## Wrongly-fitted washer led A300 to veer off runway

Incorrect installation of a washer in the nose-gear torque link axle of an Airbus A300B4 freighter **caused a chain reaction** that ended with the aircraft's veering off the runway at Bratislava.

The Air Contractors twinjet had landed on runway 22 following a service from Leipzig on 16 November last year. About 6 seconds after the aircraft touched down with its nose-gear the crew felt increasingly strong vibration. As it decelerated to 85kt, and the thrust reversers were stowed, the aircraft veered left.



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Attempts to counter the yaw with the rudder and nose-wheel steering were unsuccessful and the aircraft left the runway. Its nose-gear hit a manhole and collapsed.

None of the three crew members was injured.

French investigation authority BEA found evidence that a **washer in the axle of the torque link** – the connecting arms which prevent free rotation of the nose-gear – had been installed the wrong way round.

As a result it did not fit snugly onto the axle and subsequent operations caused the axle nut to unscrew and separate. The nose-gear, freed from the constraint, started to oscillate and the crew lost directional control.

BEA found that a **maintenance procedure** on the nose-gear had been performed 26 days before the accident. The presence of a detailed diagram, it says, **was not enough to prevent the incorrect washer assembly**. The A300 (EI-EAC) performed 37 cycles between the maintenance and the accident.

Airbus informed the inquiry that two similar incidents occurred during 2008-09, involving an A300-600 in Vietnam and an A310 in Pakistan, with only “minor” consequences.

While differential braking can be used as a steering backup below 70kt, the captain of the Air Contractors A300 told the inquiry that the event happened too quickly to consider this option.

## A Slippery Slope

I was underway on my first deployment as an 18-year old airman when I [learned a personal lesson](#) about Operational Risk Management (ORM)

I was attached to Strike Fighter Squadron 113's Line Division on board USS Carl Vinson (CVN-70) during a Western Pacific deployment. As an airman in a Hornet squadron, I am responsible for general maintenance on the aircraft, such as cleaning, performing daily turnarounds, and preparing the aircraft for launch. I had only been in the squadron [for two months](#) and was diligently working on my qualifications during the [night shift](#).

Working on and around aircraft had been a foreign environment to me, and I was still getting acclimated.

One day in mid-December, the ship was somewhere in the western Pacific. At [02200](#), my supervisor told me to hand wipe the nose of aircraft 307 in the hangar bay. I'd never cleaned the nose of an aircraft before and decided to ask a friend in the Ordnance Division how to get onto the nose of the aircraft. He told me to climb up the aircraft's ladder on the port side of the aircraft, walk aft on the leading edge extension (LEX) to the back of the aircraft, cross over to the starboard side, and position myself on the front end of the starboard LEX ([the front edge of the LEXs do not have non-skid](#)).

Then I had to climb onto the nose, sit facing forward, and slide down the nose to the area being cleaned. The aircraft's nose is about 10 feet above the deck, and there was nothing to hold on to while I was cleaning the nose. It seemed simple, [and I followed his instructions to the letter](#). As I finished, I tried to shimmy back up the aircraft to the canopy where I could grab the canopy bow and pull myself up to a point where I could place my feet on the starboard LEX.



It all went black. When I woke up, I was on the hangar bay floor, and a few squadron mates were asking me if I was OK. I had fallen as I was working my way up the nose of the aircraft. I had bounced off an ordnance rack parked next to the aircraft, hit the deck and rolled underneath a T-15 jenny next to the aircraft. I was rushed to medical, having suffered a lot of bumps and bruises, as well as a [major concussion](#). I stayed at medical for the next 24 hours to undergo standard post-concussion procedures.

## **NTSB Blames Pilot's Medications For Deadly 2010 Plane Crash In Tulsa**

The National Transportation Safety Board says the pilot's use of performance-impairing medications contributed to a plane crash that killed him and his two passengers in 2010.

The twin-engine Cessna 421 crashed at 10:05 p.m. on July 10, 2010 just north of Tulsa International Airport in Mohawk Park. Chase Bales, 51, Mats Malmberg, 43, and Damian Riddoch, 37, died in the crash. All three were executives with US Highland, a new motorcycle manufacturer in Tulsa.

The NTSB says Bales owned and was flying the plane. He was Chief Operating Officer of US Highland, while Malmberg was President and Riddoch was Chief Financial Officer.

According to the NTSB, the plane [ran out of gas](#) and the medications in Bales' system likely prevented him from getting the plane down safely.

The NTSB says Bales had Cyclobenzaprine in his blood and urine. The drug is a muscle relaxant that carries this warning: "[may impair mental and/or physical ability required for the performance of potentially hazardous tasks](#)," according to the report.

Bales also had Phentermine in his urine. The drug aids weight loss and is a stimulant chemically similar to amphetamine.

The report also says Bales had Benadryl in his blood and urine.

The crash illustrates a problem the NTSB has with the way the Federal Aviation Administration licenses private pilots. The problem was the subject of a 6 Investigates story in July.



The FAA does not require private pilots to take drug or blood tests. [It relies on the honor system.](#) Pilots are supposed to report the medications they take to the physician who gives them their yearly flight physical, and they're supposed to avoid flying if they take a medication that could affect their ability to fly safely.

Investigators say the three men in this flight left Jones Riverside airport at 9:19 that morning and flew a 3.5-hour flight to Pontiac, Michigan for a business meeting. They say the airplane used about 156 gallons of the 196 gallons of usable fuel in its tanks.

After landing, the airplane was topped off with 156 gallons of fuel for the return flight, [but the right main fuel tank sump stuck open](#), allowing several gallons of fuel to run out. [The lost fuel was not replaced](#) before the plane departed for Tulsa, according to the NTSB.

Investigators used data from the plane's GPS unit to chart the flight back to Tulsa. They say the return flight lasted 30 minutes longer than the previous flight.

They say the pilot had been cleared to land on runway 18R at Tulsa International Airport but had not reported any previous problems when he radioed ground controllers, ["We exhausted fuel."](#) The plane crashed moments later.

The NTSB says if the pilot had declared an emergency as soon as the plane ran out of gas, he likely would have made it to runway 18L, which was one mile closer to him than runway 18R.

The report says the pilot [likely didn't recognize how low his fuel was because of "impairment by the medications he was taking."](#)

<http://dms.nts.gov/aviation/AccidentReports/stnqsm55rjm4v2nwklx0nnf11/M09102013120000.pdf>

## **90 Pilots Convene to Discuss Safety**

The Air Safety Institute met with AOPA Foundation president Bruce Landsberg on Sept. 10 to discuss air safety, airport congestion and more, according to an article from AOPA. The meeting came as a result of a plane crash in Connecticut that happened the month before and killed two children, a pilot and his son.



At the meeting Landsberg discussed—with around 90 or so pilots in the audience—emergency flying procedures, best pilot practices, noise abatement procedures, power reduction during climbs and efficient energy management. He spent a good deal of time discussing the New Haven, CT accident and explained the difficulty some pilots have when landing with a circle-to-land approach.

Whelen Engineering, a manufacturer of aviation and emergency lighting products, sponsored the meeting.

In addition to general best pilot practices, Landsberg discussed how pilots can complete an emergency landing in a crowded airport, how to best choose off-airport landing sites and what to do when encountering engine problems.



For more information, visit: <http://www.aopa.org/News-and-Video/All-News/2013/September/12/Pilots-talk-safety-after-fatal-Connecticut-accident.aspx>

## **Rise in aircraft close calls in U.S. linked to better tracking: report**

New procedures to better identify air traffic controller errors showed a jump in incidents of aircraft flying too close to each other in the skies over the United States, according to data released on Thursday. There were 4,394 such instances for the year through September 30, 2012, more than double the level of the previous year, the Federal Aviation Administration said.



Of the total, 1,271 were termed "risk analysis events," or incidents serious enough to warrant further review because aircraft had flown more than 34 percent closer together than FAA regulations allow, and 41 were termed "high risk events."

The close calls, which in industry jargon are termed "loss of separation events," have since early 2012 been tracked by [enhanced radar and a new software system](#).

The FAA has also instigated reporting procedures that encourage air traffic controllers to report incidents [without fear of reprisal](#).

Some of the riskiest conditions for aircraft were said to be turns to final airport approach, parallel runway operations and aborted landings, known as go-arounds.

But none of the incidents resulted in a collision during nearly 133 million takeoffs and landings.

David Grizzle, FAA's chief operating officer, said in the just-released 2012 safety report that the changes were the most significant in 30 years as a way to track risk and safety performance in the U.S. airspace.

## **Aviation experts want to encourage safer landings**

An Asian airline's wide-body slams into a sea wall in San Francisco. Elsewhere, a 737 with 150 people aboard hits the runway so hard its nose gear buckles. And a cargo plane barely misses houses before plowing into a hillside short of the runway. These recent accidents, marking the deadliest period for airlines in the U.S. since 2009, [have something in common](#): Had the pilots aborted their landings at the first sign of trouble - a move known as a go-around - they might have avoided tragedy.



"They'd all be walking, talking and alive if they went around," said Patrick Veillette, a pilot who teaches and writes about aviation safety.

The three U.S. air crashes since July 6, which killed five people, spotlight the difficulty in getting pilots to abort touchdowns if they haven't made safe approaches to the runway. It's "the largest, lowest hanging piece of safety fruit" to make flying less hazardous, according to research sponsored by the Flight Safety Foundation.

Crashes that occur during approach or touchdown are the world's leading category of aviation mishaps and deaths, according to data compiled by Boeing. The biggest risk factor for such accidents is failing to approach a runway at the proper speed, altitude and heading, known as an un-stabilized approach.

If safety regulators can persuade pilots to conduct more go-arounds, lives may be saved and costs to airlines in damaged equipment and liability may be lowered.

Computerized flight-track records and a survey of 2,340 pilots sponsored by the safety foundation found that crews have a long way to go to comply with airline requirements to abort landings if their approaches were unstable. Almost all pilots, or 97 percent, continued to land in spite of the rules that they climb away from the runway and circle around to try again, according to the research.

"That's a risk factor that we really need to work on," said , Rudy Quevedo, director of global programs at the foundation.

### Safety is critical

The issue isn't simple or new, Quevedo and Veillette said.

"There isn't a commercial pilot who can say, 'Shame on you. You should have gone around,' " Veillette said. "We've all been in situations where in retrospect, we should have gone around and didn't."

In some cases, rules may be overly rigid, akin to imposing a highway speed limit that is so low drivers routinely exceed it, Quevedo said. Violating the rules has become so ingrained that airlines don't enforce them and pilots don't recognize when they are taking unnecessary risks, he said.

Setting up a proper approach to a landing is critical to safety, according to the Federal Aviation Administration, which regulates the U.S. aviation industry, and the United Nations' International Civil Aviation Organization.

"It's really all physics," Quevedo said. "You want to be centered on the runway on the correct trajectory, the correct descent rate and the right speed."

If that happens, a plane will almost always cross the start of the runway at a height of about 50 feet, which is optimal for a safe landing, he said.

Airlines typically require that a plane be stabilized at 1,000 feet above the runway in poor visibility and at 500 feet in clear weather. Pilots must also have performed required checklists, extended landing gear and configured the plane for landing, according to the foundation. If these conditions aren't met, the FAA advises pilots and airlines to go around.

### Too late at SFO

While the U.S. National Transportation Safety Board hasn't said what caused the three recent crashes, information it has released shows evidence of the aircraft [being unstable at points](#) within a mile or two from the runway or of pilots perceiving they were off course.

## Safety Standdown Delivers Knowledge That Saves Lives

Bombardier's annual Safety Standdown, organized by the manufacturer's business aviation flight operations team, begins in Wichita on September 30. The standdown is designed [to foster a safety culture through better communication](#).

Military aviation uses the standdown concept—essentially grounding a particular squadron or fleet—when a significant high-risk safety issue emerges. Standdown time [focuses all eyes on the problem](#), as well as the solution. In the workshops, for example, attendees don't simply talk about what a water crash might look like; they practice underwater egress training in a swimming pool. The AirCare Facts full-motion emergency simulator will also be on-site to demonstrate practical smoke and firefighting techniques.

This month's event comprises four days of talks and workshops and, as always, is offered at no cost to attendees. The standdown regularly attracts pilots from every corner of the industry: civil, military, airline and government flying.



“This year we expect quite a few business aviation pilots, but also crews from all branches of the U.S. military, the FBI, the FAA, the NTSB and Transport Canada,” a Bombardier spokesman told AIN.

Human-factors expert Dr. Tony Kern will give a presentation on the “zoology of safety” at this year’s event. This is a look at how man’s survival hinges on the same two forces that affect survival in the rest of the natural world: awareness and adaptation. “Tony Kern’s session will be a real experience,” said the spokesman.

The event started in 1996 as an internal safety review and improvement process for the Bombardier Learjet flight demonstration team. Three years later the company opened it up to other pilots, and since then more than 6,700 aviators worldwide have attended.

## **ATSB Releases Training Video on Data Input Errors**

The Australian Transport Safety Bureau (ATSB) released a training video highlighting some near catastrophes that occurred after experienced pilots **incorrectly entered takeoff data in the flight management computer** aboard large airline aircraft, including a Boeing 747 and 767 and an Airbus A340.

The video suggests the need for a takeoff performance monitoring system to call attention to **poor aircraft performance after the sort of human error** that caused these three near accidents. The aircraft also suffered significant damage from tail strikes during the takeoff runs when the flying pilots attempted to pull the aircraft into the air.

Not all such incidents involve a tail strike. A Qantas A380 crew’s data entry incident at Los Angeles International Airport (KLAX) in October 2011, for example, did not. However, it was later shown to be caused by the interruption of the cockpit crew at a critical time during their pre-takeoff checks.



[http://www.youtube.com/watch?feature=player\\_embedded&v=tuE8Tz07690](http://www.youtube.com/watch?feature=player_embedded&v=tuE8Tz07690)





As autoflight system managers, Flight Crews are responsible for entering correct information into the flight management system, selecting the appropriate flight mode and monitoring the aircraft's compliance with the desired flight path. As pilots, Flight Crews **must maintain situational awareness**, stay ahead of the aircraft, use good judgment, make sound decisions based upon training and experience, and do whatever is necessary (within the constraints of good airmanship) to put the airplane where it is supposed to be. These responsibilities apply not only to air carrier and corporate crews, but with the growing use of automation, to general aviation pilots as well.

This CALLBACK presents a few recent reports in which Air Carrier Flight Crews and a General Aviation Pilot share some lessons learned regarding automation issues. In addition, an Air Traffic Controller's report shows that automation issues are not limited to aircraft systems.

## **Distracted and Dependent**

Historically, distraction has been an element in many aviation incidents and accidents. Now, with the prevalence of automation, pilots are less actively engaged in flying the aircraft and it may well be that they are even more susceptible to distractions.

An Air Carrier First Officer reported how a cockpit conversation, when combined with autoflight dependency, was enough to adversely affect their flight.

■ ATC cleared us to cross [a fix] on the arrival...at the expected, planned, and standard FL230. Our altitude was FL270. The Captain and I were talking. The fix started flashing indicating station passage. I recorded the fuel on the dispatch release and then realized that I had not begun descending.

I told the Captain I had forgotten to descend and reduced power to idle, full spoilers, and adjusted vertical speed to 3,500 feet per minute. As I began descending, ATC told us to change to Center. We were 4,000 feet above our crossing altitude and leveled at FL230 five to six miles after the fix.

It was a quiet morning with conversation on the flight deck to keep our minds active. My error as the flying pilot was not initiating the descent when assigned by ATC, not perceiving the [glideslope] guidance in my scan, and the Captain not catching my error in his monitoring cross check. I should, as I usually do, begin descending immediately when assigned crossing fixes. I should, if planning a three-degree descent, ask the Captain to remind me if he sees me not acting at the descent point. I should be aware that conversation, though good in keeping the mind active, also leads to distraction from flying responsibilities especially during low levels of activity and when the automation is “flying.”

## **NSF Releases International Bedroom Poll Data**

The National Sleep Foundation (NSF) released the 2013 International Bedroom Poll -- the first international poll that [compare sleep times, attitudes, habits and bedtime routines](#) of those in the United States, Canada, Mexico, the United Kingdom, Germany and Japan between the ages of 25 and 55 years old. According to poll results, Japan and the United States report the least amount of sleep.

[Japanese and Americans report](#) sleeping about 30 to 40 minutes less on workdays than those in the other countries surveyed, averaging 6 hours and 22 minutes and 6 hours and 31 minutes of sleep, respectively.

Two-thirds of Japanese (66%) say they sleep less than 7 hours on work nights, compared to 53% of Americans, 39% in the United Kingdom, 36% of Germans, 30% of Canadians and 29% of Mexicans.



One in five respondents from the United States (21%), Japan (19%) and the United Kingdom (18%) report sleeping less than six hours a night during the work week, about twice the rate of the other countries (11% Mexico, 10% Germany, 7% Canada,)

To compensate for less sleep, about one-half (51%) of both Japanese and Americans have taken [at least one nap in the past two weeks](#). Every country reported sleeping in on weekends, with an average of an extra 45 minutes of sleep on days they do not work.

"As the first international public opinion poll on sleep, the National Sleep Foundation 2013 Bedroom Poll makes an important contribution to the field," said Namni Goel, PhD, Research Associate Professor of Psychology in Psychiatry at the University of Pennsylvania Perelman School of Medicine and a member of the NSF 2013 International Bedroom Poll expert panel. "Although we know that everyone sleeps, the [rather remarkable cultural differences](#) within this universal experience have not been adequately explored. It is NSF's hope that this initial poll will inspire more research on this critical yet understudied topic."

<http://www.sleepfoundation.org/article/2013internationalbedroompoll>

## **We all like to see a healthy return on our investments. Here's how to get more out of your day.**

It's probably the most common lie of modern time management: "I wish I could find the time to get enough exercise/sleep/get organized."

It's true in a way, because most people mean it honestly when they say it. It's a lie because it disguises the truth behind the idea. Some things take time. Others—including the most important aspects of work-life balance—actually give you more time than they consume. [Let's calculate the return-on-investment](#) of a few of the things you'd love to have more time for. Do they really pay off?



## Exercise

A lot of executives and entrepreneurs plan their exercise for the afternoon, often so they can cancel it if things get out of hand. But research by Sir Richard Branson found that 30 minutes of moderate exercise produced about two hours worth of focus and energy over an 8-hour workday. That's about 90 minutes extra accomplishment for 30 minutes spent. [ROI: 300 percent.](#)

Scheduling your workout in the morning makes this even better in two ways. You spend more of your day with the extra alertness from your workout, and you get it done before the chaos of daily life can encroach on your time.

## Plan Your Day

It takes about 15 minutes to plan your day each morning, time you could be spending sipping coffee, nursing a hangover or checking in about last night's big game. If you instead spent that quarter-hour first thing in the morning optimizing your schedule and prepping your brain for the flow of the day, productivity research shows it adds up to one to two hours of extra work getting done. [ROI: 300 to 700 percent.](#)

If you're baffled by the array of tools, binders, planners, programs and apps available to help you do this, don't worry. None necessarily works better than another—it's what works best for your style that matters.

## Get Enough Sleep

This one's a bit trickier. Getting more than seven hours of sleep doesn't help much, and getting more than nine significantly reduces how well you function over the course of the day. Anything less than five just ruins you. The "sweet spot" is getting seven hours instead of six, or six instead of five. In both cases, the improved concentration, focus and reaction time grants a 10 percent improvement in productivity. [ROI: 67 percent in an 8-hour workday.](#)

The most recent sleep research suggests an hour's nap in the afternoon works just as well as seven consecutive hours. You can't sleep in two chunks of 3.5 hours each, but you can take some time after lunch to eliminate any sleep deficit.

## Get Organized

A Wall Street Journal report found that the average executive loses six weeks worth of time per year searching for information in messy offices and disorganized hard drives—that's approximately 12 percent of their time. Similar research found that three hours of every office worker's week is spent looking for things or replacing lost work. [ROI: For an estimated one hour per week of maintenance to keep everything in its place, 300 to 380 percent.](#)



The ROI will be lower at first, since it takes much more time to get organized than to stay organized. However, it will be even higher as you keep your organization in place. That one hour of maintenance drops to 30 minutes once organization becomes a habit.

What are some of your best examples of finding time by spending time?

<http://excelle.monster.com/benefits/articles/4123-disorganized-itll-cost-you->

## **Inspiration!**

**Learn from the past, set vivid, detailed goals for the future, and live in the only moment of time over which you have any control: now.**

[Denis Waitley](#)

