

Aviation Human Factors Industry News

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

Hello all,

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

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

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Not A Big Fan of Luck

(The Alternative –Being Available, Staying Alert and Moving with Purpose)

A news source reporting this July 16 about a 7-year-old Brooklyn girl who is miraculously alive and well today after she fell from a third-floor window and was “luckily caught” by a sure-handed neighbor. The police said little Keyla McCree pushed out one of the accordion pieces that was holding a brand new air conditioner in a bedroom window of her Coney Island apartment



and squeezed through the tiny opening before plummeting three stories. The overnight hero city bus driver (who caught the girl) Steven Bernard said, “There were all these kids yelling, ‘the little girl, the little girl,’”. “I saw a little girl standing on the air conditioner. I said, ‘Let me get over to her in time. and I made it just in time.’” Bernard rushed over without a second to spare. I am not a particular fan of luck. But the phrase “I’d rather be lucky than good” attributed to Lefty Gomez (who was an American League pitcher for the Yankees between 1930-1942) is an often used phrase. This twist of words has even worked its way on to t-shirts from the Discovery series – The World’s Deadliest Catch. While we live outside of what theologians call the “Dissipation of Miracles” the intent here is not to take away from miracles but the opposite - to expose luck for what it is . . . a four leaf clover in the jean pocket of a hapless teenager. While casino slot machines appeal to the thought of luck in our minds – try to run that idea past those who build them and make profit from them. Not a chance.

Texas State photographer Wyman Meinzer’s blogged about the well worn phrase “I’d Rather Be Lucky Than Good”. He takes a different approach – one that is more purposefully driven. He said “I would rather be lucky than good”, is often spoken usually in response to seeing a photo that was obviously the result of being at the right place at the right time.”

Meinzer goes on to say “Of course, in order for the photographer to experience the lucky break it is essential to make oneself available to be in place when the unusual event occurs. Meinzer admits “this is often my excuse to jump into my pickup and make a break for the brush and some alone time...!!” Meinzer continues by saying “he could not stress to his college students and workshops enough that the importance of being in the field with camera in hand, hopefully at opportune times, is the way to achieve some of the most memorable images of a life time. So many of my greatest shots were never planned, but instead, the result of simply being on site when the critical moment occurred.”

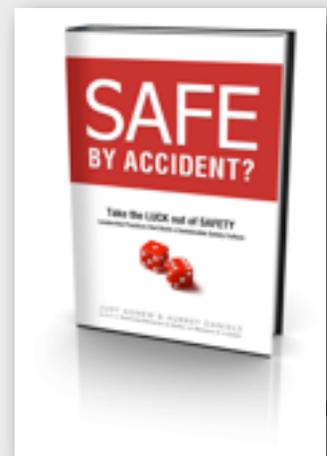
Making one’s self available and being on site is just part of the equation. Whether you are snapping a photo or catching a falling baby life is more about [living with intention rather than beating it by luck](#). We don’t have to look far to see intention at work. An example could be saving a fellow from backing up and falling off a wing or an inspector finding someone else’s tools and rivets on top of a tail elevator just before releasing the aircraft to service. Intention, purpose and alertness will prevail any day against the complacent attitude of just showing up. Whether taking a casual stroll across a crowded tarmac setting or in a hanger with just a few aircraft in it, [life is lived with intention or it is ruled by chaos](#).

When hero (who caught the girl) Steven Bernard’s daughter was asked about the actions of her dad, she said, he was just being dad, that is who he is and what he does. I want to encourage each of you [to be available to those around you](#), beware of your situation even when doing the casual things we do in our work life. Take the option of moving with purpose rather than just mowing people over. Happy summertime stay alert!

Take the Luck out of Safety

Why is it so hard to get safety right?

In attempts to improve safety, companies institute safety programs, purchase specialized equipment, and engage in safety practices that they believe have a positive impact. [Unfortunately the measure of that impact is flawed.](#)



Having a low incident rate is no guarantee that an organization is safe. Due to decades of improvements, the hazardous conditions and at-risk behavior that remain in many organizations today only occasionally result in incidents. Going a month, a year, or even several years without an incident may be a function of sheer luck.

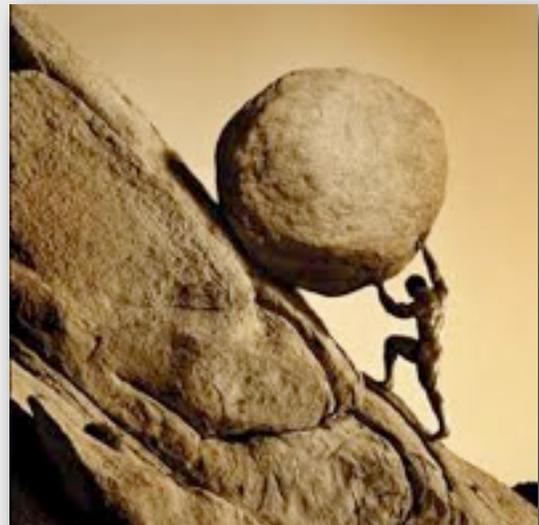
In many cases companies are *Safe by Accident*. <http://www.safebyaccident.com/>

The Potential for Greatness is Everywhere

It's hard not to think about greatness as we watch the 2012 Summer Olympic Games in London. Let's face it: the skill level of Olympic athletes is amazing. It has to be when the difference between a Gold Medal and Bronze comes down to just hundredths of a second. Being great — or, more specifically, performing at peak — whether you're an Olympic athlete or not, is directly linked to one thing. It's not talent; **it's deliberate practice**. We are so quick to say, "She is so talented" or "He has God-given talent." In truth, when you say someone is talented, you are actually under-evaluating their accomplishment. By declaring someone "talented," it diminishes the

sacrifices the athlete or person made to pursue his or her dream. It **devalues the discipline** required to practice in uncomfortable and occasionally miserable weather conditions (as is the case for Olympic athletes), not to mention a schedule that requires rising to practice before school or work and again later that day before bed.

It's too bad that we can't see these athletes practice, or that a ticker doesn't come on the screen before an Olympic event showing the number of hours each athlete practiced so we can put their performance in a perspective that would allow viewers to better value the accomplishment. The thing we sometimes forget to realize is that for those who achieve greatness, they do so by good coaching and LOTS of practice.



Business can — and does — fall victim to this perception of talent. Organizations tend to focus solely on talent rather than looking more at the prospective employee's [history of discipline and hard work](#). The best candidate should always be awarded the job — but if you are basing individuals on intelligence, you're looking at the wrong thing.

Talent management staff should instead [look for accomplishments](#) that reflect behavior patterns that have value for the corporation.

This point extends beyond the hiring in organizations, as it is also an important lesson for managers. A manager's actions, or lack thereof, impacts whether or not an employee reaches his or her highest potential.

Managers don't teach someone to the limit of the employee's ability, [but rather to the limit of the managers' ability](#).

In the spirit of the Summer Games, I offer the following tips to improve the level of practice and coaching in your organization:

1. [Aggressively train and promote people](#): As a manager, it is your job to retain and develop people. Part of any reward system for managers and supervisors should be the number of employees they keep and promote within the organization.
2. [Spend the time and money to train people to fluency](#): One of the most costly mistakes companies make is to put people in jobs before they are fluent in the critical aspects of the job. The amount of repetition required for fluency is far more than the average trainer understands, but the extra time pays off in happier customers and more confident and competent employees.
3. [Have a way of positively reinforcing and rewarding employees who put in extra time and effort](#): This requires observing behavior to make sure that those people who put in the extra effort are not overlooked or ignored. It has been proven that people who are rewarded for extra effort not only work harder on assigned tasks but also work harder on other tasks as well.

The business [that understands](#) that outstanding accomplishments come from good coaching and lots of practice rather than native talent and intelligence open up an unlimited pool of potentially outstanding performers.

<http://aubreydanielsblog.com/2009/07/21/expert-performance-apologies-to-dr-ericsson-but-it-is-not-10000-hours-of-deliberate-practice/>

Young Drivers View Drowsy Driving as Understandable

A recent study in the Journal of Safety Research from the National Safety Council indicates the dangers of sleep-deprived driving **are not highly** recognized among young drivers. Sleep-deprived driving can be as dangerous as alcohol-impaired driving, but attitudes about drowsy driving are less known. The study explains that:

- Sleep-related and alcohol-related car crashes occur predominantly among young drivers;



- Among drivers taking long trips on the highway, drivers under the age of 30 are more sleep-deprived than other age groups; and
 - The **driving errors** displayed by drinking drivers are very similar to those of drowsy drivers.
- "Drunk driving is universally viewed as dangerous, but young people especially don't understand the very serious risks associated with drowsy and distracted driving," said Janet Froetscher, president and CEO of the National Safety Council. "All drivers need to understand the dangers of driving while tired."

This study examined the differing perceptions young drivers have of sleep-deprived drivers compared to drinking drivers. Findings revealed that driving while tired was viewed as **understandable**, but that driving after drinking was definitely wrong.

<http://www.journals.elsevier.com/journal-of-safety-research/>

Nicole Michelle Lee

June 22, 1989 - Jan. 26, 2008

Nicole Michelle Lee was killed in a car accident on Jan. 26, 2008. [The driver fell asleep](#), hitting a tree going 55 MPH. There were no skids or brake marks. All five students in the car were Honor Students at Virginia Tech. They were on their way back to college from a skiing trip to Snowshoe Resort West Virginia.

Their daughter, Nicole, was in the front passenger seat of a 1999 Nissan Pathfinder headed along US 219 in Greenbrier County when the car left the road and hit the tree. She had to be cut out of the wreckage. We were not notified for a couple hours and had not enough time to travel to that part of West Virginia or Virginia in order to see our daughter alive. All five victims were taken to Greenbrier Valley Medical Center. Nicole was later transferred to Carilion Roanoke Memorial Hospital where she was pronounced dead. The driver had a quick hearing, without our notification. He pleaded NO CONTEST and received a \$25.00 fine. I have been enraged with the laws and criminal system since that day.



Question: Does sleep inertia (the grogginess experienced after waking-up) affect cognition and decision-making ability?

Imagine this: You're home in bed when your peaceful slumber is shattered by the ring of the telephone. Three maddening rings later, you manage to pick it up. An excited voice tells you there's an emergency at the plant and asks what to do. Do you:

- (a) hang up and go back to sleep;
- (b) immediately start dictating instructions;
- (c) wait at least three minutes before making any substantive decisions;

(d) or wait 10 minutes before making any decisions.

Answer: While your response depends to some extent on the emergency's severity, research suggests that you're probably better off waiting at least three minutes — but that there's relatively little to gain from waiting more than 10.



One study, from Melbourne's Victoria University, investigated the phenomenon of **sleep inertia** — the temporary grogginess and disorientation often experienced upon awakening. After going to sleep at their normal bedtime, a dozen volunteers were roused from Stage 4 sleep — the deepest stage — between 12:30 a.m. and 5:15 a.m. by a 75-decibel fire alarm.

They immediately took a computer “fire chief” test designed to assess decision making ability. As a fire spreads from a forest to 10 houses, subjects must decide how to best use a truck, a helicopter and five dams that replenish the water supply. They had previously taken the test during the daytime.

The results, reported in the *Journal of Sleep Research*, were intriguing. For the first three minutes after waking, subjects performed at only 50% of their daytime level. Between three and six minutes, performance rose to 75%, and it reached 84% after 12 minutes — where it pretty much remained for the rest of the half-hour test.

Another study, from the University of Colorado - Boulder, reported similar results when they studied how sleep inertia affects cognition. In this study, nine healthy individuals were awakened and given a simple math test.

The researchers reported in the *Journal of the American Medical Association* that study participants had severe impairments within the first 3 minutes of awakening. Additionally, the study found that cognitive performance immediately on waking was worse than performance during subsequent sleep deprivation.

The study noted these results have important implications because many safety-sensitive occupations require individuals to **perform immediately** on awakening.

So always be aware of sleep inertia and its adverse effects on decision making. And the next time you get an overnight call, if at all possible give yourself at least three minutes to clear your head before making any judgments with irreversible consequences.

Watch out for unhealthy responses to stress

A WORRYING TREND

You probably have your own ways of dealing with stressful times. Some may be healthy, such as calling a friend, cooking a comforting dinner, or curling up in bed earlier than usual. Others may not be as harmless.

All too often, people self-medicate or [turn to other unhealthy behaviors](#) in an attempt to relieve pressure they feel. They may do so in a variety of ways. For example:

- Watching endless hours of TV
- Withdrawing from friends or partners or, conversely jumping into a frenzied social life to avoid facing problems
- Overeating or weight gain
- Under eating or weight loss
- Sleeping too much
- Drinking too much alcohol
- Lashing out at others in emotionally or physically violent outbursts
- Taking up smoking or smoking more than usual
- Taking prescription or over-the-counter drugs that promise some form of relief, such as sleeping pills, muscle relaxants, or anti-anxiety pills
- Taking illegal or unsafe drugs

