

# Aviation Human Factors Industry News

*Volume XI. Issue 23, November 29, 2015*



*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:

★Maintenance lapse caused fire in IndiGo flight last year: DGCA

★Addressing the topic of pilot pressure

★Cocktail in the cockpit

★Are Drones Deadly to Helos

★Spacecraft Collision? Hang-glider Fire? There's a Code for That

★World's First FAA Approved Aviation Maintenance Technology Course with E-Learning Leading to FAA A&P Certification and Associate Degree

★Composite textbook now in ebook

★Foot stuck under rudder pedal contributes to crash

★And Much More

## Maintenance lapse caused fire in IndiGo flight last year: DGCA

The fire in an IndiGo aircraft at Kathmandu airport last year was due to "over tightening" of hose pipe at the time of maintenance work, according to DGCA probe report, which also indicated that crew **did not have adequate training** to deal with emergency situations.



Except for small cuts and bruises, there was no injury to any of the 182 persons on board, including six crew members, when the right main landing gear caught fire in IndiGo's [Airbus A320](#) aircraft during parking at Kathmandu's Tribhuvan International Airport after it had landed from New Delhi on March 8, 2014.

"As the operating hydraulic pressure is very high, the **scratches/metal gauging marks** in the connector plug/sleeve gave way to the hydraulic fluid.

"After the hydraulic fluid came in contact with hot brakes smoke was generated and subsequently fire. The scratches/metal Gauging marks in the inter diameter of QAD connector **had probably occurred due over torque (over tightening)** during maintenance," Directorate General of Civil Aviation said in its detailed 30-page final investigation report into the incident.

Surprisingly, the inquiry officer had completed its report in July but the DGCA, the aviation regulator, has made it public only now, few weeks after the airline got listed on the bourses.

Suggesting measures to ensure safety of the flight, the probe report said that IndiGo should make sure that the pilot in command **adheres to standard operating procedure** in case of emergency evacuation and not influence the cabin crew during evacuation process.

IndiGo procedures for arming/disarming the doors should be "inline with the Airbus/aviation operators within the country", it added.

According to the investigation report, at the time of the incident the captain had instructed cabin in-charge to evacuate immediately and then instructed evacuation from right side of the plane.

"This was not as per Airbus/company approved operating procedures," the report said.

Another recommendation is that IndiGo should ensure that its cabin crew is [adequately trained](#) to deal with crowd control in emergency

## Addressing the topic of pilot pressure

Have you ever waited for a plane to depart into the bush only to groan when a weather delay is announced? Do you vent your frustration on the customer service employees and the pilot? As a pilot, [have you waived in your decision to fly](#), only to have your mind changed by the people around you?

These scenarios happen everyday in Alaska, but lately are receiving some increased scrutiny. The fall issue of the Alaskan Aviation Safety Foundation newsletter tackles the issue [of pressure](#) and how it can cause pilots to make unsafe decisions. According to Mark Madden, a professor with the University of Alaska Anchorage Aviation Technology program and a Master Flight Instructor, pressure can come from [internal and external sources](#) and be very difficult to resist:



"Quite often," writes Madden, "pilots are 'caught in the middle' between trying to please someone else like your passengers or perhaps your boss if you're a commercial pilot, [and doing what you know is best and safe](#). Doing the right thing requires [self-discipline](#) and having the courage of your convictions."

It's difficult to know when pressure—either internal or external—is a factor in a crash however because it affects each pilot differently. Was a pilot who overloaded her aircraft after a hunting trip pressured by friends to do so or simply eager to fit everything into the fewest trips possible? Did a newly-hired pilot who took off in marginal conditions feel pressure to prove to his co-workers that he was up to their [unwritten standards](#) or did he blithely assume he was as capable as they were of completing the flight in unfamiliar territory?

How often are Alaskan pilots, whether flying professionally or for themselves, persuaded to take chances because [of the influence from others](#) or their own misconceptions about what flying in Alaska supposedly entails?

Effectively tracking evidence of pressure among pilots is impossible, but the National Transportation Safety Board has studied the issue among Alaskan commercial operators in the past, producing two reports in 1980 and 1995. In both, based on information gathered from surveys, the NTSB noted external sources as passengers, the delivery policies of the U.S. Postal Service and [unsafe corporate cultures](#) among employers. It also looked at the more ambiguous “bush pilot syndrome,” a combination of the universal internal pressure known as “get-home-itus”, and the mindset more unique to Alaska aviation that encapsulates the glory-seeking Last Frontier mythology and the legendary heroics of the early bush pilots. It's this aspect of the syndrome that has lead many to believe flying here is inherently dangerous and thus requires a [level of risk-taking](#) on behalf of all pilots.

Evidence of bush pilot syndrome and other sources of pressure can be detected in the subtle language of accident investigations and news reports such as when a Flight Service Station tells the NTSB that a pilot mentioned passengers getting impatient shortly before departing into marginal weather and crashing or pilots in a line of aircraft recall hearing the pilot in the rear report that she was struggling to keep up with them before crashing into the terrain.

It is willingness among the members of the Alaska aviation community to address pressure as a serious safety concern that will likely have the most significant impact on the problem. Frank discussion on the topic among pilots, such as at the upcoming AASF fall safety seminar, will resonate more than anything else and positively affect future decision-making. “[Set your personal minimums \(ceiling/visibility, risk assessment score\) before you fly and stick to them,](#)” wrote AASF Chairman Harry Kieling in the newsletter. This sentiment is echoed by Madden in his article: “Don't be concerned about letting someone down because you've determined the requested load for the airplane exceeds the aircraft's design capabilities. Don't be concerned about letting someone down because the weather is unacceptable to launch. Instead, be concerned about letting someone down because you knowingly are willing to take unnecessary chances.”

## **Cocktail in the cockpit**



While pilot fatigue can be common and overlooked, it poses a very troubling threat to aviation safety and should be taken seriously. An **inebriated** pilot was the probable cause of the Shaheen Air International flight NL-142 accident, which occurred on November 3, 2015; the flight crash-landed at Lahore airport. The plane skidded off the runway when faulty landing gear caused the tyre to burst. As many as ten passengers were injured. While the pilot's perspective is awaited, medical reports reveal the pilot was **intoxicated and fatigued** at the time of landing. Ironically, to land a plane without sleep would mean a level of tiredness that equates to being **four times over** the legal alcohol limit for flying.

Fatigue is a threat to aviation safety because of the impairments in alertness and performance it creates. The impaired judgement, decision-making and flying abilities of the captain due to the effects of alcohol and fatigue, his failure to properly assess the conditions for landing and maintaining **vigilant situational awareness** of the airplane while maneuvering onto final approach resulted in his failure to prevent loss. A drunken pilot is a drunken pilot, regardless of the plane.

Fatigue **creeps up** on pilots, slowly diminishing crucial mental capacity for decision-making. Reaction times slow down and situational awareness decreases as pilots tire. A 2013 survey by the British Airline Pilots Association showed that more than half of British pilots admitted to nodding off during flight and that one in three said they awoke to find the other pilot asleep. The effects of fatigue resemble those of **alcohol impairment** but they are much less measurable. The Civil Aviation Authority (CAA) can, however, still impose standards to prevent pilots from consuming alcohol and reaching exhaustion. In 1992, a 747 cargo jet crashed into an apartment building shortly after take-off from Amsterdam, killing the four people aboard the plane and 39 on the ground.

Whether there are packages or people behind the cockpit door, pilot fatigue exists just the same and it threatens the lives of pilots, passengers and bystanders on the ground alike. There is hardly any argument that in the air and on the roads alcohol and fatigue can kill.

I know two commercial airline pilots in the family and fatigue is the biggest problem they face in daily operations, especially on early duty when they are getting up at four am to go to work and have 12-hour days. Airlines tend to look at duty limitations as targets so they will push crews to the absolute legal limit to increase productivity. Pilot fatigue has long been a concern and the European Aviation Safety Agency (EASA) has signed into law recently proposing new EU-wide rules setting limits on the duration that pilots could fly and be on duty to ensure passenger safety is not compromised by tired pilots. The issue has always been contentious, with airlines trying to turn a profit and pilot unions making sure that their members are not being pushed beyond their limits. Today, the issue is still being argued as the industry tries to [find a common solution](#) in an effort to decrease the risks associated with fatigue.

Fatigue is a threat to aviation safety because of the impairments in alertness and performance it creates. [Conditions that contribute to fatigue include](#) the time passed since awake, the amount of time spent doing the task, sleep debt and circadian rhythm disruption. As fatigue progresses it is responsible for increased [errors](#). Many of the unique characteristics of the flight deck environment make pilots particularly susceptible to fatigue. Contributing aircraft environmental factors include movement restriction, variable airflow, low barometric pressure and humidity, noise and vibration. In commercial aircraft, hands on flying has been mostly replaced by greater demands on the flight crew to perform vigilant monitoring of multiple flight systems. While the CAA and aviation operators can help mitigate the risks of pilot fatigue through education, changes to flight hour limitations and other [fatigue management programs](#), the ultimate responsibility of fatigue management lies with pilots themselves.

For years, pilot fatigue has been a real issue. Airline pilots, as well as cargo, corporate and charter pilots can all face fatigue while on the job. While pilot fatigue can be common and overlooked, it poses a very troubling threat to aviation safety and should be taken seriously. There is a long history of debates between regulatory agencies, airline pilots and unions, and aircraft operators over pilot fatigue issues. This is why CAA needs strict, [scientifically based rules](#) to prevent fatigue from posing a risk to the safety of passengers, crew and people living under the flight-paths.

Fatigue has been blamed in numerous aviation accidents over the years and is a continuing problem faced by crews flying aircrafts of all sizes. Why does the CAA not make and enforce laws concerning the conduct of airlines and pilots?

Why it is that one type of operation has different flight and duty time restrictions than another? Does the type of operation have any bearing on the level of fatigue that crewmembers experience? Why does the CAA mandate that simple duct tape requires their testing and approval yet companies are allowed to put a flight crew in the noisiest hotels just to save a few thousand rupees? Why is it not allowed for flight crews to alternate taking controlled, planned naps while en route? [The rules are changing but not fast enough.](#)

The reality is, however, that CAA authorities often need a fatal wake-up call before they introduce adequate measures to screen the physical and mental health of the pilots and Flight Time Limitation (FTL) rules. The airlines need to recognize that the cost of fatigue and the errors that result is much higher than the cost of ensuring adequate rest for their crews. [Seventy percent of accidents in aviation are due to pilot error and fatigue is a major cause of those errors.](#) If the airlines took measures to reduce fatigue, they would reduce the chances of errors due to fatigue. Many airlines have seen their total demise due to a single accident like in the case of Valujet Flight 592. It is obvious that preventing fatigue will have a major cost advantage. Aviation psychologists have warned that the effects of severe fatigue are comparable to those provoked by alcohol. However, whilst alcohol is forbidden in transport, fatigue in the cockpit is multiplied when cocktailed with fatigue.

## [Are Drones Deadly to Helos?](#)

The U.S. Transportation Department's drone registration task force gathered recently in Washington, D.C., to start work on recommending requirements for [marking and tracing ownership](#) of unmanned aircraft systems (UAS). A key question for the 26 task force members was framed by FAA Administrator Huerta: What products should we exclude from registration based on weight, speed, altitude and flying time? That begs the question of what drones pose hazards to helicopters and other aircraft based on their weight, speed and other characteristics. That matter is under study in various quarters, [but bird strikes may offer a starting point for research.](#)



The 2011 crash of a U.S. Marine Corps/Bell Helicopter AH-1W at Camp Pendleton, California, is a case point, according to Mike Hirschberg, executive of the vertical-flight technical society AHS International. Both pilots on the Cobra were killed in the crash that was attributed to a [3-lb red tail hawk's collision](#) with a pitch change link, which led to separation of the main rotor. Drones flying at higher airspeeds and those made of metal or other hard synthetic parts could cause similar damage to a helicopter rotor system, windshield or engine, Hirschberg posited, particularly since helicopters and small drones occupy the same low-level airspace.

## Spacecraft Collision? Hang-glider Fire? There's a Code for That

**A new medical coding system allows your doctor to be specific about the cause of injury. Very specific.**

In 1924, there wasn't a code for this. A U.S. Army Air Corps Curtiss NBS-1 nosed over in a plowed field. (NASM 00190537)

[t's a dangerous world out there.](#) But you can relax: it can now be documented fully. As of October 1, health care workers, using the revised International Classification of Diseases, can identify and report thousands of injuries—to a very specific degree.



Injured while boarding or alighting from an aircraft? Use code V97.1XXA. Sustain burns in a hang-glider fire? That's V96.14XA. Forced to land your spacecraft? V95.42XA. Sucked into a jet engine for the *second* time? V97.33XD.

The ICD system dates back to Florence Nightingale, who was horrified by the statistical records kept during the Crimean War. Nightingale's subsequent report—showing that for every soldier who died from his wounds, seven others died from disease—was given to the War Office and Army Medical Department. The report made a profound impression, eventually leading in 1900 to the first attempts to classify causes of death by hospital, region, and country.

The International Classification of Diseases document was revised in 1909, 1920 and 1929. During those years there weren't separate codes for aircraft or balloon fatalities (physicians could use "Injury by Machines," if necessary). It wasn't until the 1938 revision that aviation categories were added, including "Air Transport Accidents" (code 173) and code 196 ("Deaths of persons in military service during operations at war").

The 1948 revision, as one might expect, became much more specific, with six aviation categories, including "Accident to personnel in military aircraft" (E860) and "Aircraft accident at airfield to person not in aircraft" (E864). (In contrast, there were more than 200 categories for motor vehicle accidents, including "Motor vehicle accident involving railway train" and "Motor vehicle accident involving collision with animal-drawn vehicle.") No updates were made to the aviation portion of the 1955 revision.

In 1965 and 1975, the category was broadened to include "Air and space transport accidents" (totaling some 48 separate codes). With the latest revision, helicopters, spacecraft, and gliders each get separate categories. (All other modes of flight are incorporated into "aircraft")

<https://www.cms.gov/medicare-coverage-database/staticpages/icd-10-code-lookup.aspx>

## **World's First FAA Approved Aviation Maintenance Technology Course with E-Learning Leading to FAA A&P Certification and Associate Degree**

Computerized Training Systems LLC (C-T-S.com), located in Orlando, Florida announced recently that it has been working with Spartan College of Aeronautics and Technology to develop [the e-learning platform for the distance education](#) portion of Spartan's Aviation Maintenance Technology Program.



## Composite textbook now in ebook

The textbook, which can also be downloaded from iBooks, is a primer for [beginners to composite technology](#), yet also works as a [resource for long-time composites professionals](#), according to ASA officials.

The book covers a wide array of composites fundamentals, including fiber and matrix selection, curing and achieving desired properties, tooling design and use, testing and nondestructive inspection, step-by-step repair instructions and troubleshooting, and also covering the key environmental, health and safety issues that affect the industry. The book is available in print, eBundle, eBook PDF, eBook ePub, and iBook formats.



“[Essentials of Advanced Composite Fabrication and Repair](#)” is now available in eBook ePub format from [ASA](#).

## Foot stuck under rudder pedal contributes to crash

The Cessna 182Q pilot reported that after landing in Braggadocio, Mo., with an eight mph crosswind, his left foot became lodged under a rudder pedal.

The plane drifted off the runway pavement. He was unable to correct because of the soft turf condition. The nose landing gear subsequently dug into the ground and the plane nosed over.



The plane sustained substantial damage to the fuselage, left wing, and vertical stabilizer.

The NTSB determined the probable cause as the pilot's failure to maintain directional control during landing rollout, which resulted in a runway excursion and the airplane nosing over.

NTSB Identification: [CEN14CA040](#)

This November 2013 accident report is provided by the [National Transportation Safety Board](#). Published as an educational tool, it is intended to help pilots learn from the misfortunes of others.

## Drug Errors During Surgery

If you undergo an operation, there is a good chance your doctors **will make a mistake**. A new study suggest that about half of all surgery patients are victims of medication errors or adverse drug reactions. Researches at Massachusetts General Hospital found that at least one drug-related incident or error took place in 124 of 277 operations observed at the highly respected medical center.



**That error rate is likely to be similar to other U.S. hospitals**, researchers said. Most involved improper drug labels or dosages; doctors also often overlook medications that might have proved beneficial. None of the patients in the study died, but more than one-third of the observed errors resulted in injuries to patients. Researchers note, however, that nearly **80 percent of medication errors in the operating room are preventable**. “No error is acceptable, and yet, as the saying goes, to err is human,” Dr. David Katz, director of Yale University Prevention Research Center, tells CBSNews.com. “What all this means is that **human behavior** cannot be the only safeguard against error.

Rather, we need a **multilayered defense** involving careful humans backing one another up, and automatic system backing up the humans.”

## One Key Ingredient in a Team Worth Working For

And Here's a Hint: It's Not Talent, Skill, or Expertise



**Infectious enthusiasm** is a key ingredient in a team worth working for. Talent, skill, expertise are only part of the picture. If you're not bringing energy, optimism, and creativity to the party, it won't be much fun. Why? **Motivation**. Enthusiastic people bring their own battery pack. You never have to worry about motivating them because they're already plugged into the business and fully engaged.

- **Solutions.** Problems and obstacles are part of business. A former colleague of mine used to say that if work was easy, they wouldn't pay us. But enthusiasm unlocks innovative thinking. Instead of seeing the roadblock and turning around, enthusiastic people find workarounds. They'll go over, under, around—or just build a new road.
- **Ownership.** Can-do people own whatever part of the process and outcome they're responsible for—and they're usually willing to assist on the rest. That means they don't need heavy management. They just get going and get things done.
- **Achievement.** Achievement takes energy. If you have motivated team members who are eager to find solutions and own the outcome, guess what happens? You start accomplishing goals.

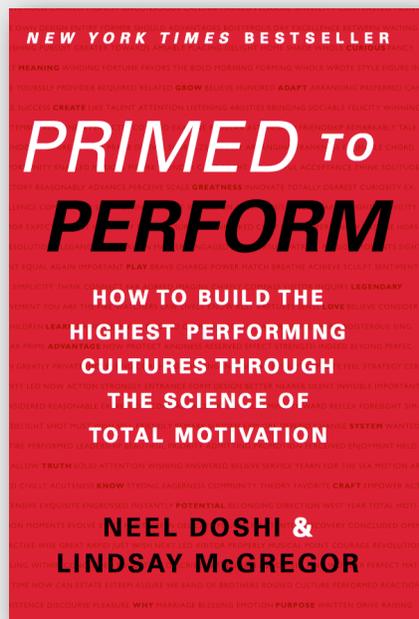
- **Culture.** Whether good or bad, attitudes are communicable. Enthusiastic people are fun to work with, which means they can bring up the mood of the whole team. It's infectious. The net result is a positive team culture. And here's the great thing. It's practically self-perpetuating.

Some people might object and say this is really a question of personality. What they mean is that people can't help it. They're either positive or not. But that's not true. Enthusiasm is a choice. the attitude we bring to our circumstances is entirely within our own control.

<http://michaelhyatt.com/batteries-included.html>

## **Build A Culture Designed to Perform**

Neel Doshi and Lindsay McGregor have just written a book, *Primed to Perform: How to Build the Highest Performing Cultures Through the Science of Total Motivation*, that answers these questions and more. It is written as a guidebook for those who know how important a strong culture is, but they don't know what steps to take to create one.



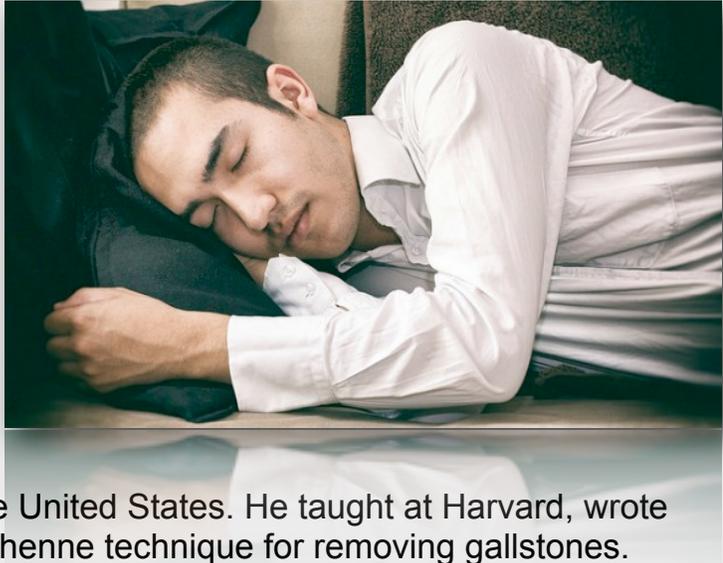
LINDSAY MCGREGOR  
NEEL DOSHI

## What My Father's Death Taught Me About the Importance of Sleep

Perhaps you can't regret something when you didn't know any better at the time.

If you could have told me in my thirties that my father would die of ALS at the age of 69, I never would have believed you.

If anyone seemed like they could defy death, it was my dad. He was once one of the most celebrated radiologists in the United States. He taught at Harvard, wrote textbooks, and developed the Burhenne technique for removing gallstones.



By all external measures, my dad was an extremely fit and healthy man. He was a competitive downhill skier and accomplished mountaineer, and we summited several of North America's tallest mountains together. He was a tremendous athlete. But something, or multiple things, went very wrong and set off a chain of events in his body and brain. Ever since he died in 1996, I have wondered how such a healthy man could have deteriorated in such a spectacular way. Sure, you might say it was genetics or just bad luck, but still I would wonder.

Over ten years later, our lives were changed forever when my wife was diagnosed with sleep apnea. That's when I began learning everything I could about sleep disorders. I stumbled into a field called sleep medicine dentistry, where dentists treat sleep apnea, to help my wife when she couldn't tolerate a breathing machine.

The more I learned, the more I would remember my dad. I would remember the nights we would sleep together in a tent while climbing a mountain when his loud snoring would keep me up. Having been his dentist, I remember seeing all of the signs of someone suffering sleep apnea with his teeth, tongue, and back of the throat—things we didn't know back were the signs of someone suffering from sleep apnea.

Of course, I'll never know for sure why my dad got so sick. But I do believe that if he could have known what we know now about sleeping better, he could have had a better chance.

I think about him all the time when I treat my patients and their sleep disorders.

I think about him when it's inconvenient for me to deal with my sleep apnea when it's hard to squeeze in an appointment with my sleep doctor or to spend the night away from home getting a follow-up sleep study, which I have to do every couple years for the rest of my life.

I think about him as I get older and hope to be around for my three daughters and their weddings, the birth of their children and one day being a grandfather myself.

I wish I had known how serious something like [snoring or grinding your teeth](#) was back in those days. I used to brush it off when my wife and daughters would tease me for my snoring in the car on family trips.

I used to subscribe to the old adage, "I'll sleep when I'm dead." I wanted to squeeze all I could out of life, and I used to think of sleep as something that was a necessary evil to get to the next day.

[Our culture doesn't give sleep much respect.](#) We share YouTube videos of adorable snoring babies or a funny video of a wife videotaping her husband's snoring. We fall asleep in bed with the blue light of our phones that throws off our circadian rhythms and reduce the amount of time we spend in deep stage sleep—the only stage where human growth hormone is produced and the brain is wiped clean of the "trash" produced during the day.

[Sleep isn't lazy.](#) It isn't unproductive. It isn't "dead time." Sleep is what protects us from illness, boosts our immune system, and repairs our bodies. Beyond that, sleep makes us the emotionally available and patient spouses, partners, and fathers we all strive to be. My father's love of the mountains lives on in me. I continue to take backpacking trips with my wife, friends, and daughters.

I still hear snoring in the tent, but now I know better than to brush it off. [I don't let my friends off the hook](#) when I confront them about their snoring. I've helped my wife and one of my daughters get treated for their snoring.

I am deeply saddened that my dad never got help. I'll always regret that I never thought to mention his snoring to him or push him to get help; after all, people with sleep apnea have a [20% shorter life expectancy on average](#). Even if treating his sleep apnea couldn't have saved him, maybe he could have been around long enough to meet his third grandchild.

Perhaps you can't regret something when you didn't know any better at the time. Regardless, this is what drives me in my day-to-day work in treating sleep apnea. [If you know someone who snores, tell them. It really could just save their life.](#)

## How good leaders encourage workers to keep growing

A manager who doesn't appreciate the value of something or simply doesn't want to do it will always find an excuse not to. And, when it comes to employee development, one doesn't have to look far for a legitimate one! [Organizations unwittingly create impediments to growing people](#) — something that's recognized as a competitive advantage and requirement for sustainable success.



[Which barriers have you witnessed or experienced?](#)

- A corporate schedule requiring that hours and hours of development planning and conversations be forced into a short window — frequently in the same time frame as budgeting or other mission-critical activities.
- Unnatural performance management systems and restrictions that result in good people receiving mediocre ratings.
- Bottlenecks in the organizational chart that result in little opportunity for promotion — and even less for raises or merit pay.

These barriers are real. They're frustrating. They aren't likely to go anywhere in the foreseeable future. And they aren't deal breakers for leaders who are genuinely committed to helping others grow. The best people developers I know live in this same world and grapple with these same limitations. And yet their people thrive.

Exceptional people developers beat bad systems by recognizing that genuine, sustainable, career-driving growth rarely results from formal processes but rather in spite of them.

They do what they must to comply and provide the data demanded by the organization; **then they get to the real work of development** — work that is about people not processes, relationships not remuneration, and opportunity not necessarily organizational moves.

Exceptional people developers embrace **four hallmarks** that allow them and the people they support to thrive despite conditions that others experience as constraining.

### **Keep talking**

Exceptional people developers keep the lines of communication open all year long, not just when the organization instructs them to. Career development is not a “one and done” activity. It requires ongoing attention throughout the year because employees are changing and transforming every day. Exceptional developers engage in short conversations that tease out evolving interests, strengths and motivators. They find ways to infuse a development focus in routine occurrences and interactions. They keep development alive well beyond the formal conversations that support organizational process.

### **Build accountability**

Leaders who are most effective at helping others learn and grow do less — not more — than others. They appreciate that employees must own their own development; and they help others internalize this idea. They refuse to do the heavy lifting; instead they help others own their goals, actions and results. They insist that employees take the lead (with their support). They might make a networking introduction but then encourage the other persons to take it from there. When confronted with a problem, they help others come to their own solutions versus providing answers. Holding others accountable for their development and related commitments builds ownership and reinforces the employee’s pivotal role in their growth.

### **Highlight progress**

The work of Teresa Amabile, Steven Kramer and others illuminates another key hallmark of “systems-beating” development: progress is a powerful motivator. Small wins and modest steps forward can boost creativity, productivity, engagement and persistence. Exceptional people developers continuously scan the environment for hints of progress. They “catch” people taking action to support their goals and development plans. Simply drawing attention back to development reminds staff members of their intentions and invites them to recommit to them.

## Optimize learning

Too frequently development reflects the sentiment of this T.S. Eliot quote: “We had the experience but missed the meaning.” A nearly infinite number of development actions can drive growth objectives and, in the process, offer tremendous opportunities for learning and insights. But for many, these insights will pass unnoticed without help and encouragement. Exceptional people developers support others in extracting maximum benefit from each developmental action or activity by deliberately debriefing it, forcing reflection, and asking a few key questions to unpack the learning it afforded.

When leaders redefine development, they change the rules of the game. When they make it personal, they create connections and motivation that transcend perceived organizational limitations. And when development becomes pervasive rather than periodic, the challenges of organizational processes fade in the light of opportunity and growth. And in this way, bad systems are no match for exceptional people developers.

## New book, ‘A Pilot’s Accident Review,’ published

The book compiles an in-depth analysis of high-profile — as well as some not so well-known — aviation accidents, such as the JFK, Jr. and Concorde accidents, and those involving Frank Sinatra’s mother, Reba McIntire’s band, John Denver, and Wiley Post. “A Pilot’s Accident Review” provides pilots with a closer look at [safety procedures in intense circumstances](#), such as flying through extreme weather or hazardous environments, and is designed to build awareness of the most preventable factors in pilot error, including the primary causes of controlled flight into terrain (CFIT) and loss of control (LOC)



The book is available in softcover, as well as eBook PDF and ePub formats.

Now available is "[A Pilot's Accident Review](#)" by John Lowery.

## **FAA: Fly Safe With Your Drone**

You're heading to the stores on Black Friday to buy that shiny new camera-equipped drone you've yearning for. You can't wait to get into the sky and let loose your inner high-flying aerial photographer, right?

Did you know you're also going to become a pilot?



When you fly your drone anywhere in the nation's airspace, you automatically become part of the U.S. aviation system. Under the law, your drone is an aircraft. So while the rules for drones may be different, you have the responsibility to operate safely, just as a Cessna or 747 pilot does.

The FAA has developed this [safety checklist](#) that you, as a pilot, should use whenever you send drone into the Wild Blue Yonder. We want you to fly safe, fly smart – and have fun.

[http://www.faa.gov/news/updates/media/2015-FAA-383-UAS\\_Holiday\\_Pre-flight-checklist\\_1200x627\\_ae05.pdf](http://www.faa.gov/news/updates/media/2015-FAA-383-UAS_Holiday_Pre-flight-checklist_1200x627_ae05.pdf)