Aviation Human Factors Industry News

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

Hello all' From the sands of Kitty Hawk, the tradition lives on.

To subscribe send an email to: <u>rhughes@humanfactorsedu.com</u> In this weeks edition of Aviation Human Factors Industry News you will read the following stories:

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★Friday FCF Follies ("What Rig Pin?")

FAA's Aviation Mx HF Newsletter, Vol. 3, Issue 4



Written by maintenance human factors professionals dedicated to identifying and optimizing the factors that affect human performance in maintenance and inspection. Past newsletters @ humanfactorsinfo.com

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https://www.faa.gov/about/initiatives/maintenance_hf/fatigue/publications/

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Was FAA Ready Watching Met For the first decade or two of my aviation career, I saw the Federal Aviation Administration as the aviation The evidence rules and guidence siped to ensure that my training met safety standard. They were

Airline Safety Record Improved In 2015

In 2015, 560 people were killed in 16 commercial aviation accidents worldwide, the Aviation Safety Network reported this week. Overall, it was the lowest number of fatal crashes ever, and it was the fifth-safest year for fatalities, according to ASN. The five worst crashes all had "at least a contributing cause of human," according to an



analysis by Jacdec, a German research firm. In March, a pilot deliberately crashed an Airbus A320 in the French Alps, killing all 150 on board, and a terrorist bomb is the suspected cause in the crash of a Russian jet carrying 224 people in October. The other worst commercial aircraft crashes in 2015 were an ATR-42 in Indonesia, killing 54; an ATR-72 in Taiwan with a death toll of 43; and the loss of an Antonov An-12 in the Sudan, killing 25. The year showed dramatic improvement from 970 deaths in the "disastrous previous year," when two widebody jets crashed with the loss of all on board, said Jacdec. Over the long term, analysis shows a shift away from technical causes and toward the human factor, Jacdec said. Given the estimated worldwide air traffic of 34 million airline flights in 2015, the accident rate was 1 fatal accident per 4.857 million flights, according to ASN. "Since 1997 the average number of airliner accidents has shown a steady and persistent decline," said ASN, "for a great deal thanks to the continuing safety-driven efforts by international aviation organizations such as ICAO, IATA, Flight Safety Foundation, and the aviation industry."

http://www.avweb.com/avwebflash/news/Report-Germanwings-Pilot-Practiced-On-Prior-Flight-224038-1.html

http://www.avweb.com/avwebflash/news/Egypt-Refuses-to-Concede-Terrorism-in-Russian-Crash-225365-1.html

http://www.avweb.com/avwebflash/news/Trigana-ATR42-Crashes-In-Papua-

Indonesia-224701-1.html

http://www.avweb.com/avwebflash/news/TransAsia-ATR-72-Crashes-in-Taiwan-Video-

Updated-223511-1.html

Factors in Aviation Maintenance

Brief overview of the "Dirty Dozen" in Human performance in aviation maintenance.



https://www.youtube.com/watch?v=c5fGOP5Jo1o

NEW HUMAN FACTORS REFRESHER COURSE.

BRAVO GOLF AVIATION announces a NEW HUMAN FACTORS REFRESHER COURSE. Robert "Bob" Gould, President of Bravo Golf Aviation is now offering a 1-day, 8 hour Human Factors refresher course. "Aviation Maintenance Human Factors Refresher" includes a review of human performance, then takes the technician into specific areas of aircraft maintenance such as situational awareness, technical communication, complacency, distractions, failure to follow



procedures, normalization of deviance in the workplace, fatigue, and fatigue risk management for the individual technician. The course closes with a brief review of the Federal Air Rules applicable to technicians and how these rules affect human performance.

This course is taught on-site at a customer's location, and is FAA accepted for 8 hours of IA renewal training. This course may also be divided into two 4-hour segments. Bob Gould has over 47 years of aviation experience, is a certificated A&P, commercial pilot, and a retired Naval Aviation Maintenance Officer. In addition to teaching his 2-day "Practical Aviation Risk Management" course (NBAA PDP approved and FAA IA accepted 8 hours)), he is an accredited IBAC IS-BAO auditor and instructs part-time at the University of Southern California's Aviation Safety and Security Program.

For further information, contact Bob Gould at 413.320.3977, email him at <u>bravo-golf-aviation@earthlink.net</u>, or visit his website at www.bravogolfaviation.com.

Putting passengers first: An industry-wide commitment to advancing aviation safety

Every day, millions of people board airplanes around the world, trusting that they will arrive at their destinations safely – whether they are visiting family or friends, traveling for an important business meeting or flying to experience a new part of the globe.

This high-level of confidence is warranted, as jet aircraft remain one of the most reliable and safe forms of travel today. As an aviation industry leader, Airbus plays an important role in ensuring this safety – but it is hardly alone – sharing a true commitment among all key stakeholders.

Continuous innovation to support a shared industry commitment

Since the birth of modern commercial aviation, consistent progress in safety has resulted from a wide range of improvements.

For example, the advent of commercial jet engines in the late 1950s enabled airliners to fly above the weather, and continuous developments since have made these powerplants



ever more reliable and efficient. Also contributing to safety have been such technologies as "glass" cockpits with electronic flight instrument displays, better autopilot systems and more. Other gains in aviation safety have resulted from enhancements in flight training – with better tools, methods and flight simulators, along with the emphasis on managing human factors – while computers and communication technologies have improved air traffic control systems and navigation techniques.

Safety: an ongoing priority for the future

As air transport continues to evolve, the industry's safety improvement list is still growing and its top priority remains the same: ensuring that everyone reaches their destination safely.

This commitment is relevant to passengers, crewmembers, travelers, relatives of those flying, as well as all citizens – and will continue with new innovations and more advanced aircraft that create even better ways to fly in the future.

http://videos.airbus.com/video/7fec4d79900s.html

Safety of budget carriers

The Ministry of Land, Infrastructure and Transport of Korea has unveiled plans to conduct a review of the country's six low-cost carriers following a string of safety lapses.

The plan seems appropriate, given that the recent frequent accidents might augur ill for budget carriers that could be involved in a disaster. The transport ministry needs to make thorough safety inspections.

On Sunday, a Boeing 737-800 jet of Jin Air bound for Busan returned to Cebu, the Philippines, about 30 minutes after takeoff when one of the plane's doors was found to be not completely closed. No serious injuries were reported, but some passengers complained that they had suffered from headaches and pain during the return trip.



On Dec. 23, a passenger jet belonging to Jeju Air, another budget carrier, plunged in mid-air due to problems with its onboard air compression system while flying from Seoul to Jeju, sending passengers into a panic. A few days earlier, an Eastar Jet plane bound for Hong Kong also returned to Incheon 50 minutes after takeoff, again due to a malfunctioning air compression system.

That three accidents occurred in a matter of weeks shows that there might be serious safety lapses in the country's LCCs.

Experts say the series of accidents may have been predicted beforehand, given the LCCs' rapid growth over the past decade. Budget carriers have attracted passengers by offering lower airfares, accounting for more than half of domestic flights. The emergence of the LCCs also helped boost the domestic tourism market.

But they have also been under fire for neglecting safety measures while focusing too much on cutting costs in an increasingly crowded market. Between 2006 and 2014, budget carriers suffered 0.63 accidents per 10,000 flights, nearly quadruple the 0.17 accident rate of Korean Air and Asiana.

LCCs' frequent accidents are attributed largely to the excessive operation of their airliners. The fact is that increasing flights while the number of planes is minimal has resulted in the deterioration of plane fuselages quickly, making it difficult for planes to receive proper maintenance. The employment of less skilled pilots is also blamed.

The low-cost airlines need to use the transport ministry's upcoming inspections as an occasion to overhaul their overall safety systems. What is most desirable is for them to awaken to the importance of the active investment in safety.

The government, for its part, should pay more attention to improving aviation safety-related measures and toughen penalties against offenders.

EasyJet A319 lands on closed Pisa runway

Italian investigators are looking into an incident involving an EasyJet Airbus A319 which mistakenly landed on a Pisa runway which had not been in operation.

Pisa has closely-spaced parallel runways, 04L and

04R, separated by around 200m (660ft). Italian investigation authority ANSV says the jet (G-EZBY) touched down "improperly" on runway 04R instead of 04L following a service on 30 December.

NOTAMs for Pisa airport which came into effect on 23 December state that runway 04R/22L is available as a taxiway only, with 04L/22R designated as the runway in use.

Meteorological data for the airport at the time of the approach shows weather conditions and visibility were good. The type of approach conducted has not been disclosed.

ANSV says it has started gathering the necessary evidence in order to understand the incident and classify it correctly.

Lawsuit Blames Sikorsky, Other Contractors, for

Death of Sailors in 2014 Sea Dragon Helicopter Crash

The widows of three sailors killed in a Navy helicopter crash two years ago off the coast of Virginia are suing the manufacturer, Sikorsky Aircraft Corp., and several other companies that produced components for the MH-53E Sea Dragon.

The lawsuit filed in federal court alleges that Sikorsky and the other defendants, including General Electric,



designed and manufactured an unsafe helicopter and failed to warn the military about its risks.

Specifically, the suit criticizes Sikorsky for outfitting the Sea Dragon with brittle wires, known as Kapton wiring, that are prone to sparking fires, and for designing the aircraft with electrical wires running too close to fuel lines.Lt. Sean Snyder, Lt. Wes Van Dorn and Petty Officer 3rd Class Brian Collins were killed on Jan. 8, 2014, when the Sea Dragon they were flying caught fire and crashed into the ocean, 18 miles off Cape Henry. One of two surviving crew members, Petty Officer 2nd Class Dylan Boone, is also named as a plaintiff.

A Navy investigation determined that a bundle of wires had chafed against a fuel line, releasing an electrical arc that connected with jet fuel and ignited a fire that burned and blinded the pilots, Van Dorn and Snyder.

The lawsuit was filed this week in Connecticut, where Sikorsky is based, days before the expiration of the two-year statute of limitations, said New York-based aviation lawyer Frank Fleming.

Under federal law, the Department of Defense cannot be sued for the death or injury of service members, but companies that provide the military with equipment can in some cases be held liable for producing a defective product. Fleming, a former Marine Corps pilot and critic of the Sea Dragon's design,

won a settlement from Sikorsky a decade ago for an undisclosed amount of money after an MH-53E crashed in Italy, killing four crew members.

"There are still many unknown aspects of exactly what happened in this particular case, and we will continue to investigate through the discovery process," Fleming said Thursday. "Our essential view is that the contractors that we've sued could have done a better job to detect and correct this particular defect."

Sikorsky spokesman Paul Jackson responded to questions about the lawsuit via email: "We believe this lawsuit has no merit, and we plan to defend against it vigorously."

The problem that caused the 2014 crash wasn't isolated to that aircraft, according to follow-up inspections. Crews spent months afterward repairing and replacing thousands of worn fuel lines and wiring bundles in the military's entire fleet of 28 MH-53E Sea Dragons and 150 CH-53E Super Stallions, the Marine Corps variant.

The Navy's post-crash safety investigation -- a confidential internal report obtained later by The Virginian-Pilot -- identified the helicopter's original design and advanced age as a root cause for the mishap.

The safety report's authors determined that the routing of wires so near a fuel line ran counter to the Navy's own aircraft wiring manual. But because the manual gives blanket priority to original manufacture specifications, and because the suspect wiring matched Sikorsky's 1970s Sea Dragon design drawings, the questionable placement of the wiring bundle near a fuel line went unscrutinized.

This minor design flaw, the report noted, was exacerbated by decades of wear and tear: "While this bundle routing may have posed minimal risk early in the service life of the MH-53E ... it poses a significant risk in an aging airframe," the report said.

Boone, who suffered a head injury and other wounds in the crash before leaving the Navy this year, said he agreed to participate in the lawsuit "to bring much needed attention to a program that fails to adapt or improve, mishap after mishap."

Nicole Van Dorn, widow of Wes Van Dorn, said she hoped the lawsuit would shine a spotlight on a troubled helicopter program.

"Money is unequivocally not a part of my motive for filing the suit," she said. "Our collective motive is to hold all culpable parties accountable, in pursuit of the justice that we do not believe has been served."

The Sea Dragon is the Navy's oldest and most maintenance-intensive aircraft, and is the only U.S. helicopter powerful enough to tow equipment through the sea to find and disarm underwater mines. Plans to retire and replace the helicopter a decade ago fell through, forcing the Navy to keep it in service through at least 2025.

Friday FCF Follies ("What Rig Pin?")

I couldn't have identified that the rig pin as anything other than another piece of the tail-rotor gearbox.

As quality assurance officer (QAO) at HSM-74, I wasn't surprised to be scheduled for a Friday functional check flight (FCF). As any QAO should be, I was happy to do it. It was also the day before our first block-holiday leave period. This produced a lot of moving pieces and bodies around the squadron in a coordinated effort to get the required work done that day. Further more, the detachment lead aircraft mechanic and I had double



scheduled ourselves. He had a medical exam, and I had a "thank you" lunch in appreciation of the quality assurance division's hard work in preparation for a recent maintenance

inspection.

The reason for the day's FCF was the discovery of a cracked brush block cover that had to be replaced. The tail rotor's inboard retention plate had to be removed, reinstalled, and subsequently torque checked. That type of maintenance requires a C-profile FCF to test controllability and drive-train operation (usually one of the shorter FCFs). The helo had had a post-phase B/C-profile just 25 flight-hours prior. We figured our FCF would be quick.

After the morning maintenance meeting, the maintenance control desk chief, the maintainers and I worked out a tentative plan for the day. We considered that the aircraft wasn't planned to be ready for preflight until 1100, I would be gone from about 1245-1415, and sunset was at 1726. We all agreed that it would be best if we could get the ground checks done and at least one solution from ground vibration analysis before I left for lunch.

That way, the maintainers could make adjustments while I was gone, and we could be flying by 1500 with plenty of time to spare before sunset. As the morning progressed, the aircraft preparations were not coming along as quickly as expected. The expected preflight time was pushed to 1200. At 1130, I reminded the maintenance control desk chief that if we weren't preflight planning by noon, we would have to wait until 1430 to start the FCF, leaving a narrow margin between FCF start and sunset. I wasn't trying to force maintenance to rush, just to make sure we were all still on the same page. In hindsight, I now realize that I wasn't helping. I should have let the maintainers conduct their business without any interruptions or outside pressure.

After all, there was no real need to finish the FCF that day; our squadron was in the maintenance phase and had no operational commitments in the near-term.

I got the word that the aircraft was not going to be ready until after noon, so I decided to delay the FCF until after lunch. I requested the aircraft be fully ready to spin by the time I returned. By 1215, our mechs had finished working on the aircraft. It was buttoned up, and all the MAFs were signed off. The day's work included setting the tail-rotor bias and conducting a daily and turnaround inspection. While I was leaving for lunch, the lead AD (who was also the CDI that day) was departing for his medical appointment.

I finished lunch at 1345. On my way back to work, I called my copilot and asked him to round up our AWs and tell them to make their way out to the aircraft to start preflighting. I would join them ten minutes later. When I returned to the squadron, I went through Maintenance Control to make sure all the MAFs were signed off and the aircraft was ready to go on the flight line. I helped finish the preflight, and we finally strapped in at about 1430.

While going through pre-start checks, my copilot noticed that the tail-rotor pedals were moving, but the right one didn't seem normal. He passed me the controls to double check, and sure enough, the right pedal seemed jammed. It moved a couple inches, but nothing near the usual throw. I asked the ADs, who were on ICS at the time, if they could think of any reason why.

The lead AD called in one of the AMs to ask what he thought. He in turn asked the junior AD (who had done the work on the tail) if he remembered to remove the rig pin that holds the controls in position while setting the tail-rotor bias. "What rig pin?" he asked.

The lead AD immediately said, "Hold on, sir, we need to check something..." Our maintainers got back up on the tail rotor and removed the cowling to discover that the rig pin was still in... and now it was stuck!

I got out to see what the problem was. With my untrained eye, I couldn't have identified that the rig pin as anything other than another piece of the tail-rotor gearbox. It was the same color, small, and did not have any identifying marks or "remove before flight" flags. The real problem was that the rig pin was still there in the first place. How did this happen? Were individuals rushed? Were steps missed? Were maintainers inexperienced, or were they distracted with impending leave and recent medical appointments? Did the aircrew not conduct a thorough preflight?

According to the Swiss Cheese Model of Human Error, the "Swiss cheese" holes lined right up. Had the copilot been less assertive or had I been over-confident, we could have talked ourselves into the idea that the limited pedal movement was accept-able. I have had aircraft with less pedal movement than others, and we were moving fast to beat the sun. At the very least, we could have engaged the rotors and taxied out of our spot before realizing something was wrong.

Some special audits and counseling sessions were conducted, and some procedures augmented for the better, but no one was hurt. The primary corrective action we put in place in our squadron to prevent this from happening in the future was to have all our rig pins striped with orange vinyl tape on the handles so they can be prominently identified as not being part of the aircraft.

Birds, Fuel Systems Cited As Helo Hazards

Two recent news reports have cited bird strikes and fuel-fed fires as safety concerns for helicopter operators. According to an Associated Press story published over the weekend, operators reported 204 helicopter bird strikes in 2013, a 68 percent increase from 2009. While some of that is due to increased reporting by pilots, the AP says there has also been an increase in the U.S. of large birds, like Canada geese and turkey vultures, that can do significant damage to an aircraft.



"We're getting more severe damage, more frequent cases of birds penetrating the windshield, and the risk of pilot incapacitation that could cause fatalities for everybody there," said Gary Roach, an FAA helicopter safety engineer, at a recent FAA meeting. Roach and his colleagues have urged the FAA to establish an industry committee to examine the helicopter/bird-strike issue, the AP said.

Another recent report, by NBC News affiliate KUSA in Denver, examined the incidence of fuel-fed fires in the crashes of medevac helicopters. According to KUSA, the fuel systems in many older helicopters are not well-protected in crashes, and while the FAA requires stronger systems in helicopters certified since 1994, it hasn't required aircraft that were certified under the older rules to change. According to the NTSB, more than 4,700 of the 5,600 helicopters manufactured since 1994 don't have fuel systems that would meet the 1994 FAA standards, since they were copies of helicopters that were certified earlier than 1994.

The NTSB issued a safety recommendation in July that urged the FAA to mandate crash-resistant fuel systems for all new helicopters, regardless of the date of certification. "Between 1994 and 2013, the NTSB has investigated at least 135 accidents in the United States involving certificated helicopters of various models that resulted in a post-crash fire. Those accidents resulted in 221 fatalities and 37 serious injuries. Only three of the accident helicopters that experienced post-crash fire had crash-resistant fuel systems and crashworthy fuel tanks," the NTSB wrote (PDF). The KUSA report said it could find only one post-crash fire report involving military helicopters, which have long had crash-resistant fuel systems. "We've seen it in the military," NTSB chairman Christopher Hart told KUSA. "We want to see similar progressive action taken in civilian helicopters." Airbus officials responded to KUSA that the true impact of post-crash fires on survivability is "not well understood."

Overall, helicopter crash statistics have been improving. According to the International Helicopter Safety Team, during the first six months of 2015, total accidents in the U.S. were down 28 percent compared to the same period last year; compared to 2006, the number of accidents has been cut nearly in half.

http://bigstory.ap.org/article/68afacf4b18041b7ab0a24e3668626be/dangeroushelicopter-bird-strikes-rise-faa-warns

http://www.ntsb.gov/safety/safety-recs/recletters/A-15-012.pdf

New Year Means New Opportunities To Be Better



Most of us look upon each New Year as milestone in our lives. After all, we only have a finite number of them. So we should take the beginning of a new year as an opportunity to take stock of where and who we are as pilots and as human beings. There is always room to improve in all areas.

But let's resolve to improve as pilots. Yes, we all secretly believe that we are far above average as pilots. But we all also know that there is much room for improvement. Any pilot who does not believe that should stop flying immediately. Continuous improvement should be our goal. Baby steps are OK. None of us will ever be perfect pilots because that creature does not exist. But if we make an honest effort to gain skill and knowledge we are on the right path.

There are plenty of opportunities available to us. We can fully participate in the FAA Wings program if we do not already do so. We can attend local safety seminars or online webinars. We can take online courses. We can take a little more refresher training from a competent CFI. We can add a new certificate or rating to our credentials. We can take a few aerobatic lessons from a professional in that area. We can read a book on aviation safety.

What we do, we should resolve that we will be a better, safer pilot at the end of year than we are at the year's beginning.

Jan. 1 Issue of Vectors for Safety Now Available

The latest issue of Vectors for Safety is now available.

Click here to go to the newsletter.

AirCorps Library is LIVE

AirCorps Aviation LLC of Bemidji, Minnesota is proud to announce the release of a collection of WWII and legacy aircraft resources delivered to members through an innovative platform designed for easy online access to this public information.

AirCorps Library consists of a phenomenal site hosting 500,000 searchable drawings and blueprints,



as well as manuals covering design, flight, maintenance, and restoration. The printable drawings are all quickly & easily accessible from a desktop or mobile device at high resolution. AirCorps Library is unlike anything offered worldwide and is offered at an exceptionally reasonable cost. Memberships vary based on groups of aircraft members desire access to at a rate of only \$25 or \$50 annually. The effort to process and rename the raw scanned microfilm blueprints to the original manufacturers' part numbers was years of work. The collecting of manuals, additional drawings and resources to add to the platform will be ongoing. But today we celebrate by saying that the switch has been turned on and the resources are available worldwide.

To quote a couple of our initial test group of users:

"The thousands of resources within AirCorps Library will be critical to our efforts in keeping these historic aircraft maintained and operating safely." Bernie Vasquez - Texas Flying Legends Director of Maintenance & Warbird Pilot.

Immediately I was able to begin searching and drawing out parts in my cad software based on clearly legible measurements on the blueprints. I started by modeling the engine control panel, as it was a simple drawing of a basically two dimensional design. It was also the first thing I printed on my own 3d printer. Justin Kramer- Flight Simulator & 3D printing enthusiast.

"The effort AirCorps Aviation put in to scan and organize over 500,000 searchable drawings and manuals is nothing short of amazing and will be an invaluable asset for owners, operators, and enthusiasts alike. Taylor Stevenson-Warbird Pilot & WWII Aircraft Restorer The goal of the program is to provide a cost effective platform for users to share Vintage Aircraft and Warbird resources. Those resources will in turn help promote, preserve, and insure that WWII and legacy aircraft fly safely through the 21st century. AirCorps Aviation's belief is that the information can grow exponentially as users see the value in contributing to the AirCorps Library community by sharing resources, knowledge, and experiences.

There are three different memberships available depending interests - Fighters, Bombers and Classics, which include the WWII Trainers and Liaisons. Each of three memberships are available on an annual basis at an extremely affordable rate of \$50, \$50 and \$25, respectfully.

The program was entirely conceptualized and created by the team of AirCorps Aviation, developer David Hatfield {Hatfield Systems Design),and Evolve Creative. Join today!

AirCorps Library website:http://www.aircorpslibrary.com. AirCorps Aviation website: http://www.aircorpsaviation.com

Engineer of Derailed Metro-North Train Opens Up

ABC7 talks with engineer William Rockefeller in his first public comments since the deadly derailment in the Bronx two years ago.

Rockefeller told federal investigators that he fell into a trance moments before his train hurtled into a sharp curve at 82 miles per hour. Four



people died, and 60 were injured. It was later determined that Rockefeller suffered from an undiagnosed case of severe sleep apnea, and prosecutors declined to press charges.

He has not spoken publicly until now."It feels like yesterday," he said. "It really feels like yesterday. It feels like it just happened. Every day, it feels like it just happened yesterday. And no matter what I do, I just can't shake that feeling."

Watch the interview at abc7ny.com

Resolve to communicate better despite technology lowering standards

As we roll into 2016, it's clear that a trend has become a pandemic – millions now speak and write in the workplace with an alarming lack of clarity, grammar and graciousness.

What's to blame?

Social media has had a lot to do with it, making everyone his or her own star, and loosening (and thereby lowering) the standards and boundaries



of public expression.But it goes deeper than that, to an accepted carelessness that's rendered clear, lean, strategic communication increasingly rare, and thus more potent.

The New Year is an ideal time to review our careers, and implement changes that can strengthen them. By integrating the following old school communication resolutions with current technology, you can shoot the vocational lights out in 2016:

Be simple: With more options than ever by which to convey a message, the more confusing the message seems to get. Simplicity has never been more important. It's increasingly rare because it takes a ton of time and hard work to get there. It's worth every second. A straightforward, consistent, easily understandable story is the foundation of communication success. Once established, it can be effectively rolled out across a myriad of platforms.

Be brief: With each passing year, our collective attention span diminishes. To influence your audience – whether it's one or 100,000 -- keep your narrative tight and bright. Brevity delivers impact. Write long, and cut short. When speaking, never go over the allotted time. It's resented.

Be prepared: You're a brand in a transforming world. Be able to tell others what value you bring – in no more than three points. Monitor, manage and protect your online identity – it can enhance your standing, or undermine it – for example, with drunken bathing suit shots from Cancun.

Be certain: Speak like the leader you are, or want to be. Start slowly, and put plenty of space around key words and phrases. Inflect down, not up. "Up talk" can make the most accomplished executive sound like a 12-year-old. And never begin a sentence with the word "like", as in, "Like, I texted her, but she didn't text back."

Be listening: Give the people around you the time and respect to fully express themselves. Interruption is verbal mugging. When your boss, client or prospect is talking (and you aren't), you'll learn stuff. Silence is a killer app of the early 21st century. A famous quote goes: "Only silence is great."

Be grammatical: One grammatical or spelling error – especially of someone's name – can undermine the credibility of an otherwise sound document. Ditch online acronyms in business correspondence. If you're speaking and flub, calmly correct yourself and move on. The bigger deal you make of it, the bigger deal it will become in the minds of your listeners.

Be positive: It's easy to buy into today's pervasive negativity, and hard to maintain an enthusiastic outlook amid an uncertain future. But leaders, in speech and correspondence, emphasize the positive while realistically acknowledging challenges. They seek to conclude every interaction on a high, knowing it can galvanize and inspire others. Negativity is a drag – so low end, so limiting, and so damaging to an organization. Optimism is contagious.

Be memorable: Business is about relationships. Look to expand and deepen yours. Compliment others, sincerely, not gratuitously. Take the time to hand-write notes. If you need to discuss a difficult issue with someone, it's of course best to do so in person, or at least over the phone. However, if you absolutely have to do it by email, don't copy the world, lest you escalate a situation that could have been resolved amicably.

That's a worthy objective for 2016, and for years to come.

Losing sleep: Stress robs us of 64 nights of a sleep a

<u>year</u>

Using technology in bed can stop us nodding off

ADULTS lose 64 nights' worth of sleep every year, usually due to stress, a study has found.

The average grown-up gets just six hours and 36 minutes' sleep every night – an hour and 24 minutes less than the recommended eight hours.

This amounts to 511 hours over a year – the equivalent of almost 64 eighthour nights, Stress is the main reason



for insomnia, the poll found. A snoring or fidgeting partner, being too hot or cold in bed and worrying about money can also cause sleeplessness.

Using technology late at night, having young children and lying in an uncomfortable bed are among the other reasons people cannot nod off.

Sixty eight per cent of adults do not believe they get enough sleep, with one in twenty claiming to get a maximum of four hours' shut-eye a night.

Britons' productivity is affected two days a week due to a lack of sleep, the survey of 1,000 people by MatalanDirect. com found.

A spokesman said: "A good night's sleep is something we all require as a matter of health, but it seems like it's something many of us struggle to get.

"Experts recommend we get around eight hours a night, but in actual fact the average adult is getting just six-and-a-half hours.

He warned: "Age UK states a lack of sleep over a long period can be associated with Type 2 diabetes, coronary heart disease, cardiovascular disease and strokes. Make sure you can switch off at night."

TED Talk: Ideas Worth Sharing

Tech columnist David Pogue shares 10 simple, clever tips for computer, web, smartphone and camera users. And yes, you may know a few of these already — but there's probably at least one you don't.

Google Stunts delta 31 • "Define" any word delta 31 I'm Feeling L delta 31-460 delta 31-300 • Flight tracking delta 31-080 Unit conversion Delta Air Lines Flight 31 On-time - arrives in 2 hours 32 mins JFK -----SFO Departs New York, todayArrives San Francisco, todayTimeTerminal GateScheduled 8:49 PMTerminal5:00 PM2268:17 PM1 Gate 45A

https://www.ted.com/talks_david_pogue_10_top_time_saving_tech_tips