

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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January GAJSC Safety Topic

Each month the General Aviation Joint Steering Committee (GAJSC) Loss of Control (LOC) Work Group selects a safety topic. For the month of January 2020, it is “[Distractions and Interruptions](#)”. The FAAS Team is on the committee and fully supports every safety initiative. [We need your help in spreading this message:](#)



Distractions and interruptions are causal factors in nearly 25% of motor vehicle accidents in the United States. NTSB accident data suggest that pilots, while distracted by less essential tasking, have lost control of their aircraft and crashed. In light of this, pilots are reminded [to maintain aircraft control at all times](#). This may mean delay in responding to ATC communications and passenger requests or not responding at all unless positive aircraft can be maintained throughout. In other words,” ***Fly the Aircraft First!*** “

Fly the Aircraft First

- As a matter of priorities first **Aviate** (maintain aircraft control at all times), second **Navigate** (manage navigation systems and tasks including fuel reserves) and third **Communicate** (with passengers and ATC)
- Checklist discipline and the proper use of autopilots are effective means to effectively cope with interruptions and distractions.
- Plan and brief each takeoff, approach, and landing to include climb and descent expectations, go no-go points, escape routes and alternates.
- Practice emergency procedures, short and soft field takeoffs and landings, and power off approach and landings.

- Reduce distractions and insist on passengers following sterile cockpit rules during critical phases of flight, except for conversation directly related to the safety of flight.

References:

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GAJSC Safety Enhancement Topics

https://www.faa.gov/news/safety_briefing/fact_sheets/

Eastern Airlines Flight 401 Accident Report

<http://www.nts.gov/investigations/AccidentReports/Reports/AAR7314.pdf>

http://en.wikipedia.org/wiki/Eastern_Air_Lines_Flight_401

Airplane Flying Handbook Chapter 17 Emergency Procedures

https://www.faa.gov/regulations_policies/handbooks_manuals/aviation/airplane_handbook/media/19_afh_ch17.pdf

Pilot's Handbook Of Aeronautical Knowledge Chapter 2, ADM, CRM and SRM

https://www.faa.gov/regulations_policies/handbooks_manuals/aviation/phak/media/pilot_handbook.pdf

Last chance to register for the upcoming January HF and CRM courses in Myrtle Beach

Aviation Safety Training and Consulting that Meets and Exceeds ICAO Standards and State CAA Requirements!

The Aviation Consulting Group provides aviation safety solutions to a wide-array of aviation organizations on a global basis.



We work with Airlines, Airports, MROs, Civil Aviation Authorities, Accident Investigation Agencies, and other types of aviation organizations. Our services include high-level consulting, training, and program implementation.

All the details can be found at <https://www.tacgworldwide.com/Scheduled-Courses>

Lion Air Accident Report Analysis

Episode 14

Greg and John do a moment by moment analysis of the events leading up to the crash of Lion Air Flight 610.

They share their takeaways following months of dissecting the Indonesian National Transportation Safety Committee (NTSC) final report regarding the crash. They put the facts in context – facts listed in the report [as well as details that are missing](#).

The MCAS system that is widely blamed for the crash was activated for only 10 seconds of the first 6 minutes of the 11:37 flight. The report shows that the pilot was controlling the plane.

[The Flight Safety Detectives find:](#)

- The airplane was not airworthy for days prior to the crash
- Maintenance was not done properly
- Flight crew stresses: the captain was sick and the first officer was called in ahead of his regular schedule
- At takeoff, aircraft control warnings were triggered that are not analyzed for impact on the sequence of events



- Flight crew did not follow procedures
- Quality of the pilot training program is not examined

John and Greg bring in insights from other crashes to provide an unmatched analysis of this tragedy.

<https://www.flightsafetydetectives.com/e/lion-air-accident-report-analysis/>

incident: Aeroflot SU95 at Moscow on Jan 12th 2020, engine cowl separated in flight

An Aeroflot Sukhoi Superjet 100-95, registration RA-89112 performing flight SU-1368 from Moscow Sheremetyevo to Stavropol (Russia) with 55 passengers and 6 crew, was climbing out of Sheremetyevo's runway 24L when the crew stopped the climb at FL070 after [the left hand engine cowl had partly separated from the engine](#). The aircraft entered a hold to burn off fuel and returned to Sheremetyevo for a safe landing on runway 24R about 50 minutes after departure.

Rosaviatsia reported the aircraft was climbing through 4000 feet when the flight crew was informed about the missing left engine cowling. The crew burned off fuel and returned to Sheremetyevo. A post flight inspection revealed the engine access doors were ripped off, a dent at the inboard leading edge of the left wing was also found.



The airline reported the engine is very close to the ground and the access door hooks hard to see if one doesn't know where to exactly look.

Baggage handler's serious injury lands fine

A Company providing a range of airline ground support services has landed a fine after an employee fell from a height of more than two meters. Luton Magistrates' Court heard that on 24 December 2016 Rebecca Smith of Menzies Aviation (UK) Limited was injured **during the loading of luggage onto an aircraft during an aircraft turnaround** at London Luton Airport. Ms Smith fell through a gap in the railing at the top of a luggage belt-loader, whilst kneeling upon it to fasten cargo straps, when the belt loader **was struck by a passing vehicle**. She fell 2.2m (7 feet) on to the tarmac below. The fall resulted in a loss of consciousness. Ms Smith suffered a brain injury, fractures of the skull and cheekbone. She also suffered permanent hearing loss in her right ear.



An investigation by the Health and Safety Executive (HSE) found Menzies Aviation (UK) Limited **had foreseen the risk** of a collision between the various vehicles operating in a congested space around the aircraft during a turnaround but had **failed to implement measures** to guard against the risk of driver error when maneuvering vehicles around aircraft. The investigation also found the company was aware **that belt-loaders had a gap in the railings** between the aircraft and the barriers **but failed to put in place** any meaningful measure to control the risk that someone might fall through.

Menzies Aviation (UK) Limited of London Heathrow Airport, Hounslow pleaded guilty, to breaching section 2(1) of the Health and Safety at Work etc. Act 1974 and has been fined £181,500 and ordered to pay costs of £21,043.

Speaking after the case, HSE inspector Emma Page said, “Airports are busy and complex workplaces where workers face many hazards, particularly from the movement and operation of aircraft and vehicles. Currently, [accident rates](#) in the industry are well above the national average for all industries. Companies should [assess the risks](#) to their own and others’ employees and put in place measures to control these risks.

“Companies should be aware that HSE will not hesitate to take appropriate enforcement action against those that fall below the required standards.”

More than 108,000 ASRS reports will be filed in 2019

The ASRS Staff is composed of [highly experienced](#) pilots, air traffic controllers, and mechanics, as well as a management team that possess aviation and [human factors experience](#).

ASRS analysts’ experience is comprised of more than 600 cumulative years of aviation expertise covering the full spectrum of aviation activity: Air carrier, corporate, military, and general aviation; as well as air traffic control in Towers, TRACONs, Centers, and military facilities. Analyst cumulative flight time exceeds 175,000 hours in more than 90 different aircraft.

[ASRS staff also has](#) human factors and psychology research experience in areas such as training, fatigue, crew resource management, user interface design, usability evaluations, and research methodology.

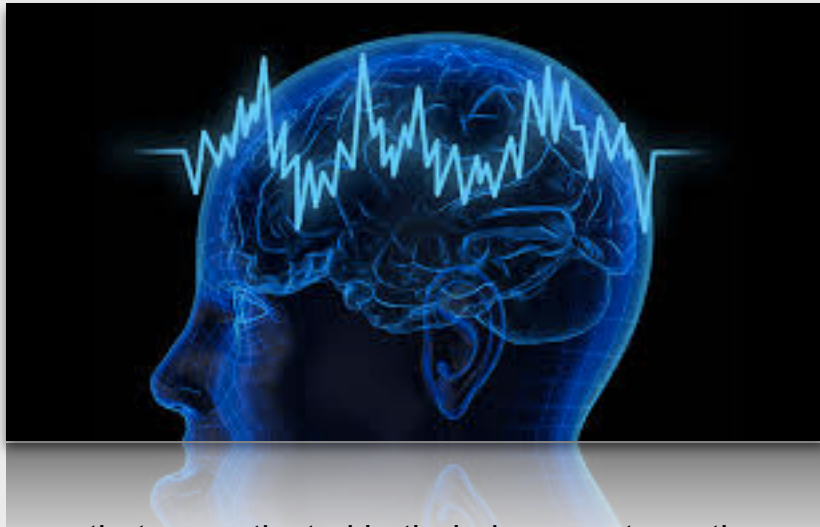


<https://asrs.arc.nasa.gov/>

<https://generalaviationnews.com/2019/03/03/top-10-things-to-know-about-asrs-reports/>

Neuroscience study uncovers unique brainwave patterns in pilots

Viewing landing scenes appears to activate the “Mirror Neuron” system in pilots more than it does in non-pilots, according to preliminary research published in [*Frontiers in Human Neuroscience*](#).



The “Mirror Neuron” system is a network of neurons that are activated both during a motor action and also when observing a similar action performed by another person.

In the study, 9 pilots and 8 individuals with no piloting experience viewed landing scenes as researchers monitored their electrical brain activity. The scenes were viewed from the perspective of the cockpit, and the participants were asked to gauge the distance of the runway number.

“The use of a simple distance estimation task enabled us to easily include in the study a non-expert population to be compared with pilots, avoiding the potential complications that may arise from including technical flight-related aspects in the task,” the researchers explained.

The researchers observed differences between pilots and non-pilots in Mu rhythm brainwaves. Mu brainwave patterns are considered a marker of Mirror Neuron system activity because they are suppressed whenever a person performs >

an action and they are also suppressed when a person observes someone else performing an action.

Pilots tended to have increased Mu suppression when observing the landing scenes, indicating greater activation of the Mirror Neuron system.

But what is the significance of increased mirror neuron activation among pilots? As the researchers explain in their study, the findings suggests that the brains of pilots process aircraft as “a sort of extension of a pilot’s body.” Observing an aircraft landing might be like observing someone trying to reach for an object — in this case, “reaching” for a runway.



“Critically, in a landing task, the angle-under-the-horizon has the functional property to express the location of an aircraft in terms of glide angle to a specific point on the ground. This importantly, allows the pilot to directly differentiate between locations on the ground that are within the glide range and that can hence be reached with the airplane, from those that are outside the glide range, that are hence unreachable,” the researchers wrote.

“It follows that for a pilot, a seemingly perceptual task such as distance judgment is framed in terms of the action capabilities of an aircraft (e.g., the glide angle)... However, in the case of aviation, the action capabilities of the aircraft would not be generally experienced by most humans.”

<https://www.frontiersin.org/articles/10.3389/fnhum.2018.00489/full>

The study, "[Investigating Neural Sensorimotor Mechanisms Underlying Flight Expertise in Pilots: Preliminary Data From an EEG Study](#)", was authored by Mariateresa Sestito, Assaf Harel, Jeff Nador, and John Flach.

Maintenance error damages helicopter

The pilot and two medical crewmembers were on a return flight to a hospital helipad in Norfolk, Nebraska. During the approach to the helipad, the crew heard a noise outside the helicopter. They reported they felt a slight "shudder" on the helicopter, but attributed it to the wind as they approached the helipad.

The pilot also heard the noise, but there was no effect on the controls or flight characteristics, so he continued the landing without further incident.

After engine shutdown, [the oncoming pilot noticed](#) that the helicopter's tail rotor drive shaft cover was missing. The surrounding area near the helicopter's approach path was searched, and the missing cover was found.

An examination of the helicopter noted substantial damage to the tail rotor drive shaft.

The day before the accident, [scheduled maintenance was performed](#) on the helicopter's tail rotor pitch change mechanism, which required removal of the drive shaft cover. The cover was reinstalled, and no problems were reported during a subsequent preflight inspection.



It is likely that maintenance personnel **did not properly secure the cover fasteners** after the cover was reinstalled.

Probable cause: Maintenance personnel's failure to properly secure the tail rotor drive shaft cover, which resulted in the cover departing the helicopter in flight.

NTSB Identification: [CEN18CA072](#)

This January 2018 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.

CNATTU Lemoore Launches CNATT's First Organic Rising Tide Aviation Maintenance Never Events Course

Instructors at the Center for Naval Aviation Technical Training Unit (CNATTU) Lemoore taught the first **Rising Tide Aviation Maintenance Never Events** course Dec. 20, a course that's designed to **curb preventative mishaps** that occur during aviation maintenance operations.



The AMNE program is a **multifaceted human factors program** that involves training, feedback systems, communication plans, and continuous improvement tools for technicians, first line supervisors, and managers. **It focuses on** identifying and mitigating the six most costly and preventable outcomes during >

aviation maintenance operations—known as “never events--” because they are entirely preventable and should never occur under any circumstances.

“Today marks the beginning of institutionalizing Rising Tide Aviation Maintenance Never Events (AMNE) training in the Strike Fighter community,” Cmdr. Ronnie Harper, CNATTU Lemoore’s commanding officer, said. “The ability to teach this curriculum organically is a phenomenal capability and will [go a long way towards helping reduce mishaps in naval aviation.](#)”

Harper said that two of CNATTU Lemoore’s most senior instructors trained and qualified with civilian instructors at Convergent Performance in Colorado Springs, Colo. These courses were developed to [not only talk about mishap reduction](#), they give squadron maintenance personnel [knowledge and tools](#) for everyday use.

“The skills students gain will help everyone, from the most junior to the most senior Sailor, actively learn on the job and adapt processes that are proven to reduce mishaps in dynamic environments like the flight line and flight deck,” Harper said. [“This is not the old “human factors,” but next-level, proven processes.”](#)

Harper added that in a May 2018 Navy Times article, Vice Adm. DeWolfe Miller III, commander of Naval Air Forces, emphasized that almost all Class C mishaps are preventable and a significant number [occur during routine maintenance evolutions](#). These AMNE courses are designed and being implemented to get ahead of all preventable mishaps.

CNATTU Lemoore, led by Senior Chief Avionics Technician Jonathan Plum and Chief Aviation Structural Mechanic Christopher Reg, is spearheading the effort to ensure every Sailor on the Naval Air Station Lemoore flight line receives the skills and tools gained from the AMNE program in an effort to reduce and ultimately eliminate these “never events” from occurring.

[So far, feedback from students has been very positive.](#)

“This training gives us tools to quickly refocus and identify the little things that often get overlooked, [helping us reduce complacency](#),” Aviation Electrician’s Mate First Class Rajesh Sharma said.

The AMNE program [empowers Sailors](#) to optimize their personal and professional performance, increase their ability to contribute to the team, and instill the leadership and skills necessary to become future leaders.

CNATTU Lemoore trains Sailors and Marines with the necessary FA-18 knowledge, skills, and abilities to function at the highest technical standards in naval aviation maintenance. CNATTU Lemoore supplies the fleet with the highest quality trained aviation maintenance technicians so commands can perform their primary mission ashore, at sea, and in combat.

[CNATT’s mission is to](#) develop, deliver, and support aviation training necessary to meet validated Fleet requirements. Its mission aligns perfectly with MyNavy HR Pillar 1, Force Development, ensuring Sailors and Marines are equipped with the specific skills they need to do their jobs and having access to career enhancement opportunities.

CNATT also is a technical training agent for the Naval Aviation Enterprise, an organization designed to sustain required current readiness and advance future war fighting capabilities at best possible cost.

Claims in aviation are skyrocketing, despite better safety records

Passengers can take a deep breath

– the global airline industry has had some of its safest years in recent times when it comes to fatalities. This news comes despite a number of crashes, according to a new study from Allianz Global Corporate & Specialty (AGCS), though the report also notes that the long-term improvement of risk management records is challenged by a growing number of claims and risks.



“Air travel has never been safer in the history of aviation,” said James Van Meter (pictured), regional head of aviation programs and product development in North America for AGCS, adding that the insurance company partnered with Embry-Riddle Aeronautical University, known as ‘[the Harvard of the Skies](#),’ to analyze some 50,000 aviation claims. “We looked at the trends and it’s very clear that it’s never been safer to get on to an airplane as a passenger. If you look at how many unfortunate deaths and fatalities occurred just between 1959 and 2017, there were almost 30,000 aircraft accidents that led to fatalities and, in 2008-2017, that number dropped to almost 2,200.”

In fact, flying on an airplane is one of the safest ways to travel today – safer than even a bicycle and definitely safer than traveling in a car. [There are a couple of key factors](#) that have led to the vast improvement in the safety of air travel, according to the AGCS aviation expert. One is the aircraft itself, which is constructed better today and has safer systems in place as well as improved engine reliability.

“You very rarely see an engine incident [or] engine failure leading to an aircraft crashing whereas a decade ago or 20 years ago, [that was a very frequent occurrence around the world](#),” Van Meter told *Insurance Business*. “In addition to the [improvement in the aircraft and the hardware is the training that pilots](#) receive today. Twenty years ago, simulator training was really just becoming the norm, whereas now we’re in a fully mature training environment where every airline pilot goes through simulator training usually every six months, and there’s been improvement on things like crew resource management and constant communications.”

That improved safety record doesn’t, however, mean that there aren’t some risks that still exist. For one, [the potential for aviation insurers to pay out large sums has grown](#).

“Probably a decade ago, the average thought was that fatality would cost between \$1-\$3 million, and we’ve really seen multiples of that recently,” explained Van Meter. “You put that into the context of an aircraft that again a decade ago, 20 years ago, it was a lot for it to have 100 people on board. Today, there are aircrafts capable of carrying 600 passengers. You take the potential pay-out per passenger, and you multiply that by 500 or 600. All of a sudden, you get to a very big number and that has a huge impact on the aviation insurance marketplace.”

With potential awards per passenger reaching millions of dollars, a major crash could result in a liability loss of up to US\$1 billion in the future, the report said. It also warned of a range of emerging risk scenarios, such as the projected demand for new pilots – about 800,000 over the next 20 years – which brings challenges in recruitment and training.

“Certain events throughout the early 2000s have impacted the growth rate seen in air travel and with airlines, but now we’re really in a boom cycle in air travel where we see the amount of passengers flying continue to increase drastically around the world,” explained Van Meter. “Obviously you need more pilots to fly those airplanes, so it’s really driving the demand for new pilots.”

One of the key takeaways of the AGCS report is that while it's never been this safe to fly on an airplane, from the insurance side, the technology brought into the aircrafts and the new manufacturing processes, like the use of composites instead of alloys, **leads to much more expensive aircrafts, and therefore leads to much more expensive repairs.**

"While we see the safety rates in aviation from a fatality perspective dropping, we **see the claims and the amount of money** that it costs to handle those claims skyrocketing," underscored Van Meter. "What cost maybe \$10 million a few years ago, today could easily run \$90-\$100 million dollars."

7 Mistakes That Could Result In An FAA Violation

If you want to keep your record clean, avoid these mistakes.

1) Busting Controlled Airspace (Especially Class B)

Anytime you fly into controlled or restricted airspace without establishing communication or receiving a clearance (when needed), you're putting yourself at risk for receiving an FAA violation. Controllers take the business of protecting airspace very seriously, so make sure you don't make a wrong turn or fly into an area you're unfamiliar with. When you request clearance into **Class B airspace**, ATC gives you a unique transponder squawk code so they can track you on radar. Once they've identified you, they'll tell you that you're "**cleared into the Class Bravo airspace.**" Those are the keywords, and you need to hear them before you enter the airspace.



2) Runway Incursion

While you taxi, be on a constant lookout for runway hold short signs that may be along your route. If you come across one that you weren't expecting or cleared to cross, then you might be taxiing the wrong way. Stop and ask ATC for help.

3) Flying An "Unairworthy" Airplane

So, what does it mean for an airplane to be airworthy? It must: meet approved type design, be in a condition for safe operation, and maintenance and alterations are performed in accordance with 14 CFR parts 21, 43, and 91. Failing to comply with **ANY** of the above three criteria automatically makes an airplane not airworthy.

If you're renting a plane for the first time from a flight school and a required inspection hasn't taken place for a few months, guess who's liable? The FAA could track down every pilot who's flown the unairworthy airplane since the inspection was required!

4) Failing To Comply With A Speed/Altitude Restriction

If ATC issues you a speed or altitude restriction, don't forget it. You could create a significant traffic conflict otherwise.

5) VFR Into IMC

VFR flight into IMC is incredibly dangerous, not to mention illegal. Nearly half of weather-related accidents involve pilots attempting to fly under Visual Flight Rules (VFR) into Instrument Meteorological Conditions (IMC). Plus, over 72% of VFR into IMC accidents are fatal.

6) Forgetting Your Required Documents

Do you remember what you must have with you every time you fly? You must carry a government-issued photo ID, pilot certificate, and medical certificate. If you get ramp checked by the FAA, not having one of these is an easy violation to receive.

7) IFR Clearance Deviation

Whether it's a departure or arrival procedure, or even just en-route waypoints, make sure your programmed route matches your IFR clearance. Deviating from the clearance could result in an FAA violation and a nasty phone call.

Long Work Hours Linked to Regular and Hidden High Blood Pressure

A recent study by the American Heart Association tested the blood pressure from employees who worked 49-plus hours on the job weekly compared with that of those who worked fewer than 35 hours a



week. The results suggest a bigger problem of hypertension than expected.

High blood pressure is incredibly common, and there may be more [hidden, work-related factors](#) than health officials originally predicted. Office workers who spend long hours on the job are more likely to have high blood pressure, but this also includes a hidden type that often [goes undetected](#) during routine checkups.

About half of Americans older than 18 years old experience hypertension, and it's a primary factor in over [82,000 deaths per year](#). Approximately 15-30 percent of U.S. adults have a type of high blood pressure that is particularly hard to detect and goes underreported: [masked hypertension](#), meaning their high blood pressure readings are normal during health care visits but elevated when measured elsewhere.

A recent study published in the American Heart Association's journal *Hypertension* analyzed data from over 3,500 white-collar employees at three public institutions in Quebec, Canada, according to *Science Daily*. The study compared the blood pressure from employees who worked [49 or more hours a week](#) with those who worked 35 hours or fewer.

Researchers found the following results:

- Working 49 or more hours was linked to [70 percent greater likelihood of having masked hypertension](#) and 66 percent greater likelihood of having sustained hypertension-elevated blood pressure readings in and out of a clinical setting
- Working between 41 and 48 hours each week was linked to [a 54 percent greater likelihood of having masked hypertension](#) and a 42 percent greater likelihood of having sustained hypertension.
- The findings accounted for variables such as job strain, age, sex, education level, occupation, smoking status, body mass index, and other health factors.

Elevated blood pressure is [notoriously linked to other health complications](#) such as a higher risk of cardiovascular disease. Like the associated risks that come with high blood pressure, the study goes to show that there are also many factors that contribute to high blood pressure, [such as](#) smoking, being overweight, lack of physical activity, too much salt or alcohol in the diet, stress, older age, and genetics, among other things. Researchers admit there are [likely other factors](#) outside of long work hours that contribute to participants' readings.

“The observed associations [in the study] [accounted for job strain, a work stressor](#) defined as a combination of high work demands and low decision-making authority. However, other related stressors might have an impact,” said lead study lead author Xavier Trudel. “Future research could examine whether family responsibilities—such as a worker's number of children, household duties and childcare role—might interact with work circumstances to explain high blood pressure.”

Plus, studying blood pressure takes time. In the case of this five-year study, researchers conducted three waves of testing—in years one, three, and five. The study required that participants use wearable monitors to check the participant's resting blood pressure multiple times a day: three times in one morning, then for the rest of the day every 15 minutes. Each monitor collected a minimum of 20 additional measures for one day.

Average resting readings at or above 140/90 mmHg, and average working readings at or above 135/85 mmHg, were considered high.

Overall, about 19 percent of participants sustained hypertension—which included those who were already taking high blood pressure medications. Over 13 percent of the workers had masked hypertension and are not receiving treatment for high blood pressure. What's more is the correlation between working long hours and high blood pressure [appeared to be about the same for men as for women](#).

Researchers do recognize the limitations of the study, especially the fact that the data [does not account for blood pressure readings of blue-collar workers, shift workers, or positions with higher physical demands](#). Other limitations include the study's measurement of blood pressure only during daytime hours, and the omission of hours worked outside participants' primary job.

But while there are many factors that can contribute to high blood pressure, the study serves to educate people on the [effects of working long hours](#), and the health consequences that come with it. Not only can working long hours put you at a higher risk of high blood pressure, but it can also mean you might have masked hypertension that is hard to detect.

"People should be aware that long work hours might affect their heart health, and if they're working long hours, they should ask their doctors about checking their blood pressure over time with a wearable monitor," Trudel said. "Masked hypertension can affect someone for a long period of time and is associated, in the long term, with an increased risk of developing cardiovascular disease. We have previously shown that over five years, about 1 out of 5 people with masked hypertension never showed high blood pressure in a clinical setting, potentially delaying diagnosis and treatment."

<https://www.ahajournals.org/doi/10.1161/HYPERTENSIONAHA.119.12926>

<https://www.sciencedaily.com/releases/2019/12/191219074644.htm>

<https://ohsonline.com/Articles/2020/01/09/elevated%20blood%20pressure>

NSC Notes an Increase in Yearly Workplace Fatalities

The Bureau of Labor Statistics reports the highest total worker fatalities since 2008, with leading causes of deaths being motor vehicle accidents, falls, and drug overdoses. The National Safety Council has some [disheartening news](#) about average fatalities for the



last year. There is a reported 2 percent rise in total worker deaths—5,250 in 2018 compared to 5,147 in 2017—according to data released today by the Bureau of Labor Statistics.

The rate of death has not changed since 2017, and this is the highest total worker fatality number reported since 2008. Unintentional workplace deaths also increased, totaling 4,493 in 2018, up from 4,414 the year prior.

[Unintentional overdoses from non-medical use of drugs or alcohol is on the rise, too.](#) Rates increased for the sixth consecutive year, claiming 305 lives in 2018 compared with 272 the previous year.

However, work-related motor vehicle death declined, totaling 1,276 in 2018 and 1,299 in 2017. Additionally, falls to a lower level decreased to 615 deaths in 2018, down from 713 the previous year.

The leading cause of preventable deaths on the job is motor vehicle crashes is falls. Drug and alcohol overdoses are a growing workplace threat as cases continue to rise, and drug overdoses are the leading cause of preventable death outside of the workplace.

The NSC concludes that there is still not enough being done to protect workers. Workplace fatalities should remind employers and employees alike that safety is of utmost importance. Leaders need to set the tone from the top and engage all workers in safety, identify hazards and measure safety performance using leading indicators to constantly improve.

According to NSC, “employers need to take a systematic approach to safety that includes having policies, training and risk assessment techniques in place to address major causes of fatalities and injuries.”

https://injuryfacts.nsc.org/work/work-overview/work-related-fatality-trends/?utm_source=hs_email&utm_medium=email&utm_content=80918600&_hsenc=p2ANqtz--h9eGkSiGsfZjJFPa0WIEsX2VqY52aTpxASJ0Fv7O8crzApvAHt3K8dpEnKcwVDUxWX9ldMk2fOjslotRL8tExjM28bg&_hsmi=80918600

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CELEBRATE WHAT'S RIGHT WITH THE WORLD! |

Dewitt Jones



Are you discouraged by what's happening in the world today? **THEN WATCH THIS!** In minutes, you'll rediscover the wonders and possibilities that surround us everyday just waiting to be noticed and celebrated. Find out for yourself why former National Geographic photographer **Dewitt Jones** is considered by thousands to be one of the most inspiring speakers on the planet. Dewitt Jones is one of America's top professional photographers. 20 years with National Geographic, 10 years creating national advertising campaigns, 2 documentary films nominated for Academy Awards. 20 years speaking to audiences around the world on vision, possibility and celebration. This talk was given at a TEDx event using the TED conference format but independently organized by a local community.

Learn more at <https://www.ted.com/tedx>

https://www.youtube.com/watch?v=gD_1Eh6rqf8