Aviation Human Factors Industry News

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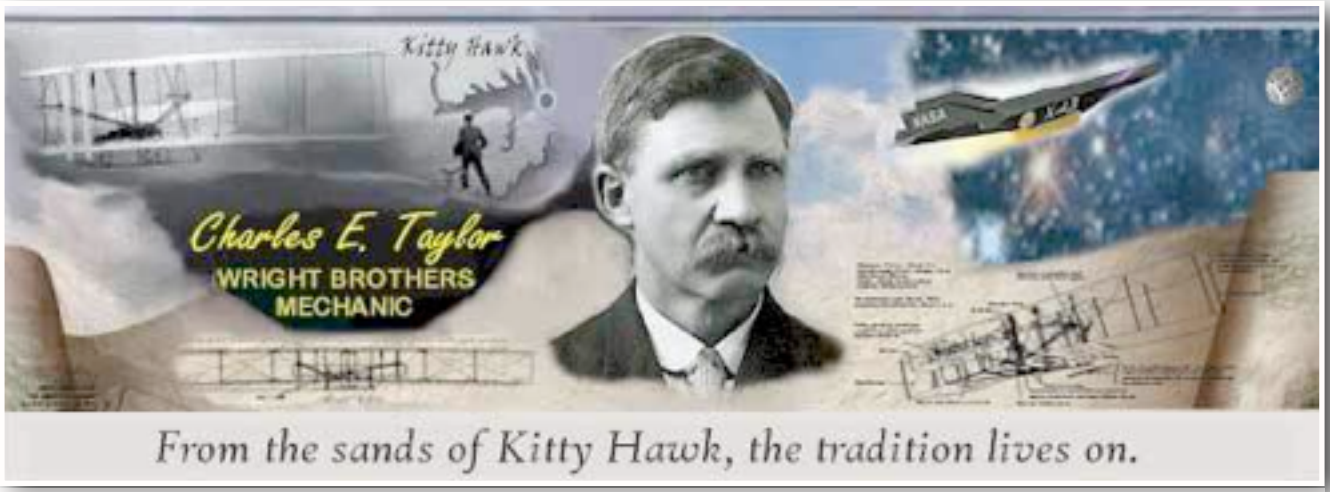


Hello all,
To subscribe send an email to: rhughes@humanfactorsedu.com
In this weeks edition of *Aviation Human Factors Industry News* you will read the following stories:

Human Factors Training: Why The Stigma?

Bob Baron, Ph.D

The Aviation Consulting Group

I have been teaching Human Factors (HF) courses for a very long time. And in my more than two decades of training aircraft maintenance personnel both in the United States as well as abroad, a common theme is noticeable — there can be a stigma associated with HF training. Aviation Maintenance Technicians (AMTs) are often put into these classes (sometimes at the last minute) thinking that HF training is "for people who screw up." And, because of that, many attendees feel that this type of training "doesn't apply to them." This attitude can be found in Initial, as well as Recurrent, HF courses. The stigma is certainly understandable. In most cases, course attendees have not been briefed, or given a heads-up, about the real purpose of HF training. So, let's try to eliminate the stigma and assuage any fears that you are being "sentenced to a class for klutzy mechanics."

By definition, "Human Factors is a multidisciplinary effort to generate and compile information about human capabilities and limitations and apply that information to equipment, systems, facilities, procedures, jobs, environments, training, staffing and personnel management for safe, comfortable, effective human performance." (FAA Order 9550.8 Human Factors Policy).

Okay, that's a good start. The FAA basically wants you to know how different factors can influence you on the job and affect your performance; factors that can cause you to forget things, do wrong things, skip steps, and deviate from procedures. So, yes, the training is there to help you improve your awareness of these factors so that you might think twice about skipping a functional check or not conducting a tool inventory after zipping up an aircraft. Everyone, at every level of the organization, can benefit from HF training. In fact, the error that you do not make (as a result of the HF training) may save hundreds of lives, including your own, or your family's. HF is certainly not a "class of shame."

Your instructor knows that you are a consummate professional, not an error-prone employee singled out to serve an HF course sentence. During, and after the course, you will most likely embrace the new attitudes, skills, and knowledge you absorbed. In fact, you may be pleasantly surprised! I've had students come into the course with a bad attitude but finish the course with nothing but praise for a "very useful and enjoyable training class."

In order to get this result, the training needs to be developed using adult learning principles in a facilitative fashion. Too much theory should be avoided. The course should be very interactive and include activities, exercises, and videos (but not too heavy on the videos). Course attendees should know that HF training is a much different experience than any other courses they have sat through before. And when I say "different," I mean that in the most positive way. It's all about the soft skills!

But, if the course is so good, why is no one from Management in the class? I'm glad you asked! Well, it's probably not as much about stigma as it is a general lack of motivation and time management. Managers may believe that they do not need to participate in human factors training because, "We don't need it, it's only for mechanics," "We don't make mistakes," or, "We just don't have the time for this kind of training." Sound familiar?

Obviously, Managers do make errors. In fact, some of the most vivid aviation accidents have been precipitated by management errors made at the very highest levels of organizations. But even as history repeats itself with bad management decisions leading to accidents, there still appears to be a mindset of "error insulation" for those in management positions (in other words, "it won't happen to me"). When this type of management attitude permeates an organization, it can have negative consequences. It can negatively affect an organization's safety culture. Management is not only about making strategic business decisions and watching out for the bottom line—it also serves as a model of safety behavior that is clearly visible to employees at all levels of the organization. Thus, if employees see that Managers are not attending the HF course, then it will certainly diminish the importance of HF training to the AMTs.

Hopefully, this article provided some useful information for those of you who have the HF training stigma and/or fear of the unknown. A well-developed HF course, with an effective facilitator, will be a very good experience for you.

And it will also make you a safer employee Oh, and try to get Management to attend the course. After all, we are all human—and we all make mistakes!

Need Human Factors training or assistance with HF course development?

TACG can help!

www.tacgworldwide.com

NTSB Investigation of the Kobe Bryant Sikorsky Helicopter Crash

Episode 16

The fatal Jan. 26, 2020, Sikorsky Helicopter Crash near Calabasas, California is the latest high-profile NTSB investigation. John and Greg use the unfortunate tragedy to look at the facts known so far and also to explain the NTSB investigative process.

They give listeners behind the scenes insight into what happens from the first moments after an accident. John and Greg share examples from the many investigations they have been part of to review what is known and what remains to be learned in this case.

The NTSB has already shared an update and some video footage from the investigation.

https://www.flightsafetydetectives.com/e/ntsb-investigation-of-the-kobe-bryant-sikorsky-helicopter-crash/

Investigators release final Emirates 777 crash-landing report

Emirates Boeing 777 aircraft, flying from India, crash-landed in Dubai (UAE) as it was attempting to fly a go-around, bursting into flames minutes later. While the 300 people onboard the wide-body evacuated alive, a firefighter was killed when tackling the fire. Immediately after the accident, which happened in 2016, a landing gear failure was suspected to be at fault. However, the final accident report now points to pilot mistake and the fact that the engine thrust was insufficient for a second go-around flight.

Emirates Boeing 777-300 crash-landing at Dubai (the UAE) on August 3, 2016, was the first accident of such scale in the Emirates' history. Immediately after the incident, reports emerged stating that the aircraft had issues with its landing gear, suggesting that the gear did not fully extend and the aircraft had to land on its belly. However, during the course of investigation, no issues with the Boeing 777-300's systems or its Rolls-Royce engines were found and the investigators' shifted their focus to the crew.

Emirates Boeing 777 crash-lands with explosion in Dubai

Emirates Boeing 777-300, registration number A6-EMW, was operating a scheduled passenger flight UAE521 on August 3, 2016. Having departed from Trivandrum International Airport (VOTV), India, the aircraft was about to land at its destination airport in Dubai, the United Arab Emirates.

During the first landing attempt, the Emirates pilots were unable to land the airplane within the runway zone, opting for a go-around instead. While a moderate windshear was expected on the day, the main reason for the go-around decision was due to thermals. Thus, the crew opted for a normal go-around instead of the windshear escape maneuver.

However, some switches required for the second go-around were inhibited because of a touchdown. The problem was, the flight crew were unaware that there had been a touchdown, which lasted for six seconds.

After becoming airborne during the go-around attempt, the aircraft had insufficient engine thrust for the climb and quickly began losing height and speed. While the pilots did try to fix the situation by performing the windshear escape maneuver, it was already too late.

Eighteen seconds after the initiation of the go-around, the Boeing 777 carrying 282 passengers, 16 cabin crew, and two pilots, crashed-landed on the runway 12L in Dubai International Airport (DXB).

After sliding on its lower fuselage along the runway, the plane finally came to a stop next to a taxiway Mike 13. Less than ten minutes later, the aircraft burst into flames as the center wing tank exploded.

Despite the fact that some passengers evacuated with their carry-on baggage, thus prolonging the procedure, the evacuation lasted for about seven minutes (6 minutes 40 seconds). During it, 21 passengers, a pilot, and six crew members sustained minor injuries, while four cabin crew members were injured more seriously. Only the captain and the senior cabin crew member evacuated after the center wing tank explosion.

However, the accident did result in one fatality. The explosion of the wing tank tore down a large section of the right wing upper skin. The falling panel struck and fatally injured a firefighter.

The Emirates Boeing 777 was destroyed during the fire.

Final report lists four main causes

Following a four years' investigation, the UAE's General Civil Aviation Authority issued a final report on January 20, 2020. The determined there were four main causes and various contributing factors to the accident:

a) During the attempted go-around, except for the last three seconds prior to impact, both engine thrust levers, and therefore engine thrust, remained at idle. Consequently, the Aircraft's energy state was insufficient to sustain flight.

(b) The flight crew did not effectively scan and monitor the primary flight instrumentation parameters during the landing and the attempted go-around.

(c) The flight crew were unaware that the autothrottle (A/T) had not responded to move the engine thrust levers to the TO/GA position after the Commander pushed the TO/GA switch at the initiation of the FCOM– Go-around and Missed Approach Procedure.

(d) The flight crew did not take corrective action to increase engine thrust because they omitted the engine thrust verification steps of the FCOM– Go-around and Missed Approach Procedure.

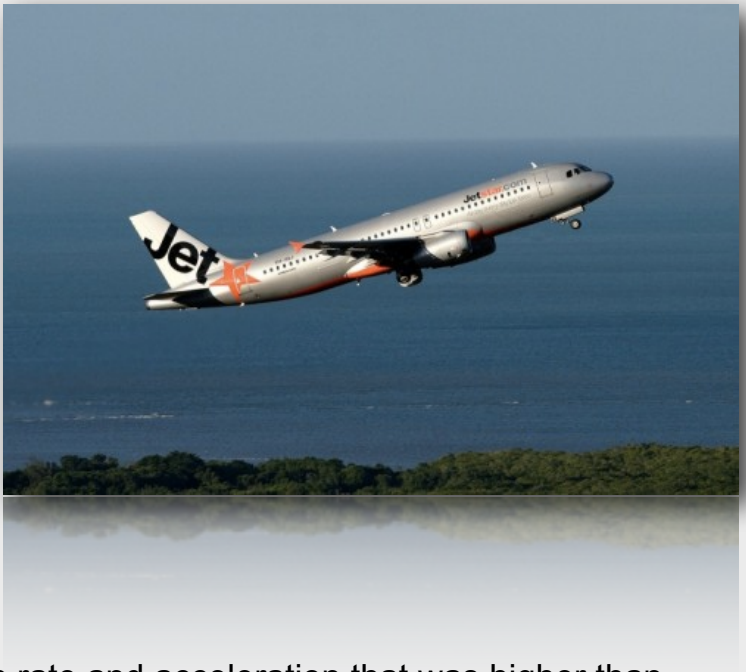
JETSTAR PILOTS EXCEEDED SAFETY LIMITS AFTER GETTING SUMS WRONG

A problem with an electronic system prompted a Jetstar flight crew to make flawed manual calculations and exceed safety limits as they took off from Sydney.

They also failed to retract the landing gear when required, doing so after realizing it was the source of a buffeting noise.

A newly-released report by the Australian Transport Safety Bureau found that a Jetstar crew was preparing for a flight from Sydney to Melbourne >

in September 2018 when they experienced problems with the electronic system used to calculate take-off performance.



They reverted to a back-up procedure and calculated the information manually but in doing so inadvertently calculated take-off speeds that were too high and failed to identify them by independent verification and cross-checking.

This resulted in an incorrect pitch rate and acceleration that was higher than anticipated.

This result was a flap overspeed, an event where the aircraft exceeds a speed safety limit that could result in damage to the flap system.

"The aircraft did not rotate to the correct pitch attitude and the pilot monitoring did not alert the pilot flying of this," the report said.

"However, he called 'speed, speed' in an attempt to assist the pilot flying manage the airspeed, to which the pilot flying reduced the engine power in response, rather than increasing the aircraft pitch.

"The action of reducing the engine power was taken when the aircraft was below the safe altitude above ground.

"The landing gear would normally be retracted by the flight crew as soon as the aircraft had a positive rate of climb.

"In this case, the crew did not retract the landing gear when required.

"Climbing through 2,800 ft, they identified that the landing gear was still extended while troubleshooting the source of a buffeting noise.

"They then immediately selected the gear to 'UP' without first checking the aircraft speed, resulting in a landing gear retraction overspeed event."

Jetstar subsequently distributed a safety summary of the event to the wider pilot community and highlighted the importance of "reasonability and accuracy checks" as well as consulting the company procedure manuals in the event of issues with electronic systems.

"This incident highlights the importance of independent validation and cross-check by the flight crew, in particular for performance speeds and aircraft weight," the ATSB said in its safety message.

Fokker 50 crash crew ignored multiple alerts during take-off roll

Kenyan investigators have disclosed that the crew of a Fokker 50 continued a take-off roll, despite multiple alerts apparently warning of a serious engine problem, before the aircraft crashed some 50s after becoming airborne.

The inquiry into the accident, involving a Skyward International Aviation turboprop departing Nairobi's main international airport, found that 27 high-level 'triple-chime' alerts had sounded as the aircraft rolled along runway 06.

Aural alerts had commenced as early as 8s after the take-off was initiated but, while the aircraft was well below the V1 decision speed, the crew did not act to abort the take-off roll.
Flight-data recorder information indicates the left-hand Pratt & Whitney Canada PW125 engine was exhibiting problems, with increasing torque but declining propeller speed compared with the right-hand engine.

"On [its] ground roll for take-off, the aircraft seemed to take [more] runway than anticipated before attaining the take-off speed," the Kenyan air accident investigation department states, indicating that the roll lasted over 90s.

The aircraft lifted off from the high-elevation airport at about 100kt but "barely climbing", the inquiry says, reaching no more than 50ft above ground after about 20s while continually deviating to the left of the extended centerline.

It subsequently collided with a building 2,100m north-north-east of the runway end. None of the four occupants - two pilots, an engineer and a loadmaster - survived.

None of the four occupants survived after the Fokker 50 struck a building

The aircraft had been conducting a cargo service to Mogadishu, in darkness, on 2 July 2014.

Investigators found discrepancies in the load-sheet for the aircraft and analysis of the cargo, including a shipment of the mild narcotic qat, indicated that the aircraft was 500-1,500kg above its maximum certified gross weight at take-off.

The captain, who had been flying, had logged over 6,800h in command of Fokker 50s, although the inquiry says it was "unable to determine" whether either pilot had demonstrated an ability to fly the turboprop with one engine inoperable.

Analysis of recordings from the previous positioning flight by the aircraft (5Y-CET) showed a 'three-chime' alert had occurred, and that the crew spent time trying to diagnose the problem. Despite the evidence from the cockpit-voice recorder, the monitoring pilot for the flight "denied knowledge" of any anomalies, says the inquiry.

Investigators could not obtain any evidence that any problem was recorded in the technical log, nor that any maintenance was conducted in relation to the apparent anomaly. At least one of the crew members - possibly the captain - from the positioning flight was among those fatally injured during the subsequent accident.

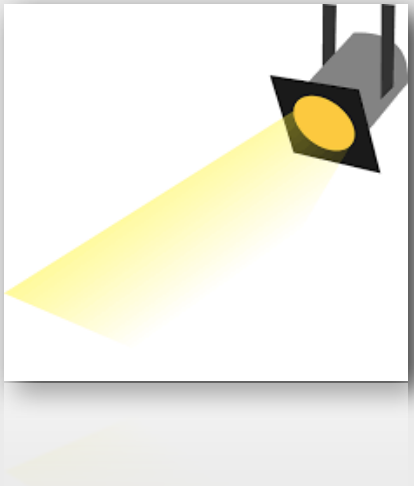
While the 'three-chime' alert sounded repeatedly during the ill-fated flight's take-off roll, the inquiry says "it is not clear" why the crew continued to proceed with the flight, particularly given that Fokker documentation requires an abort under such circumstances.

Cirium fleets data shows the aircraft was originally delivered to Lufthansa CityLine in 1992 and served with Air Nostrum and Avianca Brazil before being transferred to Skyward from Dutch operator Denim in May 2014. It had been operated in Kenya for just 92h before the crash.

Although the accident occurred in 2014, the inquiry was only signed off at the end of November last year and published by the transport ministry in January.

U.S. Congress Keeps Spotlight on Aviation Workforce Issues

While the U.S. Congress passed comprehensive legislation in late 2018 to take a multifaceted approach to address workforce shortage concerns, lawmakers are keeping a spotlight on the issue as the numbers surrounding future employment needs remain daunting.“Challenges in sustaining this workforce are looming, if not already upon us,” said House Transportation and Infrastructure Committee chairman Pete DeFazio (D-Oregon) in testimony for a recent aviation subcommittee hearing on the subject.



Citing FAA data, DeFazio noted half of the 330,000 aviation maintenance technicians in the U.S. were between 50 and 70 years old at the end of 2018.

The Labor Department, meanwhile, is predicting that roughly 11,800 maintenance and technician jobs will need to be filled each year over the next decade, but the FAA certified only about 8,600 per year over the last four years. In all, the industry is estimating a need for 193,000 new mechanics and technicians in North America over the next 20 years, DeFazio added.

WORKFORCE DIVERSITY

Troubling to the lawmakers is the lack of diversity in the current workforce—3 percent of maintenance workers are women, for instance. “To expand the pipeline and meet the growing industry demand for FAA-certified workers, we can and must do better,” DeFazio said.

The FAA Reauthorization Act of 2018 included a number of measures to address the workforce in general and the diversity of the workforce. These include authorization of an aviation maintenance education and recruitment grant program, the establishment of a Women in Aviation Advisory Board, and the development of a Youth Access to American Jobs in Aviation Task Force to encourage apprenticeships.

“The future of America’s aviation maintenance and manufacturing workforce is bright, but it is clear Congress can do more to ensure the U.S. remains at the forefront of the aviation and aerospace,” said House aviation subcommittee chairman Rick Larsen (D-Washington), adding that the hearing provides the subcommittee “the opportunity to reaffirm its commitment to supporting U.S. jobs and the aviation workforce.”

Larsen stressed that working to improve skills training and workforce diversification would be an “all-around win” for job seekers and the industry.

This is particularly critical, DeFazio added, since the current generation of airplanes has become extraordinarily complex. “There are between 60 and 70 miles of electrical wire in a single Boeing 787.

The Airbus A350 performed the world's first fully automated takeoff last month. Gulfstream's G650 is built using significantly different manufacturing techniques than previous designs, which required the company to provide specialized training to manufacturing workers," he said.

INDUSTRY PARTNERSHIPS

As for the FAA's part, one of Steve Dickson's first acts as FAA Administrator was to create a position to serve as a focal point to engage with industry, the academic community, and other government industry to collaborate on workforce issues, according to Catherine "Kate" Lang. She is a veteran FAA official who recently returned from an assignment as regional director for Europe, Africa, and the Middle East in Brussels to become the new senior advisor to the FAA Administrator on aviation workforce outreach.

"The FAA is committed to partnering with industry, the academic community, and government agencies to remove unnecessary barriers for entry to the aviation workforce, enhance education pathways, and build the pipeline of qualified aviation professionals," she said in her testimony to the subcommittee. Lang is steering an FAA Aviation Workforce Steering Committee that is tasked with identifying concrete steps that can be taken to address shortages. And the agency is taking a number of steps, from hosting a STEM symposium for future professionals to hosting a summit that gathers industry leaders to discuss potential solutions.

NBAA president and CEO Ed Bolen, meanwhile, told the subcommittee in testimony submitted for the hearing, "We must come together and take bold actions" given that worldwide demand for air travel is increasing.

Bolen offered support for a bill that Larsen introduced with fellow lawmakers—H.R. 5118, the Promoting Service in Transportation Act—that would authorize the Department of Transportation to develop a series of broadcast, digital, and print public service announcements to promote transportation careers.

"Through these public service announcements, we will raise awareness of careers across all modes of transportation, including aviation,"

Bolen said. “While momentum around the future STEM workforce is strong, aircraft pilot and aviation technician careers are often not considered by students. That is why the passage of H.R.5118 is critical as it will help address these challenges.”

From the US Navy Fleet: When Complacency is on the Agenda

Tailored Ship’s Training Availability (TSTA) had finally come to an end, and our port call also came to an end too soon. Pulling back out on USS Abraham Lincoln (CVN-72) for an additional 10 days didn’t sound too bad, but none of us were that excited about it. As usual, the flight schedule and routine maintenance were to be expected in an F/A-18E squadron, and the focus needed to be back on deck.

On this particular day, I realized that no matter how many ship detachments I’ve embarked on, or how many maintenance evolutions I’ve completed, focus and concentration are the most important elements to successfully performing these duties safely. Being a Collateral Duty Inspector (CDI) for the ordnance shop comes with a bit of responsibility, and being deployed on a ship increases the risks associated with these responsibilities tremendously.

The flight schedule was beginning its nightly cyclic operations and was being taken care of by my night shift Quality Assurance Safety Officer (QASO). Being the night shift CDI, I took a team of workers to start on a routine maintenance evolution in the hangar bay. I was supervising a gun removal from aircraft 304.

In the midst of preparing the gear for the gun removal, I took a couple minutes to myself to analyze the rest of the maintenance that needed to get done on this aircraft. As I was still looking through my note pad and thinking ahead on the next plan of action, I realized one worker was loosening the mounting bolts of the gun. Next thing I knew, the gun fell from inside the top of the aircraft to the bottom of the gun skid that was sitting right below it.

After the initial shock of "What just happened," I realized I made a grave mistake. I didn't verify that the hoist was intact prior to connecting it to the gun. I immediately ran to get my supervisor and Gunner to explain what just occurred.

I admit, I made this mistake due to my lack of focus, communication, and quality assurance, which all lead to complacency. Luckily, none of my shipmates were injured. Mistakes are bound to happen with complacency leaning on a maintainer's shoulders. I had the lives of my shipmates in my hands, and to think that I could have caused harm to them brings this lesson home to me, especially since this could have caused a fatality.

It's because of mistakes like these that Naval aviation has its publications "written in blood." Facing a disciplinary review board and having to answer the tough questions such as "do you believe this was a complacent act?" really makes you question whether complacency is in your daily agenda. It's time to create a culture in which complacency becomes a thing of the past.

Bend man joins the U.S. Navy's elite Blue Angels

The U.S. Navy's Blue Angels are an elite precision flight team you may have seen performing their dramatic maneuvers at air shows around the country. Now, two Bend men are part of that glory.

A life of structure and discipline is what Collin Palmer, who turned 28 Friday, said the Navy afforded him when he joined seven years ago.

Born and raised in Bend, Palmer attended Elk Meadow Elementary School, High Desert Middle School and Bend High School. He was unsure after graduation what he wanted to pursue, but when he landed in the Navy, he excelled.

"He ended up joining the Navy when he was 20 years old, and from there became a jet mechanic," said Cindy Palmer, Collin's mother.Collin's parents, Cindy and Kip Palmer, said when Collin joined the Navy, they never knew the opportunities that would unfold for him.

"He never liked Cub Scouts, Boy Scouts. He didn't like conforming at all," Kip Palmer said. "We don't know where this came from -- but when he jumped in, he jumped in hard."

Collin Palmer, who works on the Power Plants team as an aircraft maintenance mechanic, was one of 32 men and women crested as Blue Angels on Thursday.

"It was a big step to take," he said. "It is not easy to get on the team, but just seeing the people that I respected were able to do that, I figured it (was worth) a try, and ended up getting picked up this time around last year."

Members of the Blue Angels go through a rigorous three- to four-month training process to showcase the excitement and power of naval aviation, which they in turn share with the public in exciting fashion.

"We really kind of provide that community between the public who might not really have that experience with the military and what we do as Blue Angels," Palmer said.

Palmer has three years remaining on the team and said he would love the opportunity to one day become a pilot.

He joins Chris Gordon, another Bend native and a Mtn. View High graduate who was crested as a Blue Angel last year and works in public affairs.

From a boy with no clear path to a man serving now proudly serving his country, no one is more proud of his accomplishments than his parents.

"He's come full circle, from kind of losing his way, to finding a direction, to just excelling at what he's doing," Cindy Palmer said. "And we're just so proud of him!"

How Does Shift Work Influence Sleep and Mental Health?

Research shows that workers who engage in shift work can suffer from mental health issues as a consequence.

Nearly 20% of workers globally and around 27% of the American workforce conduct their schedules around shift work, which occurs outside of the standard 8-hour workday. Sleep disturbances linked to shift work can lead to major mental health issues, as well as workplace challenges, including safety concerns and poor on-the-job performance.

For people working in the medical professions, maintaining healthy sleep habits can often be incompatible with the demands of their job. Notably, nearly half of shift workers are not satisfied with their wellbeing and 58.2% of shift workers are displeased with their sleep, with 28.3% being unhappy with their physical and mental health.

Get the full story at psychiatryadvisor.com.

Four Ways to Avoid Work Burnout

Occupational burnout is understood as chronic workplace stress that is not efficiently managed. Here are some key ways to manage your stress levels and avoid burnout.

The World Health Organization (WHO) defines burnout as an "occupational phenomenon" conceptualized from chronic and unmanaged workplace stress. People are stressed from work, stressed in life, and stressed overall—and they don't know how to manage it.WHO characterizes burnout with three dimensions:

- feelings of energy depletion or exhaustion
- increased mental distance from one's job, or feelings of negativism or cynicism related to one's job; and
- reduced professional efficacy

One Harvard Business Review article outlines the three components of burnout, as identified by research psychologist Christina Maslach and several collaborators. The three symptoms of burnout are:

1. **Exhaustion** is the central symptom of burnout. It involves physical, cognitive, and emotional fatigue that makes it difficult to work effectively and feel positive about the work being done. This can stem from work demands that require you to be "always on" or tasks with intense time pressure, especially if you feel like you lack control over the situation.
2. **Cynicism**, also called depersonalization, represents an erosion of engagement. It is basically a way of distancing yourself >

3. psychologically from your work. Instead of feeling invested in your assignments, projects, colleagues, customers, and other collaborators, you feel detached and negative.
4. **Inefficacy** refers to feelings of incompetence and a lack of achievement and productivity. It is usually a kind of byproduct of feeling exhausted and cynical because a you are both out of fuel and have lost your connection to work.

How does one “manage” stress, though? This might seem like a difficult idea to address something with so many variables. Well, the solution is actually quite simple: make enjoyable hobbies a routine, and think differently.

One article from *Thrive Global* by Tyce Escalante outlines some effective ways to avoid burnout. According to Fahed Essa, founder of Dala Wellness, burnout is a serious issue because it can affect a person’s emotional, physical, and mental wellness. Here are a couple ways to manage your stress:

Structure

Humans are creatures of habit, and those habits aren’t always healthy. Essa recommends finding something structured to deal with stress. For him, this includes baking and building Ikea furniture. It’s really about finding something he likes to do outside of work so he can routinely unwind—and train his body to look forward to that unwind.

Meditation

Before you write this one off, hear Essa out. Essa meditates to maintain mental clarity and enhance focus, and it’s proven to reduce symptoms in a number of disorders, including anxiety and depression.

You don’t have to meditate for hours at a time, or even every day. In most cases, just 10 minutes of meditation a day can rewire your brain. When you meditate, your hormonal levels balance, cardiovascular health improves, and cognitive functions are restored. As a result, your energy rises and you can more easily engage with others and with your work. Maybe you start taking yoga classes, or maybe you check out these beginner mediation tips if you’re unsure where to start.

Comedy and Humor

You might have heard before that laughter is a release of tension. When we laugh, we feel good, and this can be especially important when stress takes a physical toll on our bodies (and cause hair to fall out, weight gain, nervous habits, etc.).

“Whenever I feel tense, just watching a comedy can help me release some of this through a hearty laugh,” Essa said.

Laughter also decreases stress hormones and increases immune cells and infection-fighting antibodies, thus improving your resistance to disease.

Health and Fitness

Exercising regularly has all kinds of physical, mental, and emotional benefits. Exercise can help alleviate stress and create a sense of well-being. It will also help improve your energy levels and productivity throughout the day, and even help you get those zzz’s at night.

You don’t have to exercise alone, and you don’t need to do an ironman. Go for a walk with a friend. Invite coworkers to do an office fitness challenge. Go with a colleague to a workout class the make it less nerve-wracking.

Managing stress to avoid burnout means you need to make active changes in your self-care routines, your mindset, and your connections. The Harvard Business Review article says you should:

- **Prioritize self-care**: Work hard to replenish your physical and emotional energy by prioritizing good sleep habits, nutrition, exercise, social connection, and habits. This can include meditating, journaling, and enjoying nature. Logging the hours you spend every day on specific activities can help you identify how much time you are spending doing healthy, or unhealthy, activities.
- **Shift your perspective**: Part of the problem of stress originates from the workplace, of course. Try and identify what parts of your situation and work life are truly fixed and which ones you can change.

- Altering your perspective can help you approach more situations with a positive attitude, gain more control on your to-do list, or curb cynicism. Do you need more positive work-relationships with people? Almost nothing is fixed entirely, and there are ways you can change your situation. You just need to try.
- **Seek out connections**: If you surround yourself with people who support you and avoid cynicism and inefficiency, your stress will likely decrease. Find coaches and mentors who can help you identify and activate positive relationships and learning opportunities.

Burnout, while not a medical condition, is still a prevalent, and problematic, reality for many people. There are so many contributing factors, but understanding the breakdown of work-related stress, its causes, and its fixes can help you reshape your life so you are staying happy and healthy.

https://www.who.int/mental_health/evidence/burn-out/en/

https://hbr.org/2016/11/beating-burnout

https://thriveglobal.com/stories/how-to-avoid-burnout-wisdom-from-dala-wellness-ceo-fahed-essa/

https://zenhabits.net/meditation-guide/