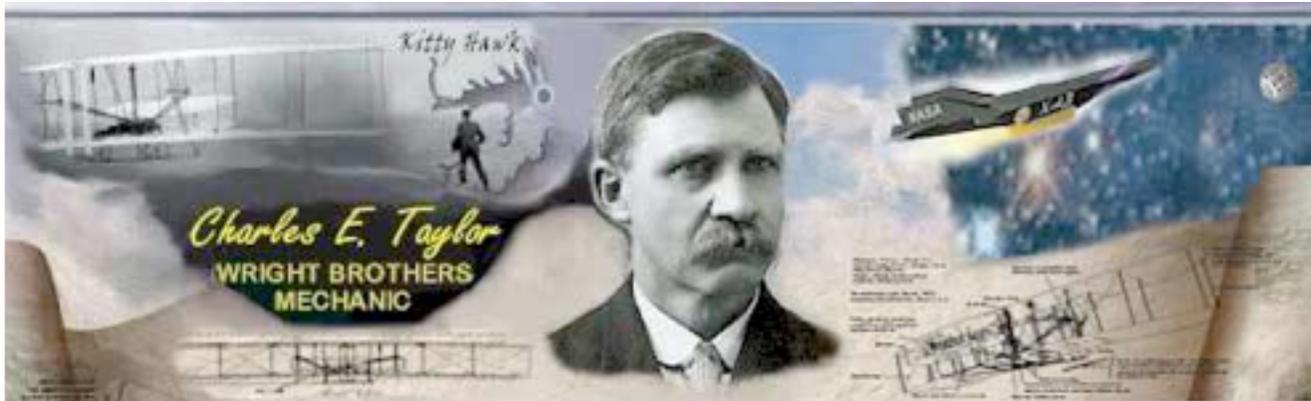


Aviation Human Factors Industry News

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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:

★**Air controller 'fatigue threat'**

★**EHEST found that helicopter operator safety culture and management are largely to improve**

★**Young woman becomes first Aircraft Maintenance Engineer**

★**ERAU Graduate Survey:**

★**Aerobic Exercise Relieves Insomnia**

★**Personal Accountability—A Requirement for Life Advancement**

★**The Complete Idiot's Guide to Walking for Health**

★**Medical Error Prompts Doctor to Push for Safety Measures**

Air controller 'fatigue threat'

An air traffic controller directed passenger jets across northern Australia after being **awake for more than 17 hours**. It happened because he was asked to do a **second shift** by his employer, Air Services.

The air traffic controller's union, Civil Air, said the safety of passengers could have been compromised by Air Services' actions on Monday night, which the union claims was in breach of safety standards.



"You had someone who had been awake for 17 1/2 hours supervising planes and we believe that this raises serious questions about safety when someone is **so fatigued**," Civil Air executive secretary Peter McGuane said yesterday.

Mr McGuane said yesterday that "no reasonable person would consider that having no rest for that period of time would allow you sensibly to be separating planes".

It is believed that an Air Services manager completed a **risk assessment** of the situation before deciding that the risk to the controller and to the passenger jets using the airspace was acceptable.

A spokesman for Air Services -- the government-owned air traffic control manager -- said yesterday: "We have a thorough fatigue management program at Air Services and the request to undertake additional duty was consistent with these procedures."

The Brisbane-based controller was one of about 40 controllers responsible for airspace across northern Australia stretching from Cape York to Broome.

Mr McGuane said Air Services **had a shortage** of air traffic controllers and so it was asking controllers to work extra shifts rather than close the airspace.

EHEST found that helicopter operator safety culture and management are largely to improve

Cologne, Germany - European helicopter safety team unveils secrets of rotary wing's problems

The European Helicopter Safety Implementation Team (EHEST) has a short guide to preventing and overcoming four of the most pernicious risks affecting rotary-wing flight. This is one of the European Aviation Safety Agency's contributions to the global effort to improve helicopter safety launched by the International Helicopter Safety Team in 2005. Just-published analysis of data from six years of European helicopter accidents has led the European team to identify **four specific killer risks**, and has decided to provide pilots and operators with a training strategy - and techniques - to avoid or deal with them.



The four hazards identified include unexpected encounters with a degraded visual environment; getting into a "Vortex ring state"; loss of tail rotor effectiveness (LTE); and static and dynamic rollover. To counter these hazards, the European team has produced the first in a forthcoming series of training leaflets intended to provide "Methods to improve helicopter pilots' capabilities", with an emphasis on helping their technical understanding of the phenomena, how to avoid them, and how to recover.

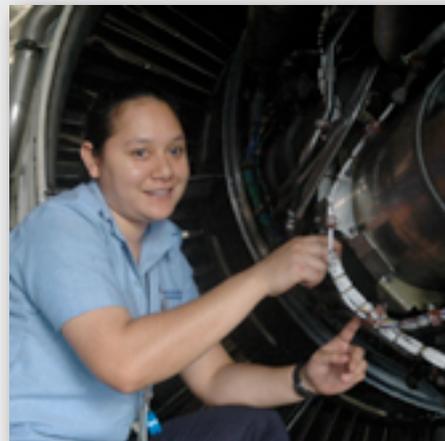
Inadequate mission planning was high on the list of accident contributory factors in all types of helicopter operation and the new training leaflet provides pilots first with the information about how to plan and manage a mission to avoid exposure to the four hazardous conditions examined, to be able to recognize the developing risks early enough to avoid them, and finally how to carry out the recovery action to escape an accident once the condition is established.

EHEST found that operator **safety culture and management** is largely to blame for poor mission planning.

It found evidence of a reluctance to "Establish and apply effective standard operating procedures for all activities that they undertake", and recommends that the implementation of an effective **safety management system** would rectify the inherent conditions that lead to the kind of accidents that are happening today.

Young woman becomes first Aircraft Maintenance Engineer

A young woman from Rotuma has created history by becoming Fiji's **first female** Aircraft Maintenance Engineer for Air Pacific. Maria Munivai Wilson recently acquired her Aircraft Maintenance Engineers License from the Civil Aviation Authority of the Fiji Islands(CAAFI) after joining Air Pacific Engineering and Maintenance department's avionics workshop as a trades woman three years ago.



Air Pacific managing Director and CEO Dave Pflieger said the airline is extremely proud as the development of their people is one of Air Pacific's key strategies as a business.

Wilson is now part of the Air Pacific team that maintains the air-worthiness of Air Pacific's fleet of two Boeing 747s, one B767 aircraft, its three narrow bodies 737s and Pacific Sun's two ATR42-500 turboprops.

ERAU Graduate Survey:

My name is Gary Chag, and I am currently a graduate student at Embry-Riddle Aeronautical University. As part of my graduate project I've created a brief (5 questions) survey regarding the topic of Crew Resource Management (CRM).



I would appreciate the assistance of anyone who has been exposed to CRM. The results will be used only in the completion of my project, and I can be reached for comments or questions at gary.chag@gmail.com.

Thank You.

Survey Here: www.surveymonkey.com/s/5R75X6J

Aerobic Exercise Relieves Insomnia

Regular aerobic exercise improves the **quality of sleep, mood, and vitality**, according to a small but significant new study from Northwestern Medicine. The study included 23 sedentary adults, primarily women, 55 and older who had difficulty falling sleep and/or staying asleep and impaired functioning. After a conditioning period, the aerobic physical activity group exercised for two 20-minute sessions four times per week or one 30- to 40-minute session four times per week, both for 16 weeks. Participants worked at 75% of their maximum heart rate on at least two activities including walking or using a stationary bicycle or treadmill.



Participants in the non-physical activity group participated in recreational or educational activities, such as a cooking class or a museum lecture, which met for about 45 minutes three to five times per week for 16 weeks.

Both groups received education about **good sleep hygiene**, which includes sleeping in a cool, dark, and quiet room, going to bed the same time every night, and not staying in bed too long, if you can't fall asleep.

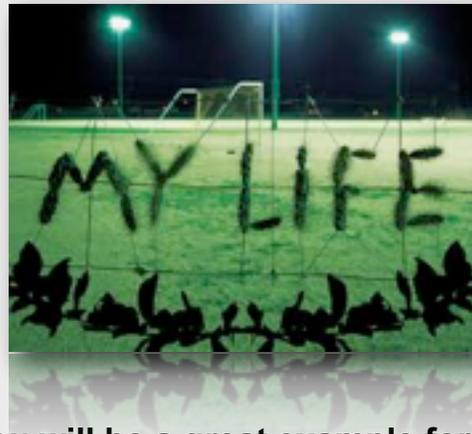
Exercise improved the participants' self-reported sleep quality, elevating them from a diagnosis of poor sleeper to good sleeper. They also reported **fewer depressive symptoms**, more vitality, and less daytime sleepiness.

The participants' scores on the Pittsburgh Sleep Quality Index dropped an average of 4.8 points. (A higher score indicates worse sleep.) In a prior study using t'ai chi as a sleep intervention, for example, participants' average scores dropped 1.8 points.

<http://bit.ly/cNNojn>

Personal Accountability—A Requirement for Life Advancement

Accountability is normally viewed as being responsible—giving an explanation of your actions—to somebody for something. However, today's lesson is not about someone holding you accountable. It's about **you holding yourself accountable**. When you take 100 percent for holding yourself accountable, your performance will improve, your relationships will flourish, your market value will soar, people's respect for you will skyrocket, you will be a great example for others to follow, and your self-esteem will grow.



How is it that in all these areas of your life you can see such dramatic improvement? Because when you hold yourself accountable to doing the things you know you should do, you will **distinguish** yourself from the crowd.

I am convinced if you want to advance your life personally or professionally, you must hold yourself accountable for your actions, responsibilities, and goals. Think about it. Why should it be someone else's job to make sure **you are doing the things** that you know you should to be doing?

The mindset I adopted more than 25 years ago is this: it is up to me and no one else to make sure I am doing what I know I should be doing. When someone has to hold me accountable, because I failed to do what I should have done, I have a serious conversation with myself. My belief is that no one should have to hold me accountable for my actions, responsibilities

and goals. While I appreciate others helping me get better, I am the one that must hold myself to a high standard.

Three Types of Accountability

There are three areas in which you must hold yourself accountable:

1. **Your actions and choices**—This would include such things as:
 - The way in which you communicate with others
 - How you spend your time
 - Your behavior and manners
 - The consideration and respect you show others
 - Your eating habits and exercising routine
 - Your attitude and thoughts
 - The way you respond to challenges
 -
2. **Your responsibilities**—This would include these types of things:
 - Returning calls, emails, and texts in a timely manner
 - Being on time for business and personal appointments
 - Keeping your home, car, and workplace clean
 - Spending less than you earn
 - Doing the things you agreed to do when you agreed to do them
 - Executing your job description to the best of your ability
 - Writing things down on a “To Do” list so you don’t forget
 -
3. **Your goals**—This would include your:
 - Fitness and health targets
 - Financial goals
 - Family objectives
 - Career ambitions
 - Personal goals
 - Marital enhancement
 - Any other goals you have set for yourself

Make no mistake about it. You cannot achieve any worthwhile personal or professional goal, if you don’t hold yourself accountable. The reason is simple. It’s your life! If you have to be held accountable at work, don’t expect to be promoted or to experience any type of significant career advancement. If you have to be held accountable at home by your parents, roommate or spouse, it will grow old fast and your relationships will deteriorate.

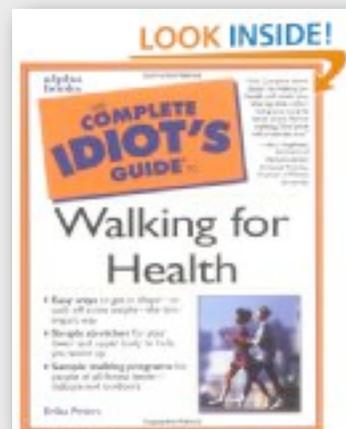
Holding yourself accountable is nothing more than **following through with YOUR commitments and responsibilities**. It's doing what YOU know YOU should do, when YOU should do it.

Whether you are 15 years old or 60 years old, let today be the day that you make the commitment to yourself that you will NEVER again require anyone else to hold you accountable. Let me also encourage you to start keeping a **prioritized "To Do" list** and focus on holding yourself accountable to working through your tasks in a prioritized sequence.

This is your life! Take control. Be responsible for it.

The Complete Idiot's Guide to Walking for Health

Walking is one of the simplest and most convenient ways to get **much-needed** daily physical activity. It doesn't require fancy equipment or a gym membership, and just about everybody can find ways to fit more walking their daily schedule. The Complete Idiot's Guide to Walking for Health (Erika Peters, Alpha Books, \$16.95) is a comprehensive guide to walking your way fit. More than 275 pages of tips, photos, and illustrations cover everything you need to know, whether it's creating a weight loss program, combining walking with strength training, or avoiding injury.



For more information, visit

www.idiotsguides.com

Medical Error Prompts Doctor to Push for Safety Measures

In 2009, Dr. Jose Gonzalez, the medical director for the Texas Medicaid/State Children's Health Insurance Program, discovered the devastating results of a **medical error** in a very personal way. When his niece Kaelyn Sosa, then 18 months old, was brought into a Miami hospital after receiving bump on her head from a fall, she was sedated and given an MRI. During the test, her breathing tube became dislodged, resulting in a severe brain injury.



Cases like Kaelyn's are all too common in the U.S. - and some patients don't even leave the hospital alive. Nearly **100,000 people die every year** in hospitals and doctors' offices due to **medical mistakes**. It's a huge number: put in perspective that's the equivalent of one **fully loaded 747 crashing every single day for a whole year**.

In Texas, unlike many other states, reporting medical errors isn't mandatory - yet. So the scope of the problem in the Lone Star state isn't clear. Recent research in North Carolina suggests physicians make one to **two serious mistakes every month** and cause harm to a patient once a year. With 613 hospitals and thousands of physicians in Texas, a similar error rate would mean thousands of hurt patients here.

The frequency of medical errors hasn't motivated enough hospitals and other health care facilities to take action, and that's a message being spread by Dr. Gonzalez and his niece's parents, Ozzie and Sandy Sosa. So when Dr. Gonzalez saw Stephen Harden, CEO of LifeWings, speak on the issue of **patient safety** and systems for change, he knew he needed to invite the expert to Texas.

Harden will present "Meeting the Unspoken Expectation of Safety: What Every Clinician Can Learn from the Miracle on the Hudson and the Ditching of Flight 1549" at the upcoming Texas Pediatric Society Annual Meeting in San Antonio. His presentation, which will take place on Saturday, November 6, will explain the type of safety systems that can **stem the tide** of mistakes.

Harden's organization, LifeWings, has adapted the **best practices** of high-reliability organizations - such as **commercial aviation**, U.S. Navy aircraft carriers, and nuclear power - to help more than 100 healthcare organizations provide the highest safety for their patients. Seven of those healthcare organizations are located in Texas. At the San Antonio conference, he'll explain just how the healthcare industry can adapt the safety systems used by commercial aviation.

"Had the **back-up systems and cross-check** we use in commercial aviation been in place when Kaelyn was being treated, the dislodged tube would very likely have been discovered and her brain damage prevented," says Harden. "The one thing we know from aviation is that people will make mistakes. A good safety system recognizes **people aren't perfect** and will catch their mistakes before they harm the patient. The great thing about the Texas Pediatric Society is that they recognize more work is needed to protect their patients and they are willing to look outside of healthcare to find the best way to do that."